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RURAL SPORTS.

VOLUME II.

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Serfaraz Nayah. 1827

Fishing.

WITH an Account of the OTTER the first Volume of **Rural Sports** concluded; there are several animals, such as the Walrus, Seals, &c. which by their almost constant residence in the water seem to partake greatly of the nature of Fishes, but as their power of living in the Deep increases, so, in the same degree, augments their unfitness for existing upon the Earth; they are nevertheless classed by Naturalists under the denomination of Quadrupeds, and being perfectly amphibious, living with equal ease in the water or on land, may be considered as the last link in the scale of Nature, by which one great division of the Animal World seems united to the other; these, however, are not the immediate objects of consideration in this work, and the Otter is mentioned, as most connected with the detail now proposed to be entered upon, which is that of Fish.

It has been asserted, that the History of Fishes affords small entertainment; for hitherto Philosophers, instead of studying their nature, have employed themselves in augmenting Catalogues, and in lieu of observations or facts, the reader is furnished with a long list of names, disgusting from their barren superfluity; for no man can be well pleased with the extensions of a language, while the Science unfolds nothing which can reward his memory, for the increasing burden imposed upon it. Under these circumstances, although it would be presumption in the Compiler to profess to arrange the History of this class of beings, yet he might be accused of neglect, were he not to notice some of their distinguishable properties.

The Natural History of Fishes is, at best, more imperfect than that of Quadrupeds and Birds, inasmuch as the Element which is their residence is of such vast dimensions, and wherein they can so easily withdraw themselves beyond the influence of human power, that their haunts are rendered inaccessible to Man, and they are able to shun his remarks upon their modes of procedure, with regard to the ordinary functions of animal life; some very skilful Ichthyologists maintain, that there are to be found in the different collections of Fishes about London six hundred kinds, not enumerated by LINNÆUS; what numbers then must still remain in the unexplored and unfathomable Abyss of the Ocean!

The external form of the greater part of fishes, tends much to the celerity and ease of their motion; at either end being sharp, and swelling towards the middle, they are by nature so modelled, as to be endeavoured to be imitated in the built of those Ships in which the quickest dispatch is needful: but far short falls human contrivance; for all the larger fishes can not only overtake the fastest sailing vessel, but play around it without any apparent extraordinary effort.

The *Tail* is the principal instrument from whence this velocity of the fish is derived, aided by the strength and pliancy of the *Back-bone:* when in pursuit of its Prey, or avoiding an Enemy, all the smaller fins are laid close to its body; by the impulse of the tail alone, it then glides through the water with the swiftness of an arrow; the other fins are too minute and flexible, compared with the animal's weight, to impel it so quickly; their principal use is to adjust and moderate the movement, communicated by the energy of the tail; deprive a fish of these fins, and when put into water he darts downwards, upwards, and laterally, with all his usual quickness, but is unable to *direct* his course. The *Ventral* and *Dorsal* fins serve to keep the fish in a perpendicular posture, and possibly the first contributes to raise or sink them; the *Pectoral* fins assist and regulate progressive motion; by extending them, the progress is stopt when swimming rapidly forward, and by folding either, whilst the other continues to

play, the turn to the left or right is accomplished*. It is supposed the *swimming bladder* aids the fishes motion; and that they can dilate or contract this Organ, and by that means raise or sink themselves at pleasure, by increasing or diminishing the specific gravity of their body; and as their watery Element is of different degrees of weight, according to its depth, they thus possess a power of varying their specific gravity, of swimming easily at a great depth, and of poising themselves in any part

* The following, from Dr. PALEY's *Natural Theology*, confirms the foregoing account.

" Fish have very nearly the same specific gravity with the Element in which they move. In the case of Fish, therefore, there is little or no weight to bear up: what is wanted, is only an impulse sufficient to carry the Body through a resisting medium, or to maintain the Posture, or to support or restore the balance of the body, which is always the most unsteady when there is no weight to sink it. For these Offices, the *Fins* are as large as necessary, though much smaller than *Wings;* their action is mechanical, their position, and the Muscles by which they are moved, are in the highest degree convenient. In most fish, beside the great fin the Tail, we find two pair of fins upon the Sides, one or two fins upon the Back, and one upon the Belly, or rather between the belly and the tail. The *balancing* use of these Organs is thus proved. Of the large-headed fish, if the *Pectoral* fins (that is the pair which is close behind the Gills) be cut off, the Head falls prone to the bottom: if the right pectoral fin only be cut off, the fish leans to that side; if the *Ventral* fin on the same side be cut away, then it loses its Equilibrium entirely: if the *dorsal* and *ventral* fins be cut off, the fish reels to the right and left. When the fish dies, that is when the fins cease to play, the Belly turns upwards. The Use of the same parts for *Motion* is observed when put into Action, as follows. The pectoral and more particularly the Ventral fins, serve to *raise and depress* the fish: when the fish desires to have a *retrograde* motion, a stroke forward with the pectoral fin effectually produces it: if the fish desire to *turn* either way, a single blow with the Tail the opposite way sends it round at once: if the tail strike both ways, the motion produced by the double lash is *progressive*, and enables the fish to dart forwards with an astonishing velocity; the result is, not only, in *some* cases, the most rapid, but, in *all* cases, the most gentle, pliant, easy, *animal* motion, with which we are acquainted. However, when the Tail is cut off, the fish loses all motion, and gives itself up to where the Water impels it. The rest of the fins, therefore, so far as respects *Motion*, seem to be merely subsidiary to this. In their Mechanical use, the *Anal* fin may be reckoned the *Keel*, the ventral fins, *Out-riggers*; the pectoral muscles, the *Oars:* observe, that it is not the resemblance of Imitation that is here meant, but the likeness which arises from applying similar mechanical means to the same purpose. We have seen that the *Tail* in the fish is the great instrument of Motion; now, in *Cetaceous* or warm-blooded Fish, which are obliged to rise every two or three minutes to the Surface to take breath, the Tail, unlike what it is in other fish, is *horizontal;* its stroke, consequently, perpendicular to the Horizon, which is the right direction for sending the Fish to the *Top*, or carrying it down to the *Bottom*."

of it: it is however insisted, that the bladder cannot be thus employed, as it has no muscles to enable the fish *voluntarily* to shrink or expand it. Many fish that live continually at the bottom of the water have an air bladder, such as the *Eel* and the *Flounder;* and many are entirely without any, that swim at ease in every depth, for instance the *Gudgeon.* Naturalists have assigned different uses to this bladder, and although it is possible, that some one, or more than a single purpose, foreign from their ideas, may be served by it, the Apparatus is too conspicuous to be formed in vain.

The Expedient, whatever it be, forms part, and perhaps the most curious part, of the Provision. Nothing similar to the *Air bladder* is found in *Land* Animals; and a life in the *Water* has no natural tendency to produce a bag of *Air.* Nothing can be farther from an acquired Organization than this.

Fishes thus fitted by their *internal* structure, and *outward* shape, for their Element, seem equally well furnished with the means of happiness, as either Birds or Quadrupeds. Like them, they are furnished with an external Covering to defend them from the injurious turbulence of the Fluid which they inhabit; that slimy substance which is secreted from the pores of all fishes, not only defends their Bodies from accidents, but to their progress through the water it happily presents no obstruction; besides this substance, the greater part of fishes have a strong covering of scales*, which is a still further protection from injury, and beneath this,

* The SCALES of Fishes are formed with surprizing Beauty and Regularity, and exhibit an endless variety in Figure and Contexture, not only in those taken from distinct sorts of Fish, but even in those of the same fish. The Scales from the Belly, the Back, the Sides, Head, and all the other parts, being very different from each other. These Scales are not imagined to be shed every year, nor during the whole Life of the Fish, but to have an *Annual* Addition of a new Scale growing over and extending every way beyond the Edges of the former in proportion to the Fish's Growth, something in the same manner as the *Wood* of *Trees* enlarges yearly by the increase of a new *Circle* next the Bark; and as the Age of a *Tree* may be known by the amount

an oily matter is supplied, which preserves the body in warmth and vigour. When, however, the *Senses* and other faculties of this part of the Animal Kingdom are examined, we find that Nature having intended them for less perfect beings, in her endowments has been proportionably sparing. The *Brain*, the seat of sensation, is much *smaller* in fishes than in other animals. Their sense of *Touch* is, in all probability, far from being delicate, being obstructed by those strong teguments which surround them. The external Organs of *Smell*, and the nerves supplying them, are perceptible in the greater part of fishes; but as *Air* is the only medium we know for the distribution of Odours, it cannot be supposed that, residing in water, they can possess any capacity of being affected by them; if they have any perception of Smells, it must be that the *Olfactory* membrane in fishes serves them instead of a distinguishing palate, in the same manner as we distinguish by our Taste; by this use of the Organ, they may judge of substances, when *Vapours*, having tinctured the water, are sent to their nostrils, and doubtless produce some kind of sensation, as otherwise they would be provided with the instruments of a *Sense* which, from want of an opportunity, of using, they could not enjoy.

The sense of *Taste* in fishes must be very imperfect, if its delicacy arises from the softness of the Organ, the whole mouth of most fishes being covered with a hard bony substance, by which they are deprived of almost all power of discriminating different bodies by the *Palate*, insomuch,

of the Ringlets its Trunk is made up of, so in *Fishes* the number of Plates composing their *Scales* denote to us their Age.

Leuwenhoeck supposed each Scale to consist of an Infinity of Scales, laid one over the other; or, more simply, of an infinity of *Strata*, of which those next to the body of the Fish are the *largest*. He took some *Scales* from an extraordinary large *Carp* (forty-two inches long, and thirty-three in the round, *Rynland* measure), which were as broad as a Dollar. These he macerated in *warm* water, to make them cut the easier; and then cutting *obliquely* through one of them, beginning with the first-formed and very little *Scale* in the Centre, he, by his *Microscope*, plainly distinguished forty *Lamella* or *Scales*, glued as it were over one another; whence he concluded that the Fish was *Forty years* old.

that the salt-water fishes have been known to swallow the Fishermen's plummet, instead of the bait. The greediness which Sea fish discover, and by which they are taken, is prodigious; the *lines* of the fishermen who go off to *Sea* are coarse and clumsy, their *baits* are seldom more than a piece of a fish, or the flesh of some quadruped, stuck on the *hook* in a bungling manner: on the banks of *Newfoundland*, the hook, which is only hid by the entrails of the animal last taken, is dropt into the water, the *Cod* seizes it at once, and the fishermen have but to pull up as fast as they throw down: but it is otherwise in *fresh* water; the lines must be drawn to a hair-like fineness, be tinctured of the peculiar colour of the Stream, the bait must be selected with care, or formed with the nicest Art, and still the fishes approach with diffidence, and often swim round it with disdain, while hours are wasted in fruitless expectation, and the *Patience of an Angler* is become proverbial.

Of the sense of *Hearing*, it is probable, fish are altogether destitute, since all, except the Cetaceous, are deprived not only of external Ears, but also of the auditory Nerves and Canal; for these reasons, it is generally agreed by Naturalists, that all the *Spinous* fishes (so called from their bones resembling the sharpness of Thorns) have no faculty of hearing.* In this class of the Animal Kingdom, Linnæus, whose accuracy in examining a great number of subjects is scarcely to be disputed, confesses, that he has been unable to discover any *auditory* Organs. Had nature made a provision in their conformation for the hearing of fishes, that Sense must, by the properties of the Element which they inhabit, have been rendered extremely imperfect. Experiments on the capacity of water to transmit *Sounds* have been correctly tried, and as it quickly deadens that vibration upon which they depend, it is unable to convey them but a short distance. A man whose head is *one* foot beneath the surface hears voices and words uttered in the Air, but when immersed *twelve* feet, he scarcely hears a Musquet discharged over his head; hence it is probable, that Nature having for ever consigned Fishes to an Element, which must in a great

measure have defeated its purpose, has formed no Organic Apparatus to convey Sounds to them.

On the contrary side several of the old Naturalists allege, in proof of the faculty of hearing in fishes, that in some places in *Germany* where they are tamed, they are regularly convened to their food by the sound of a *Bell;* but Mr. GOUAN, of *Montpelier*, clearly refutes these proofs. The Gold-fishes which he kept in Vases could never be disturbed by the loudest noise, provided he could prevent the *tremor* of the *Air* from affecting the *Water*. From this it appears, that fishes can no more hear than *speak*, and that apparently coming to their food at the call of a *bell* or *whistle*, it is either by feeling the sound vibrate and affect the water, or by seeing the persons approach by whom their food is accustomed to be given, that they collect themselves together to receive it.

Upon this Organ of *hearing* in fishes, the late Mr. JOHN HUNTER observes very differently, and his Authority warrants the digression in giving his arguments at some length.

He states, that previous to his quitting his Anatomical pursuits, in the year 1760, and going with the Army to *Belleisle*, he had found this Organ in fishes, and had the parts exposed and preserved in spirits. " My researches," continues Mr. H. " have been continued ever since that time, yet I am still inclined to consider whatever is uncommon in the structure of these parts in fishes as only one mode in the variety displayed in the formation of this Organ of sense in different animals, descending in regular progression from the most perfect to the most imperfect. The preparations to illustrate these facts have ever since been exhibited in my Collection to both the curious of this Country and Foreigners : in shewing whatever was new, or supposed to be so, the *Ears of Fishes* were always considered by me as one important Article.

" The Organ of hearing in fishes is placed on the sides of the Skull or cavity which contains the *Brain;* but the *Skull* makes no part of the

organ, as it does in the Quadruped and the Bird, the Organ itself being distinct and detached. In some fishes, the organ is wholly surrounded by the parts composing the *Cavity* of the skull, as in the *Ray* kind. In others, this Organ is partly within the skull, or that Cavity containing the brain, as in the *Salmon*, *Cod*, &c. the Skull projecting laterally, and forming a Cavity.

" The Organ of hearing in fishes appears to increase with the Animal, for it is nearly in the same proportion with that of the Animal, which is not the case with the Quadruped, &c. the Organs being in them nearly as large in the growing Fœtus as in the Adult.

" It is much more simple in fishes than in all those orders of animals which may be reckoned superior, such as Quadrupeds, Birds, and *amphibious* animals; but there is a regular gradation from the first of these to fishes. It varies in different orders of fishes; but in all consists of three curved tubes which unite with one another: this union forms in some only one canal, as in the *Cod*, *Salmon*, *Ling*, &c.; and in others a pretty large cavity, as in the *Ray* kind. In the *Jack* or *Pike*, there is an oblong bag, or blind process, which is an addition to these canals, and which communicates with them at their union. In the *Cod*, &c. this union of the three tubes stands upon an oval cavity, and in the *Jack* there are two; the additional cavities in them appear to answer the same purpose with the cavity in the *Ray* or Cartilaginous fishes, which is the union of the same canals.

" The whole Organ is composed of a kind of cartilaginous substance, very hard or firm in parts, and which in some fishes is crusted over with a thin bony Lamella, so as not to allow it to collapse; for as the Skull does not form any part of these canals or cavities, they must be composed of a substance capable of keeping its form.

" Each tube describes more than a Semicircle. This resembles in some respects what is found in most other animals, but differs in the parts

being distinct from the skull. The *Turtle* and the *Crocodile* have a structure somewhat similar to this; and the intention is the same, for their Skulls make no part of the Organ. Two of the semi-circular canals are similar, they may be called a pair, and are placed perpendicularly, and united at one end laterally, forming one canal; at their other extremities they have no connection with each other, but are joined to the terminations of the horizontal one near its entrance into the common cavity; the third is not so long: in some it is horizontal, uniting, as it were, the other two at their ends. In the *Skate* it is only united to one of the perpendicular canals: near the union of these canals into the common, they are swelled into round bags, becoming then much larger. In the *Ray* kind they all terminate in one cavity; and in the *Cod*, in one canal placed upon the additional cavity or cavities, in which there is a bone or bones. In some there are *two* bones, and in the *Pike*, which has two cavities, in *one* of them are found two bones, and in the other *one:* in the *Ray* there is only a chalky substance; this chalky substance is also found in the Ears of *amphibious* Animals.

" In some fishes, the external communication enters at the union of the two perpendicular canals; this is the case with all the *Ray* species; the external orifice being small, and placed on the upper flat surface of the head: but it is not every genus of fishes that has the outward opening. The nerves of the Ear pass outwards from the brain, and appear to terminate at once on the external surface of the swelling of the semi-circular tubes above described. They do not seem to pass through them so as to get on the *inside*, as is supposed to be the case in Quadrupeds; it is therefore to be much suspected, that the *lining* of the tubes in the quadruped is not *nerve*, but a kind of internal *periosteum*.

" Fishes thus evidently possessing the *organ* of hearing, precludes the necessity of making any experiment, which only leads to prove this fact. One trial will however be related, to shew that *Sound* affects them, and is one of their *Guards*, as it is in other Animals.

" When in *Portugal*, in 1762," says Mr. H. " I observed in a Noblman's garden near *Lisbon*, a small fish-pond full of different sorts of fi... Its bottom was level with the ground, and was made by forming a bank all around, with a Shrubbery close to it; whilst lying on the bank seeing the fish, I desired a Gentleman, who was my companion, to go behind the Shrubs (that there might be no reflection of light from the flash) and fire his Gun. The moment the report was made, the fish seemed to be uniformly affected, for they vanished immediately, raising as it were a cloud of mud from the bottom. In about five minutes afterwards, they began to appear, and again swam about as before."

Mr. HUNTER allows, that although GEOFFROI, who wrote upon this topic, cannot be said to have given a perfect account of the Organ of hearing in fishes, yet *he* should be considered as a discoverer; and with modesty Mr. H. continues, that he should not have claimed a discovery, to which Mr. GEOFFROI had a prior right, had he been acquainted with that Author's researches and pretensions. The Hearing of fishes has been long and strongly contended, but by the skilful investigation of our celebrated Anatomist, the Question of the fishes *Hearing* seems to be decided.

The *Sight* of fishes is perhaps the most perfect of all their Senses, and yet their seeing is far inferior to that of most other animals; the *Eye* in almost all fish is covered with the same transparent skin that surrounds the rest of the head, and which probably defends it in the water, as they are without *eye-lids;* the globe is more depressed in front, and is furnished behind with a muscle, which serves to lengthen or flatten it according to the animal's necessities. The *chrystalline* humour, which in Quadrupeds is flat, and of the shape of a button-mould, in fishes is round as a *pea*, or sometimes oblong like an *egg*. A general idea of this may be formed from the glasses used by near-sighted people: those whose chrystalline humour is too *convex*, or in other words, too round, are always very near-sighted, and have recourse to *concave* glasses to amend this imperfection of Nature. The chrystalline humour of fish is *so round*, that it is not in the power of

glasses, much less of water, to correct their Vision. This humor is that hard *pea-like* substance which is found in their eyes after *bo*. the natural state, it is transparent, and not much harder than a jelly. is no evidence of any fishes seeing at a considerable distance, and the conduct of many of them, that are deceived by the different baits prepared in imitation of their food, gives room to suspect, that Objects are not very distinctly perceived by them, even when near.

The *Iris* also in the Eyes of *Fish* does not admit of Contraction. This is a great difference, of which the probable reason is, that the diminished light in Water is never too strong for the Retina.

In the *Eel*, which has to work its head through sand and gravel, the roughest and hardest substances, there is placed before the Eye, and at some distance from it, a transparent, horny, convex case, or covering, which, without obtruding the sight, defends the Organ. To such an Animal, could any thing be more wanted or more useful?—Thus, in comparing together the Eyes of different kinds of Animals, we see in their resemblances and distinction one general plan laid down, and that plan varied with the varying Exigencies to which it is applied. There is one property, however, common to all Eyes, at least to all which have been examined*, namely, that the Optic Nerve enters the *bottom* of the Eye, not in the Centre or Middle, but a little on one side; not in the point where the Axis of the Eye meets the Retina, but between that point and the Nose. The difference which this makes, is, that no part of an Object is unperceived by *both* Eyes at the same time.

In all animals, Respiration, or the admission of *Air* into the body, seems necessary to the support of life: in the *spinous* fishes, which are more immediately the objects within our notice, respiration is performed by the *gills*, without the cavity of the body; but the precise manner in

* The Eye of the *Seal* or Sea-calf is said to be an Exception.

operation is carried on, is one of those Secrets of Nature, either the *glasses* nor the *knife* of the Anatomist have ever yet ble to develope. Those who have seen a fish in water, will recollect the motion of its Lips and Gills, or at least of the bones on each side that cover them; in the animal, this motion is doubtless analogous to our *breathing*, but it is not *air*, but *water*, that the fish actually sucks in and spouts out through the gills at every motion, while the bony covering of the gills prevents it from going through them until the animal has drawn the proper quantity of Air from the body of Water there imprisoned, the bony covers then open, and give it a free passage; the gills, by this means, are again opened, and a fresh quantity of water is admitted. Should the fish be obstructed in the free play of its gills, or the bony covers, by a string tied round them, be kept from moving, the Animal would speedily be convulsed, and die in a few minutes. The manner indeed whereby the *Air* is transmitted from the *lungs* of *quadrupeds* into the *blood*, is perhaps equally mysterious as its passage from the *gills* of *fishes* into the *arteries* leading to the *heart*. As the Air and Water pass quickly through the Gills, without any apparent effort to separate them, probably but a small quantity of the former is absorbed, but that by the frequent transition of the water, a sufficiency of it may be admitted to supply animals whose *blood* is not in a great abundance, and is naturally cold.

But however small a quantity of Air may suffice to sustain the life of a fish, some portion is absolutely essential to every living being: the *Death* of fish in a severe *frost* is in consequence of the congelation of the surface, whereby the *external* Air is excluded; the animals below must of course perish; and the eagerness to procure a supply of Air is manifested, by the suffocating fish instantly crowding to any Aperture made in the Ice, where to obtain it they will suffer themselves to be caught by the Hand.

Next to the necessity of breathing Air, that of devouring *food* seems

to be the most urgent and constant in the constitution of fishes. Among *them*, both in Strength and Avidity, this Appetite surpasses those boundaries, which, in the other orders of the Animal World, Nature seems to have prescribed. Every *aquatic* animal that has life, falls a victim to the indiscriminate voracity of one or other of the fishes. *Insects*, *worms*, or the *spawn* of other Tenants of the Waters, sustain the smaller tribes, which in *their* turn, are pursued by millions larger and more rapacious. A few feed upon *mud*, *aquatic plants*, or grains of *corn*, but the far greater numbers subsist upon *animal* food alone, and of this they are so ravenous, as to spare not those of their own Kind. That there are *vegetables* in both fresh and salt waters admits no doubt, and these may furnish food to particular fishes; but those sorts are few, perhaps no *one* kind can be pointed out, that subsists entirely upon them; and although most fishes eat *flies* and *terrestrial* worms when they come in their way, yet in the immeasurable waste of Waters surrounding this Globe, the Swarms of fishes are so immense, that the subsistence to be derived from the above sources appears to be altogether disproportioned to their wants, and those of a smaller size seem to constitute the principal food of nearly all the fishes known to us. *Charr* kept in a pond, if scantily supplied, frequently devour their own young; other fish that are larger, go in quest of more bulky prey; it matters not of what sort, whether of their own or of another Species. If we turn our attention in this argument to *Sea* fish, those with the most *capacious* mouths pursue almost every thing that exists, and often meet each other in fierce opposition, when the fish which has the widest *throat* comes off with victory, and devours his Antagonist.

The *voracious* fishes differ widely from the predatory kinds of *terrestrial* animals; they are neither limited in their number, nor solitary in their habits; their rapacity is not confined to a few species, one region of the Sea, or individual efforts; almost the whole Order is continually irritated by the cravings of an Appetite, which excites them to encounter every danger, and which, by its excess, often destroys that Existence, which it was intended to prolong. Innumerable shoals of one species pursue those

of another, through vast tracts of the Ocean, from the vicinity of the *Pole* to the *Equator*. The *Cod* pursues the *Whiting*, which flies before it from the banks of *Newfoundland*, to the southern coasts of *Spain*. The *Cachalot* drives whole armies of *Herrings* from the regions of the North, devouring at every instant thousands in the rear. Hence the life of every fish, from the smallest to the greatest, is but a continued scene of rapine, and every quarter of the immense Deep presents one uniform picture of Hostility, Violence, and Invasion.

In these conflicts, occasioned by the voracity of the different kinds of fishes, the *smaller* classes must have long since fallen Victims to the avidity of the *larger*, had not Nature skilfully proportioned the means of their escape, their numbers, and their productive powers, to the extent and variety of the Dangers to which they are unceasingly exposed. To supply the constant waste, occasioned by their destruction in the unequal combat, they are not only more *numerous* and *prolific* than the larger Species, but by a happy instinct are directed to seek for food and protection near the *shore*, where, from the shallowness of the water, their Foes are unable to pursue them. These, however, yielding to the strong impulse of hunger, become Plunderers in their turn, and revenge the injuries committed on their kind, by destroying the *spawn* of the greater fishes, which they find floating upon the surface of the water.

In what manner *digestion* to such an amazing extent and rapidity is carried on in the Stomach of fishes, the enquiries of Naturalists have at present been unable to ascertain; it so far exceeds every thing that can be effected either by *trituration*, the operation of *heat*, or of a *dissolving fluid*, that a celebrated Physician, (Dr. Hunter,) after various experiments, was of opinion, that none of these Causes were equal to the Effect, and that the digestive force in the *cold Maw* of fishes is so great, as to overturn the systems that have attempted to account for it on those principles; that by some power in the stomach yet *unknown*, which from all kinds of artificial maceration acts differently, the meat taken into the *Maw* is often seen,

although nearly digested, still to retain its *original* form, and whilst ready for a total dissolution, appears to the *Eye* as yet untouched by the force of the Stomach.

The power of fishes to sustain themselves upon a given quantity of food, seems to accommodate itself to the quantity of aliment with which they are supplied. A *Pike*, sparingly fed, can be habituated to subsist on very little aliment; if fully dieted, it acquires the power of devouring an *hundred* Roaches in three days. Exceptions are produced by Naturalists, to the extraordinary Voraciousness of fishes; but if thoroughly examined, they will perhaps be found more apparent than real. Some are said to subsist on *pure* water alone; the Element of Water, however, is seldom found unmixed; the very Epithets usually applied to it of *salt*, *bitter*, *sweet*, imply a composition perceptible even to the taste; the particles of the Earth upon which it runs necessarily enter into it, and vitiate its Purity; these substances, together with myriads of Animalcules with which it teems, *may* for a while afford a scanty subsistence, and sustain the being of the most hungry animals. Of the Economy of Nature, we are, in fact, only capable of observing a few of the visible effects, and the Phenomena resulting from them in certain circumstances: we cannot prove that fishes may not be naturally endowed with the Faculty of converting unorganized matter, that may at this moment subsist under a *fluid* form, into *solid* animal substances. We are certain that a *Leech* may be long preserved healthy in common water, will increase in size, and be capable of exercising all its animal functions in that state. It would be hard to deny that the *Leech* had in this instance derived nourishment from the *fluid alone* in which it lives, though it is well known, that the *Leech* greedily sucks up another *fluid* of Animal origin, when it can have access to that, from which we cannot doubt, but it receives nourishment; from this may be inferred, that fishes in general can obtain sustenance from *pure* water, in the same manner as *terrestrial* animals derive it from Vegetables, and though in both cases there may be some kinds which cannot be at all subsisted upon this original *pabulum* in its native state, yet this

pabulum must be considered as constituting either *directly* or *indirectly* the food of the whole; so that the *flesh* of all *terrestrial* animals may be considered as being produced from *vegetable* matter, changed by the animal process into its present state. In like manner, the *flesh* of all *fishes* may be deemed to be *water* (or some diaphanous matter administered through the medium of water) converted by the animal economy into the *flesh* of fishes; and *vegetable substances* also, from something administered to them in a similar way, through the medium of *water*, may be held to derive their Nourishment.

Supposing then that fishes, perhaps of every sort, procure *some* part of their sustenance from water, yet of *all* known to Man as an article of food, not one it is conceived subsists so entirely on *water* as the *Herring*; and there is little reason to doubt, but that Herrings extract their subsistence from *water*, nearly as much as *vegetables* in general do. The Herring is always found in Shoals, and on some occasions are crowded so close together, as to fill the Sea, at least so far as our implements can reach from top to bottom. Ships are said to have been retarded in their course in passing through these Shoals, and instances are recorded where these little fishes have been left by the Ebbing of the tide in heaps three feet deep upon the shores for many miles in extent. It is universally credited among those conversant in the Herring Fishery, that no other Fish will go into the middle of a Shoal. The Whale, to whom they are a favourite repast, and who swallows a thousand at once, never ventures into the Shoal, but hovers about the skirts of it, and regularly follows their course. The Dog-fish, which in vast *troops* assiduously attend the Herrings wherever they go, carefully keep aloof from the great Mass of them; so it is with other fishes, who delight in the Herring as a prey, but as a body seem to dread their Multitudes. That Herrings obtain their subsistence *directly* from Water in which they swim, seems confirmed by many facts respecting the habits of that singular and celebrated fish. Although ever swimming in Shoals, unlike any other Phenomenon in Nature with which man is acquainted, unless it be those

destructive swarms of *Locusts* which, in certain Regions, have been sometimes known so to fill the Air as to obscure the light of the Sun, and cover with their bodies every terrestrial object they met with in their course; yet no other resemblance can be found between the Shoals of *Herrings* and the *Locusts*, but their *numbers*. These insects proceed in their career evidently in search of *food alone;* the foremost of this pestiferous throng seize upon the first vegetables that come in their way and devour them, leaving those that follow to die with hunger. Their course is marked by destruction; nothing is left behind to support animal existence. Should the wind shift so as to cause their return in the same track through which they came, their Subsistence being exhausted, they all perish. They are therefore constantly *progressive*, for to rest in one place for a few days, or to retrace their former path, are to them alike inevitably destructive; not so with the *Herrings*. With rapidity, and sometimes slowly, *they* advance, at times recede, and again resume their former course, and often remain stationary for Months. Nor are these motions apparently influenced by the nature of their Aliment; nor have any symptoms ever been discovered that in consequence of their long continuance in one place, their food has been diminished. With their fatness, or the reverse, no circumstance in their migrations has been ever oberved to have the smallest Connexion. When they are in progress, let it be continued ever so long, the *foremost* fishes in the shoal have *never* been found to be in *better* condition than those in the *rear*, which, had they fed on small fry, or drawn their subsistence from any other *solid* substances that floated on the water, must have been the case; nor has it been observed, that they generally become leaner after a long continuance in one spot, which, had solid substances been their Nutriment, must have been quickly devoured; so that no known fact gives the smallest Indication that ever the Quantity of food has been in any respect *consumed*, or even *lessened*, by the numbers or long abode of this fish in one station. This reasoning is strongly confirmed by the Condition, when examined, of the Body of the Herring: whenever one has been caught, or under whatever circumstances it has been killed, if it be fat and in good health,

nothing is ever found in its Stomach, that gives the smallest token that it was either of vegetable or animal origin. The only contents of the stomach is a very small quantity of a mucous matter, *sui generis*, and that has no known parallel; all these facts seem to decide, that the Herring is capable of drawing its Subsistence from the water itself, by an inherent power of its animal functions, in converting *sea water*, or the particles of which it consists, into its own Sustenance, and which nutrimental matter it always finds in plenty, wherever that water is; thus deriving its nourishment directly from water, in a mode nearly similar to that in which Vegetables * obtain their subsistence from the same Element in the soil where they are planted.

Returning from this peculiar instance of the Herring, it may however be conceded, that other fishes, although for ever prowling, can endure hunger for a long period. A *Pike*, one of the most gluttonous of fishes, will live and even thrive in a pond where there is no inhabitant but itself; and the *Gold* and *Silver* fishes which are confined in glass Vases, subsist, frequently for years, without any visible support but *Water:* it would appear therefore, that in certain situations, fishes are as remarkable for their *Abstinence*, as in others they are distinguished for their *Voracity;* and that Nature, in compassion to the Want which they must often suffer, has indulged them with a power of accommodating their appetite to *scarcity*, as well as to *abundance* of food.

An opinion has been formed concerning the spontaneous production

* It has been remarked, that *Vegetation* is merely the *Process* of converting *Air* into a *fixed* and *solid substance*, or rather the *process* whereby *Air* becomes the means of CONSOLIDATING all the most beautiful *Adornments* of the *face of the Earth.*

Mr. CAVENDISH had reason to conclude that *all* Animal and Vegetable substances contain *fixed air;* he at last found, that Vegetables consist almost *entirely* of *fixed* and *phlogisticated air*, and some Water; and he had even cause to be persuaded that the *very Water itself* consisted solely of inflammable Air united to dephlogisticated Air. This last conclusion has since been strengthened very much by some subsequent Experiments of Doctor PRIESTLEY'S.

of fishes. It is a Phenomenon in Nature, for which it is indeed difficult to account; yet it is notwithstanding an incontrovertible fact, that in stagnating pools, occasioned by the rain in *Bombay*, which have no communication with any River or the Sea, fishes are generated, of which many persons have eaten, and which upon the drying of these ponds die and are corrupted. In whatever manner the fishes were introduced into these pools, we must conclude, that they were originally produced from the Eggs of Animals of *their own kind;* because the idea of spontaneous Generation is repugnant to every maxim of sound Philosophy.

Fishes in general are Male and Female; the former possessing the *Milt*, and the latter the *Roe*, although some individuals of the Cod and Sturgeon* are said to contain both. The Spawn of the greater number

* PALLAS, speaking of the STURGEON Fishery at ASTRACHAN, says, "the Fishery here, during the Feasts of the *Greek* Church, which amount to at least *one third* of the Year, affords the principal food to the whole European part of RUSSIA. According to the Average produce, the Value of the STURGEONS *annually* taken amounts to 1,760,405 Roubles.

"It may hence be concluded in what incalculable numbers these large Fish, so rich in Caviare, are continually propagated in the Depths of the *Caspian* Sea; they proceed in Shoals to the Mouths, and a considerable way up the Currents of the Rivers, without the least apparent diminution of their numbers. This super-abundance may be more clearly conceived from the account of Eye-witnesses, respecting the fishery of *Sallian* in PERSIA. As the Persians eat no *Sturgeon*, the before-mentioned speculators in Fish have rented the fishery of that River from the *Khan* of *Derbent*, SHICH ALI, a son of FETH ALI KHAN, at a certain sum which of late years has been raised to 25,000 Roubles. In the Season of their Migration there are sometimes in one day *Fifteen Thousand Sturgeons* taken at the Weirs, formed across the water, with the *Hooks* which are fastened to the end of Poles, and after being plunged into the water are drawn up again when a Fish is felt: Nay, it is still more remarkable, that if the Fishermen are accidentally prevented from working during a single day, the Fish accumulate in such numbers at the *Weir*, as to fill the whole Channel, insomuch that those which are uppermost appear with their backs above water, in a River not less than four *Arsheries*, or twenty-eight *English feet* deep, and sixty Fathoms wide. The Persian Fishery, which has been established by the Proprietors only a few years since, and which, together with the Rent, amounts to an Expence of 80,000 Roubles, is said to produce *annually* upwards of 200,000 Roubles. It might be still more lucrative if the injudicious Fishermen would preserve the great number of fish, instead of throwing them into the Sea as useless, after having collected the *Roes* and *Air bladders*."

of fishes is deposited in the Sand or Gravel; and in that state it is probable that the *Roe* and *Milt* are mixed together. A fish whose weight, at *twenty* years old, shall be *thirty* pounds, generates the first or second year, when perhaps it does not weigh more than *half a pound;* and it is certain that the Male seems more attached to the *Eggs* than the Female, for when she ceases to drop them, the Male instantly abandons her, and with ardour follows the Eggs which are carried down by the stream, or dispersed amongst the waves by the wind, passing and repassing many times over every spot where he finds the Eggs.

The most valuable production of the *Sturgeon* is the *Isinglass*, which is sold to England for the *Breweries*, and to the Southern Countries to clarify their *Wines;* but the best *Isinglass* and also *Caviare* are procured from the BELUGA, a species of Sturgeon, which inhabits the *Danube* and the Russian Rivers, and sometimes attains the length of twenty-four feet; in figure it resembles the *Pike*, it is black above, yellow below, and is studded with bony tubercles, which as the fish grows old disappear.

The STURGEON grows to be Eighteen feet long, and to weigh five hundred pounds; the Body is pentagonal, being armed from head to tail with *five* rows of large bony tubercles, each of which terminates in a strong recurved tip: one row is on the back, one on each side, and two on the margin of the belly. The Snout is long and obtuse, and has the *tendrils*, which are some inches long and much resemble *Earth-worms*, near the end. The mouth, which is *beneath* the head, is so formed as to be pushed suddenly out, and is somewhat like the opening of a purse. The upper part of the body is of a dirty olive colour; the lower part silvery, and the Tubercles are white in the middle. By some it is said to feed on fishes, particularly the *Herrings*, Salmon, Mackerel, and Coal-fish. Others, and perhaps with more probability, assert that he hides his large body among the weeds near the sea-coast, or at the mouth of large Rivers, only exposing his *Tendrils*, which small fish or sea-insects mistaking for real worms approach to eat, and are sucked into his mouth: as he has no *Jaws* he evidently lives by *Suction*, and during his residence in the Sea, Marine insects are generally found in his Stomach. The Flesh of the STURGEON is extremely delicious, and was so much valued in the time of the Emperor SEVERUS that the *Servants* who brought it to Table had *Coronets* on their heads, and were preceded by *Music*. In England those caught in the Thames are generally presented by the Lord Mayor to the KING. It is so spiritless a fish that when taken accidently, as it sometimes is, in the *Salmon* nets, it scarcely makes any resistance, but is drawn out of the water apparently lifeless. One of the largest ever caught in our Rivers was taken in the ESK about twenty-six years ago, it weighed *four hundred and sixty pounds*. In April and May the Sturgeon deposits almost innumerable *Ova*. CATESBY declares that the Females contain frequently a *Bushel of Spawn* each, and LEUWENHOECK found in the Roe of one of them no fewer than 150,000,000,000 Eggs.

Summer is the usual spawning time, because at that season the water is tepified by the beams of the Sun, and is therefore better adapted for quickening the Eggs into life. How the Eggs of fishes are impregnated is wholly unknown. All that obviously offers is, that in ponds, the Sexes are often seen together among the long grass at the edge of the water; that there they seem to struggle, and are in a state of suffering, as they grow thin, lose their appetite, whilst their flesh becomes flabby, and in some, the *scales* grow rough and lose their lustre; on the contrary, when the time of coupling is over, their appetite returns, their natural agility is resumed, and their Scales become brilliant, and beautiful. The Spawn continues in the state of eggs a longer or a shorter period, but this is for the most part proportioned to the size of the animal. The young animal remains in the form of an Egg from *December* until *April*, in the *Salmon* kind; the *Carp* not above three Weeks; and the *Gold* fish from *China* is produced in a still less time; with all the advantages of minuteness and agility when excluded from the Egg, there is not *one*, perhaps, of a *thousand*, that survives the dangers of its youth. Among the spinous fishes, there is no trace of parental Affection; they abandon their Eggs to be hatched by the warmth of the Season; and if they ever return to the spot where their young first received life, the Parents that gave them birth, become the most formidable Enemies.

Although the fishes perish by millions, by the rapacity of one another, yet they have other destroyers. Many of the *Quadrupeds*, and a great proportion of *Sea Fowls*, either feed on fish, are the merciless invaders of the small fry, or devour the Spawn. In a Savage state, numbers of the Human race wander round the Lakes and Rivers*, whence a considerable

* The Title, *Ichthyophagi*, or FISH-EATERS, so frequently occurring in HERODOTUS and other ancient Authors, was applied to such Nations as lived partly on Fish, and was probably intended as a mark of Contempt, or to express their wretched mode of Subsistence. MENELAUS, relating his Adventures in Egypt, seems to consider the living upon *Fish* as not the least of his Hardships. Of his Companions, he says,

——————— "They around the Isle with Hooks
The Fishes snaring, roamed, by *Famine* urged."

portion of their Sustenance is derived; and among those Nations, whom Arts and Agriculture have rendered less dependent on this precarious support, *Superstition* has usurped the place of *Want*, and given a new edge to their Avidity for this Species of food; but the munificent Author of Nature, notwithstanding the *annual* consumption of fishes is constant and immense, has made a kind provision for his creatures, in which the Glory of his Providence is remarkable in a two-fold manner. *First*, by giving fishes, at certain fixed Seasons of the year, a particular inclination to approach the *land;* and this always at a time when they are the fattest, and not emaciated by breeding; as the *Salmon* in the *Spring*, *Mackerel* about *Midsummer*, *Herrings* in the *Autumn*, *Cod* in the *Winter*, &c. *Secondly*, by the amazing Fertility which he has conferred on this class of beings. The Fecundity of fishes far surpasses that of any other animals: if we should be told of a being so very prolific, that it would bring forth in one Season, as many of its kind as there are Inhabitants in England, our surprise would be deeply excited, yet upwards of *nine millions* of Ova have been found in the Roe of a single *Cod.* One million three hundred and fifty-seven thousand four hundred have been taken from the belly of a *Flounder;* the Mackerel, Carp, Tench, and a variety of others, are endowed with a fertility but little inferior. Such an astonishing progeny, were they allowed to arrive at maturity, would soon overstock the Element allotted them; but their numbers, by the means above mentioned, are considerably lessened, and thus two important purposes are answered in the Economy of Nature; by the extraordinary fruitfulness of fishes, amongst a Host of Foes it preserves the Species, and furnishes the rest with an aliment adapted to their Nature.

The *Table* of the ingenious Mr. Harmer, and his accurate remarks upon the prolific powers of fishes, deserve a place here, and no alteration is made in them, except that of classing the Fresh and Salt water fishes, without mixing them together.

The plan to ascertain the numbers of the *Eggs* was to exactly weigh

the *whole Spawn*, then taking a piece weighing twenty, thirty, or forty *grains*, as was most convenient; and after weighing that parcel accurately, and giving the turn of the scale to the eggs, to tell them very carefully over, and then by dividing the *number* of Eggs by the *grains*, to find how many *eggs* there were in each *grain*, or nearly so; Mr. *H.* says *nearly*, for by this method there must have been rather more; but he chose *thus* to estimate them, that there might be no danger of representing the fecundity of these animals greater than the Truth. The Eggs were limited to those that could be distinguished by the *naked Eye*, although by such limitation, numbers were passed over that by the help of an *Eye-glass* might justly have been counted: they were told on a fine earthen vessel, extremely *black*, by which means they are better discovered, and the *weights* they were reckoned by *Avoirdupois;* but there being no weights of that sort small enough to answer all purposes, Mr. *H.* was obliged to make use of *Grains* along with them, of which he reckoned *four hundred and thirty-seven and a half*, made an *Ounce* Avoirdupois.

From this table it appears, that the size of the Eggs is almost equal in great and small fishes of the *same species*, at the *same time of the year;* that the quantity of Spawn is, in general, nearly proportionate to the Size of the animal; from whence a tolerable guess may be given, of the greatest fecundity of each kind, if it is known to what weight they have been found to grow in a breeding state: their produce at a medium may likewise be settled, upon learning what the mean size of each sort is, when in the fore-mentioned condition; this is not however *universal*, and consequently not perfectly *exact*, some fish being much more prolific than others, although of a similar bulk and species.

Mr. H. further observes, that the great fruitfulness of Fishes is not, upon examinations of this nature, the only thing that affects the imagination: the extreme disproportion of their *first* appearance in the water after being hatched, and that of their *full growth*, as well as the difference between the magnitude of fish of various kinds, and that of their eggs, are

striking curiosities. The Egg of a *Smelt* (continues Mr. H.), which weighs at its full growth but *three* or *four* ounces, appeared larger than those of a Cod of *twenty pounds* weight, and which might have grown to *forty;* whilst that of a *Sticklebach*, the smallest of all known fish, was found to be above *six* times bigger than the largest *egg* he had ever noticed in a *Smelt**.

* The *Eggs* in the Roe, and *Animalcules* in the Milt of Fishes of *one* year old, are as large as in those of the same Species of twenty years old.

The Table.

1. Names of the Fish.	Nos	2. Their weight. Oz.	Dr.	3. Weight of the Spawn. Grains.	4. Fecundity.	5. Portion of Spawn weighed. Grains.	6. No. of Eggs to a Grain.	7. Time of Examining.
Carp.	1	16	12	1265	101,200	46	80	May 25.
	2	25	8	2571	203,109*	55	79	April 4.
Perch.	1	8	9	765½	28,323	85	37	April 5.
	2	5	10	502	20,582	85	41	6.
Pickeree.	1	56	4	5100½	49,304	70	9⅔	April 25.
	2		—	3248	80,388†	76½	24¾	November 25.
	3	48	10½	3184	33,432	43	10½	March 19.
Roach (or what Mr. H. took to be of that Species.)	1	2	0	114	9,604	—	—	April 4.
	2	6	8	671	43,615	68	65	May 4, 1764.
	3	3	8	346½	29,799	42½	86	Ditto.
	4	2	2	153	9,486	42½	62	5.
	5	10	6¼	361	81,586	39	226	2, 1765.
	6	9	10¾	417	113,841	42	273	6.
	7	3	8	213¼	45,475	20	213	24.
Smelt.	1	2	0	149½	38,278	30	256	February 21.
	2	(289½ gr.)		50	14,411	—	288	March 21, 1764.
	3	1	14	157¼	29,925	40½	199	27, 1765.
	4	1	12	145½	30,991	20	213	28.
	5	1	7	149	24,287	20	163	Ditto.
	6	1	5	136	23,800	20	175	Ditto.
Tench.	1	40	0	—	383,252‡	—	—	May 28, 1764.
	2	28	8	533½	280,087	25	525	3, 1765.
	3	8	14¾	224	83,104	20	371	10.
	4	9	8	284½	108,963	20	383	Ditto.
	5	12	8	366	138,348	22¼	378	Ditto.
	6	27	9½	1969	350,482	23	178	June 11.
	7	14	15	866	138,560	20	160	Ditto.

* Petit is said to have found in a Carp 342,144 Eggs.

† 143,000 *Ova* are said to have been taken from a *Pike* caught in the *Rhine*, which did not weigh above *Nine pounds*.

‡ No. 1. of the Tench certainly had a much larger number of Eggs; but being extremely distended with Spawn, and unluckily let fall before it was brought to Mr. H., the enveloping skin in which the Eggs were contained, was broke, which made it difficult to determine some circumstances relating to this fish; it had however the number of Eggs here set down, at the lowest way of reckoning, and it is believed, many thousands more.

Table Continued.

1. Names of the Fish.	Nos.	2. Their weight. Oz. Dr.	3. Weight of the Spawn. Grains.	4. Fecundity.	5. Portion of Spawn weighed. Grains.	6. No. of Eggs to a Grain.	7. Time of Examining.
Flounder.	1	2 14	182½	133,407	23	731	February 21.
	2	3 8½	152	225,568	19	1484	December 18.
	3	6 12	598	351,026	26½	587	March 14.
	4	24 4	2,200	1,357,400	24½	617	Ditto.
Cod Fish *.		——	12,540	3,686,760	29	294	December 23.
Herring.	1	4 3	367	32,663	48	89	Oct. 8, 1763.
	2	5 0	236½	21,285	48½	90	29.
	3	3 13	259	23,569	52½	91	Oct. 2, 1764.
	4	5 10	480	36,960	53	77	25.
	5	4 6½	366	29,646	57	81	Ditto.
	6	4 8	420½	27,753	51	66	November 3.
	7	5 1	490½	32,863	41½	67	October 18.
Mackerel.	1	20 0	1,027	454,961	33	443	June 20, 1764.
	2	20 0	949	430,846	24½	454	29.
	3	18 0	1,223½	546,681	32½	447	18, 1765.
Sole.	1	14 8	542½	100,362	20	185	June 13.
	2	5 0	179½	38,772	20	216	28.
Lobster †.	1	14 8	—	7,227	—	14	April 4.
	2	36 0	1,671	21,699	129	—	August 11.
Prawn.	1	127 gr.	—	3,806	—	243	May 12.
	2	94½ gr.	—	3,479	—	287	Ditto.
	3	100½ gr.	—	3,579	—	247	Ditto.
Shrimp, with light coloured Spawn.	1	17½ gr.	3	3,057	—	1000	May 3.
	2	39 gr.	7	6,807	—	972	Ditto.
	3	——	—	4,601	—	—	Ditto.
Shrimp, with dark col. Spawn.	1	31 gr.	5	4,090	—	818	Ditto.
	2	22 gr.	4	2,849	—	712	Ditto.

* In a Cod Fish of middling size Leuwenhoeck affirms there were 9,384,000 Eggs.

A *Cod* fish was lately sold in *Workington* Market, Cumberland, for One Shilling: it weighed 15*lbs*, and measured two feet nine inches in length, and seven inches in breadth. The *Roe* weighed 2*lbs*. 10*oz*.: *One grain* of which contained 820 Seeds, or Eggs; the whole, therefore, might contain 3,901,440 Seeds. From such a trifle as this may be observed the prodigious Value of the Fisheries to a Commercial Nation. Thus, supposing that each of the above Eggs should have arrived at the same perfection and size of the *Mother* fish, its produce would weigh 26,123 *Tons*, and consequently would load 261 Sail of Ships, each of *One hundred Tons* burthen. If each fish was brought to Market and sold for a *Shilling*, this would net a clear sum to the Nation of £.195,000. But this Increase is trifling compared to that of the *Sturgeon*, which according to Leuwenhoeck (as before noticed) amounts to *one hundred and fifty thousand Millions* of Eggs from a single Fish.

† Four Millions and Ninety-six thousand Eggs were computed in the Roe of a *Crab*, each of which received its Nourishment by a Rope from the *Crab's* Body.

Mr. H. concludes with saying, that he has taken no notice of several fractions in the number of Eggs contained in a *grain*, in many cases, choosing rather to fall below than exceed the Truth. That in every fish mentioned in the Table, he has been scrupulously exact in all particulars, excepting the Weight of the fish in the second column, where the utmost nicety was not necessary; some few might vary a trifle more or less, but the weights of much the greater part were *accurately* set down.

From this investigation of the *Produce* of fishes, we return to the consideration of their Senses as compared with those of other Animals. Hitherto fishes have been examined with regard to their external Conformation; and in their *Organization*, and in the number of their enjoyments, they have been found *inferior* to *terrestrial* animals; they are now to be contemplated in a more favourable point of view, and that is, in the lengthened duration of that humble Existence, which Nature has assigned them; their *Longevity* is far superior to that of other creatures, and there is reason to credit that they are, in a great measure, exempted from Diseases. Wherever there is Existence, there is some degree of Felicity; there are Enjoyments suited to the different powers of feeling; and Earth, and Air, and Water, are by the *great* Father of all, with magnificent liberality, made to teem with Life and Happiness.

Most of the disorders incident to Mankind arise from the changes of the Atmosphere, but fishes reside in an Element but little subject to Alteration; theirs is an uniform existence, their movements are without effort, and their life without labour; their Bones also, which are united by *Cartilages*, admit of indefinite extension, and allow the conjecture, that the intention of Nature was neither to fix the duration of their Lives, nor the expansion of their Size, to such narrow limits as that of *terrestrial* creatures. Instead of suffering from the rigidity of Age, which is the cause of natural decay in land animals, their bodies still continue increasing with fresh supplies; and as the *body grows*, the Conduits of life furnish their stores in greater abundance. How long a fish that seems to have

scarce any bounds put to its growth, continues to live, is not ascertained; the date prescribed as the *Age of Man*, would not perhaps be sufficient to measure the life of the smallest. In the royal Ponds at *Marli*, in France, there are some fishes that have been preserved tame since the time, it is said, of FRANCIS the *First*, and which have been individually known to the persons who have succeeded to the charge of them, ever since that period. These have now attained a Size much beyond the common Bulk of fishes of the same kind; and although there are certain peculiarities distinguishing them from younger fishes, yet they evince no Symptoms of that decrepitude and disease, which *inevitably* accompany a Life protracted much beyond the usual space among *Quadrupeds*. It is well known, likewise, that fishermen sometimes catch an individual fish of more than double the weight of what is deemed a full sized fish of that Species, especially in those situations where they have been strictly guarded from danger. *Carp* and Eels of very large dimensions are sometimes caught in ponds that have been carefully secured from common depredators, and at the same time neglected by the Owners for a long series of years, which extra size may be justly ascribed to their great Age; nor is there risque that the old fishes in such situations will be starved, by the multitude of younger ones increasing so much as to deprive them of food; for on whatever the *small fry* may subsist, Providence seems to have designed that the larger should never want, whilst the smaller were beside them; for fishes, in general, are observed to prey upon others of any sort, that can be swallowed by them. In August 1799, the *Earl of* ESSEX fished a large pond near Radnor Forest, which had been stocked *fifty-eight years*. *Carp* and *Eels* were the only fish found in it; of the former, one hundred brace were taken that weighed from *fourteen to fifteen pounds each Carp;* of the latter, the largest exceeded *eight* pounds.

The *dietetical* uses of fish are to us the most important part of their History, a part that is happily free from that uncertainty and darkness, in which many other circumstances relating to their manners and economy are still involved: it is not exactly meant here to refer to the great

Epicures of former times, who have made themselves noted for the delicious style of preparing their fish: for instance, APICIUS for having taught Mankind to *suffocate* fish in *Carthaginian* pickle; QUIN, for rescuing from oblivion the *John Doree*, and for overcoming the vulgar prejudices on account of its Deformity. Superstition had indeed allowed the *Doree* to rival the *Haddock*, in the honour of having been the fish, from whose mouth St. PETER took the *Tribute Money;* perhaps it is rather difficult at this time to decide this dispute, but the *Doree* asserts an origin and right to the *Spots* in question, of a much earlier date than the Haddock; as St. CHRISTOPHER, (who by the way was of *Colossal* stature, and whose Image at *Auxerre* is near seventy feet high,) in wading through an arm of the Sea having caught a fish of this kind *en passant*, as an eternal memorandum of the fact, left the impression of his *finger* and *thumb* on its sides, to be transmitted to all posterity; but however doubtful its title to religious notice, Mr. Quin and the sauce he composed for it, has beyond controversy established the *Doree*'s reputation with the *Bon Vivant.* Mrs. GLASS has contributed her *Eel pie;* and Mr. TULL, to give them a finer flavour, has *humanely* made known his invention of *spaying Carp:* laying aside these far-fetched auxiliaries to heighten the flavour of fish, almost every *European* one, whilst in season, is nutritive*. The Art of Navi-

* It has however been said by a learned Writer upon Diet and Regimen, "that *Fish*, though of a tender flesh, afford upon the whole but weak nourishment. They are more or less difficult to digest, according to the different kinds of Water in which they live. Those living in Ponds, ditches, and other *standing* waters, are certainly less wholesome than *River* fish, whose exercise is greater, and whose natural Element is purer; for standing water easily putrefies, and the fish lodging in the mire of such reservoirs, continually feed upon the putrid parts. But the same kind of River fish is also of various qualities, according to their different nourishment. Thus, those caught in Rivers contiguous to great towns are less salubrious than others; because they necessarily receive great quantities of the impurities thrown into such rivers. *Salt-water* fish are perhaps the best of any: their flesh is more solid, more agreeable and healthy, less exposed to putrescency, and less viscid. These excellent qualities they possess when fresh; and with respect to *Herrings*, it is certain that of all the Sea-fish they are most easily digested. Fish dried in the open air, and afterwards boiled soft, digest speedily. Salted Sea-fish have all the properties of Salt-flesh, and consequently its disadvantages; and as well as *smoked* fish, are injurious to the stomach, and afford little nutrition, with the exception of *Salt Herrings*, which, if eaten in small quantities, dissolve the slime in the stomach, stimulate the appetite, create thirst, and do not readily putrefy by long keeping."

gation may be said to have completed Man's conquest of the *Ocean*, and to have brought a vast accession both to his subsistence and enjoyments, by the capture of so many animals, where Nature seemed to have placed them beyond his reach. The austere, scrupulous regulations of the *Romish Church*, have tended more than any other circumstance to enhance the value, and increase the quantity of this species of food: so rigid was the Precept upon this point, that in the year 1629, CLAUDE GUILLON was beheaded at *St. Claude* in *Burgundy*, for eating a morsel of *Horseflesh* on a *Fish*-day*; an Exchange, which (considering the severe punishment annexed to the act, and putting *Palate* out of the account) it is to be presumed nothing but the Inability to buy fish could have induced him to make. To supply, therefore, the imaginary abstinence of the devout or superstitious, large demands are annually made upon the Sea; and to make up the deficiency of this precarious supply, Ponds have been dug, and fish, like *land* animals, rendered domestic. The late Dr. FRANKLIN remarked, that, "he who takes a fish out of the water, finds a piece of Money." What a mine of Wealth had our own Coasts presented, which had been little resorted to; and it is something singular, that Fish for the *supply* of the London Market were never brought by *Land Carriage* until 1761†.

It is remarkable, that only *three* kinds of fish have been transported from *foreign* parts into GREAT BRITAIN: the CARP, the TENCH, and the GOLD-FISH; but if the transplacement of *fish* has not been often attempted, it certainly is not because they are incapable of sustaining various degrees of *heat* and of living in different *climates;* of this the *Gold-fish* are a striking instance, being originally natives of CHINA and JAPAN. About the year 1691 they were *first* introduced into England, but were not generally known until 1728, when a great number were brought over

* In 1546, a short time preceding the Burning of GEORGE WISHART, four men were hung in Scotland for eating of a Goose upon a *Friday*.

† By an account of the amount of premiums, bounties, and sums of money expended under the authority of the Act of the 41st GEORGE III. cap. 99, "for granting Bounties for taking and

and presented to Sir MATTHEW DECKER, who circulated them round the neighbourhood of *London*, from whence they have been distributed to

bringing Fish to the Cities of London and Westminster, and other places in the United Kingdom;" it appears that the total quantity of Fish brought to Billingsgate Market, by the different candidates for the bounties, were, for the year,

	1802.	1803.
	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs.
Fresh Cod, Haddock, &c.	1,416 10 3 4	2,173 10 3 14
Slightly salted Cod, Haddock, &c.	171 9 1 8	312 10 1 8
Skaite, Thornback, &c.	649 8 2 14	1,090 3 3 17
Fresh Herrings	No. 4,677,500 or	623 0 0 0
Fresh Sprats		10,309 bushels.
Fresh Mackerel		No. 866,995.

The distribution of the Bounty in the Port of London, was as follows:

	£.	s.	d.
To 13 vessels bringing the largest quantities of Cod, being upwards of 20 tons, each 50*l.*	650	0	0
To 12 single vessels bringing the largest quantities of Skaite, &c. being upwards of 20 tons, each 40*l.*	480	0	0
To two persons bringing the largest quantities of Herrings, No. 886,000	100	0	0
To four persons bringing the largest quantities of Sprats, bushels 6,222	140	0	0
For the largest quantity, No. 384,500	150	0	0

BRISTOL.

The Bounty paid for the largest quantity brought to Market to the 31st *Dec.* 1802, of fresh Skaite, Turbot, &c. viz. 40 tons	50	0	0
For the largest quantity, not less than 75,000 of Mackerel, or 30 tons	30	0	0
For the next largest quantity, not less than 37,500 of ditto, or 15 tons	15	0	0

N. B. No return has been made of the quantities of Fish caught.

EXETER.

The Bounty paid for the greatest quantities of Fish caught between the 1st of *Dec.* 1801, and the 1st of *Sept.* 1802, was:

	Tons. cwt. qrs. lbs.	*Bounties.* L. s. d.
Skaite, Hake, &c.	131 4 1 0	166 0 6
Herrings	8 6 2 0	30 5 0
Mackerel	3 2 0 0	31 10 0
Cod and Haddock	3 5 3 7	21 0 0

N. B. The total quantity of Fish brought into this Market in the Year preceding appears to have been 58 tons.

most parts of the country; they have been known to attain the length of eight inches, and in their native place are said to equal the size of the largest *Herring*, and perhaps from the observations made upon *these*, when kept in a glass Bowl, much information respecting the various actions of fish *in the water*, has been derived. Mr. White, of *Selborne*, has been particular in these remarks.

" It was here, (says that Gentleman,) that I first observed the manner in which fishes die. So soon as the creature sickens, the Head sinks lower and lower, and it stands, as it were, upon it; until, getting weaker, and losing all poise, the tail turns over, and at last he swims on the surface of the water, with its Belly upwards. The reason why fishes, when dead, float in that manner, is very obvious, because, when the body is no longer

For the greatest quantities of Fish caught between the 1st of *December* 1802, and the 1st of *August* 1803 :—

	Tons.	cwt.	qrs.	lbs.	*Bounties.* L.	s.	d.
Herrings	204	13	3	0	180	10	0
Cod and Haddock	3	10	2	0	15	0	0
Pilchards	15	7	2	0	25	0	0
Skaite, Hake, &c.	13	2	2	0	20	0	0

EDINBURGH.

The Bounty paid to the three persons bringing the largest quantities of Fish into Market from the 1st of *October* 1802, to the 1st of *October* 1803, was, for :—

	Tons.	cwt.	qrs.	lbs.	*Bounties.* L.	s.	d.
Cod	104	14	3	0	90	0	0
Haddocks	422	9	8	0	100	0	0
Skaite	27	11	0	0	25	0	0
Turbot and Soles	9	1	1	2	30	0	0

The total quantity of Fish exposed to sale in Edinburgh Market was for the years

	1802. Tons.	cwt.	qrs.	lbs.	1803. Tons.	cwt.	qrs.	lbs.
Cod	214	13	2	19	128	13	2	22
Haddocks	302	5	3	6	526	13	2	4
Skaite	25	17	3	13	45	8	3	14
Turbot and Soles	5	5	0	6	11	18	2	13

The total Amount of the sums paid for Bounty, and the expences attending ascertaining the same, (including 6000*l.* remitted to Ireland for bounties in that kingdom,) is 11,260*l.* 9*s.*

In

balanced by the fins of the belly, the broad muscular back preponderates by its own gravity, and turns the belly uppermost, as lighter, from its

In the following Accounts will be seen the Price of Fish which were brought to the London Market at a very early period*, and also *that* which they bore upon an Average at the same place in the Year 1804. If the increased Expences of *Provisions*, *Cordage*, *Bait*, (*Wilks* for *Cod* bait selling now at *five shillings* per Bushel,) *Mens Wages*, &c. &c. the vast population of the Metropolis, and the Quantities of Fish now consumed, compared with the same Circumstances in the time of EDWARD the First; and if also the different value of Money be taken into the Calculation, we shall find a much less Variation between the Prices of the two Periods than might have been imagined.

"BILLINGSGATE," says Mr. PENNANT, "was antiently a small port for the Reception of Shipping, and, for a considerable time, the most important place for the landing of almost every Article of Commerce. It was not till the Reign of King WILLIAM the Third, that it became famous as a Fish-market; who, in 1699, by Act of Parliament, made it a free Port for Fish, which might be sold there every day in the week, except *Sunday*. The object of this has been long frustrated, and the Epicure who goes (as was a frequent Practice) to *Billingsgate* to eat Fish in perfection, will now be cruelly disappointed.

"I cannot," adds Mr. P., "give a list of the Fish most acceptable to the SAXON Ages; but there is a List of those which were brought to Market in the Reign of EDWARD I. who condescended even to regulate the underneath Prices, that his Subjects might not, at that period, be left to the mercy of the Venders.

	s.	*d.*
"The best Plaise	0	1½
A dozen of best Soles	0	3
Best fresh *Murril*, i. e. *Molva*, either Cod or Ling	0	3
Best Haddock	0	2
Ditto Barkey	0	4
Ditto Mullet	0	2
Ditto *Dorac*, (John Doree)	0	5
Ditto Conger	1	0
Ditto Turbot	0	6
Ditto Bran, Sard and Betule	0	3
Ditto Mackrel in *Lent*	0	1
Ditto out of *Lent*	0	0½
Ditto Gurnard	0	1
Ditto fresh Merlings, i. e. *Merlangi*, Whitings, four for	0	1
Best powdered ditto, twelve for	0	1
Ditto *pickled* Herrings, twenty	0	1

N. B. "This shews that the Invention of Pickling was before the time of WILLIAM BEUKELEN, who died in 1397."—See Brit. Zool. iii. Article *Herring*. "Best

* The FISHMONGERS had their Charter as a Company of the Livery of London A. D. 1433. The Livery Fine is £.25, and in Precedency they rank as the *Fourth* Company.

being a Cavity, and because it contains the swimming bladders, which contribute to render it buoyant. Some people (continues Mr. W.) have

	s.	*d.*
" Best fresh Herrings before *Michaelmas*, six for . . .	0	1
Ditto after Michaelmas, twelve for	0	1
Ditto *Thames* or Severn Lamprey	0	4
Ditto fresh Oysters, a Gallon for	0	2
A piece of Rumb, gross and fat, I suspect *Holibut*, which is in general sold in pieces, at	0	4
Best Sea Hogs, i. e. Porpesses	6	8
Ditto Eels, a Strike, or Quarter of a hundred . . .	0	2
Best Lampreys in *Winter*, the hundred, at	0	8
Ditto at other times	0	6
N. B. These, by their cheapness, must have been the little Lampreys now used for Baits; but we also imported Lampreys from *Nantz:* the first which came in was sold for not less than	1	4
A Month after at	0	8
Best fresh Salmon, from Christmas to Easter . . .	5	0
Ditto, after Easter	3	0
Best Smelts the hundred	0	1
Ditto Roche in *Summer*	0	1
Ditto *Lucy* or Pike at	6	8
By the high price of the *Pike* it is very probable that this Fish had not yet been introduced into our Ponds, but was imported at this period as a Luxury, pickled, or some way preserved."		

In this List, by Mr. PENNANT, of the Fish sold at Billingsgate, the Pike and Porpuss bear the highest price.

" Among these Fish let me observe," continues Mr. P. " that the *Conger* is, at present, never admitted to any good Table; and to speak of serving up a *Porpess* whole, or in part, would set your Guests a staring. Yet, such is the difference of *Taste*, both these Dishes were in high esteem. King RICHARD's Master Cooks have left a most excellent receipt for *Congur in Sause*;* and as for the other great fish, it was either eaten roasted, or salted, or in broth, or *furmente with Porpesse*†. The learned Dr. CAIUS even tells us the proper sauce, and says, that it should be the same with that for the *Dolphin*‡, another Dish unheard of in our days. From the great price the *Lucy* or *Pike* bore‖, one may reasonably suspect that it was at that time an exotic fish, and brought over at a vast expence.

* Forme of Cury, 52. † Ditto, 53, 39, 56. ‡ Caii Opuscula, 116. ‖ Brit. Zoology, 3 vol. 320.

" I con-

adopted a notion that *Gold* and *Silver* fish need no Aliment. True it is, that they will subsist a long time without any apparent food, but what they

" I confess myself (says Mr. P.) unacquainted with the words *Barkey*, *Bran*, and *Betule: Sard* was probably the *Sardine* or *Pilchard:* I am equally at a loss about *Cropleys* and *Rumb:* but the pickled *Balenes* were certainly the *Pholas Dactylus* of LINNÆUS, 1110, the *Balanus* of *Rondeletius*, *de Testaceis*, 28; and the *Dattili* of the Modern *Italians*, which are to this day eaten and even pickled."

To this list of Sea-fish which were admitted in those days to Table, may be added the *Sturgeon* and *Ling;* and there is twice mention in Archbishop NEVILL's great Feast of a certain fish, both roasted and baked, unknown at present, called a *Thirl-poole.*

The *Seal* was also reckoned a fish, and, with the *Sturgeon* and *Porpuss*, were the only fresh fish which by the 33 of HENRY VIII. were permitted to be bought of any Stranger at Sea, between *England* and *France*, *Flanders* and *Zealand.*

Average Price of the several Sorts of Fish in the year 1804.

Plaise, 1½*d.* to 2*d.*
Soles, 5*d.* per *lb.*
Cod, 6*d.* per *lb.*
Ling, 5*s.* each.
Haddock, if plenty, 3*s.* or 4*s.* a basket of 24 fish.
Mullet, 2*s.*
Doree, 2*s.*
Conger.
Turbot, small, from 3*s.* to 5*s.*
Mackerel, 30*s.* to 3*l.* 10*s.* per hundred.
Gurnard, 4*s.* or 5*s.* a basket of 24.
Whiting, 2*d.* to 3*d.* each.
Pickled, Red, and Fresh Herrings, 4*s.* per hundred.
Lampreys.
Oysters, 12*s.* per bushel.
Eels, 4*d.* to 6*d.* per *lb.*
Holibut, 10*s.* to 20*s.* each.
Salmon, 1*s.* 6*d.* per *lb.*
Smelts, early from 12*s.* to 15*s.*—2*s.* 6*d.* per hundred afterwards.
Roach, from 2*s.* to 3*s.* per hundred.
Pike, 1*s.* a *lb.*
Perch, 2*s.* 6*d.* per *lb.*
Carp, 1*s.* per *lb.*
Tench, 1*s.* 6*d.*

can collect from Water frequently changed; yet they must draw some support from Animalcules and other nourishment supplied by the Water; because though they seem to eat nothing, yet the consequences of eating often drop from them. That they are best pleased with such *jejune* diet may easily be confuted, since they will seize crumbs tossed to them readily, if not with greediness; but *bread* should be sparingly given, lest, turning *sour*, it corrupt the water. They will also feed on the water plant called *Ducks-meat*, and on small fry. It has been said, that the Eyes of fishes are *immovable*, but these apparently turn them forward or backward in their sockets, as their occasions require. They take little notice of a lighted Candle, though applied close to their heads, but flounce and seem much frightened by a sudden stroke of the hand, against the support whereon the Bowl is placed; especially when they have been motionless, and are perhaps asleep; but their Eyes being always open, (as fishes have no *Eyelids,)* it is not easy to discern when they are sleeping or not."

From the foregoing observations, it would appear, that fish of the same species are capable of living in very different Quarters of the Globe, and of enduring various degrees of *heat* and *cold;* a circumstance which opens a vast field for the enterprize and ingenuity of Man, in transplanting, and rendering them subservient to the purposes of domestication; to calculate the additional quantity of human sustenance that might by this Operation be procured, is not here to be ascertained, and will probably reward the Art and Industry of future generations of Men.

Fish, like *land* animals, are either solitary or gregarious; of the former kind, when the Trout, Salmon, Pike, &c. migrate, they are perhaps in quest of a proper place to deposit their spawn; of the *fresh* water fishes that herd together, little is known respecting their migrations. It is probable, that the *Perch* and *Minnow* are stationary, and that to drop their spawn, they retire only to the margin of the River. Of the *Sea* fishes, the *Cod*, *Ling*, *Haddock*, *Herring*, *Pilchard*, *Sprat*, and *Sparling*, or *Smelt*, are the most remarkable for assembling in immense Shoals; and, although

it is not within the direct scope of this Compilation to mention *Sea fish*, yet to note some of the peculiar habits of the *gregarious* Sea fishes, from which Man derives so valuable a treasure, considered both as *food* and an Article of *commerce*, may be excusable.

The *Cod* is the foremost of these wandering tribes, and is chiefly found in the *Northern* parts of the world; it affects cold Climates, and seems confined between the latitudes 66 and 50; there are, nevertheless, certain Species found near the *Canary Islands*, and which, according to the report of the unfortunate Captain GLASS, are better tasted than those of *Newfoundland;* upon the Banks of which, and the other *sand* banks that lie off the coast of *Cape Breton*, the Cod makes its great rendezvous. These situations they prefer for the quantity of *Worms* produced in the sandy bottoms, which is a tempting food; but another cause of their attachment to these spots is, their vicinity to the *Polar* seas, where they return to spawn; *there* they deposit their Roes in full Security, but so soon as the first opening admits their getting to the more *Southern* Seas, want of food forces them to repair thither.

The greater fisheries of *Cod* were on the coast of Iceland, and of our *Western Isles*, before the discovery of *Newfoundland.* That discovery took place by CABOT, about the year 1500; and, although the English began settling there twenty years afterwards, the fishery did not flourish until 1577, when England had the *least* share of it. Mr. ANDERSON, in his History of Commerce, says, the *French* began to Fish there in 1536; and it is somewhere asserted, that their first pretence for fishing for *Cod* in these Seas was only to supply an *English* Convent with that article. Notwithstanding this intrusion, about 1625, *Devonshire* alone employed one hundred and fifty *Ships* and eight thousand *persons* at *Newfoundland* for *six* months in the year, and the value of the *Fish* and *Oil* was then computed at three hundred eighty-six thousand four hundred pounds. The increase of Shipping that resorts to these fertile Banks is now astonishing,

supplying all *Europe* with a considerable share of provision; our own Country yet enjoys the largest share, a pre-eminence that brings *wealth* to Individuals, and *strength* to the State. All this immense fishery is carried on by the *hook* and *line only;* the bait is *Herring*, a small fish named a *Capelin*, a shell-fish termed *Clams*, and *bits of Sea Fowl;* and with these are caught fish sufficient to find employ for near fifteen thousand *British* seamen, and to afford subsistence at *home* to a much more numerous body of people, who are engaged in the various *manufactures* which so vast a Fishery demands.

The Fishermen take the Cod from the depth of *fifteen* to *sixty* fathoms, according to the inequality of the *Bank*, which is represented as a Mountain under water, above five hundred Miles long, and near three hundred broad, and that the approach to it is known by the great *swell* of the Sea, and the thick *mists* that impend over it.

In our Seas, the *Cod* fish begin to spawn in January, and leave their Eggs on rough ground, among rocks. They recover *quicker* after spawning, than any other fish. When out of Season, they are thin tailed, and have a kind of *Lice*, which chiefly fix themselves on the *insides* of their mouths. The middle-sized fish are most esteemed, and are chosen by their plumpness and roundness, especially near the *tail*, by the depth of the *pit* behind the head, and by the regular undulated appearance of the *sides*, as if they were *ribbed*. The glutinous parts about the Head lose their delicate flavour after it has been twenty-four hours out of water, even in *winter;* in which these, and other fish of this Species, are in highest Season.

Fishermen are well acquainted with the use of the *Air-bladder* or *Sound* of the *Cod*, and are very dexterous in perforating this part of a *live* fish with a Needle, in order to disengage the inclosed *air;* for without this operation, it could not be kept under water in the *Well-boats*, and brought

fresh to Market. The *Sound* of the Cod, *salted*, is a delicacy often brought from *Newfoundland*, and *Isinglass* is also made of this part, by the *Iceland* fishermen.

The largest Cod ever taken on our coasts was at *Scarborough*, in 1755, and weighed *seventy-eight pounds;* the *length* was five feet eight inches; and the *girth*, round the shoulders, five feet. It was sold for *one shilling*. The general weight of these fish in the *Yorkshire* Seas, is from *fourteen* to *forty* pounds.

The *Haddock*, one of the commonest fish in the *London* markets, begins to be in *Roe* the middle of *November*, and so continues until the end of *January:* from that time until May they are thin tailed, and much out of Season. The grand *shoal* of Haddocks comes periodically on the *Yorkshire* coasts. It is remarkable that they appeared in 1766 on the *tenth of December*, and exactly on the *same day* in 1767. The Shoals extended from the Shore near three miles in breadth, and in length from Flamborough Head to *Tinmouth* Castle, and perhaps much farther, Northwards. The following fact will give an idea of their numbers. Three fishermen, within the distance of a mile from Scarborough harbour, frequently loaded their *Coble* or boat with them, *twice a day*, taking each time about a *Ton* of fish; when they put down their lines *beyond* three miles from shore, they caught nothing but *Dog*-fish, which shews how exactly these fish keep their limits. The best of these Haddocks were sold from *eight-pence* to a shilling per Score, and the poor had a smaller sort at a *penny*, and sometimes a *halfpenny* per Score.

Fishermen assert, that when the Sea is rough, Haddocks sink down into the Ooze and Sand at the bottom, and there shelter themselves until the Storm subsides; their reason for this Assertion is, that in boisterous weather they take *none*, and those that are caught immediately *after* a Storm have their backs covered with *mud*. The bulk of the Haddock is seldom known to exceed fourteen pounds; these are *uncommon*, and

extremely coarse, the best for the Table weighing from two to three pounds. The black spot beyond the Gills is the mark which Superstition interprets to be the impression left by the finger and thumb of ST. PETER, when he took the Tribute-money out of the mouth of a fish of this Species, and which has been ever since that Miracle continued to the whole race of Haddocks.

Mr. ARBUTHNOT at Peterhead, North-Britain, has excavated many large Basins out of the Granite Rock in its neighbourhood, and which basins can be filled with Salt water at the high Tide, and emptied at the low Ebb at pleasure. These are meant as receptacles for Sea-fish, caught in great abundance by the Fishermen, to be therein fed, and occasionally forwarded to the London Markets. As the water is clear and unagitated in these Reservoirs, all the Movements of the fish contained in them can be easily noticed, and from these observations one singular fact has been ascertained respecting the HADDOCK, which is, the remarkable docility of the *common* HADDOCK, when compared with others; this little fish is so acute in its perceptions, as to be tamed almost in an instant; so that being fed for a day or two it begins to know its benefactor, flies towards him the moment he appears, and follows him, so far as the Element that it inhabits will permit, wherever he goes, nearly after the manner of a Dog.

Of all migrating fish, the *Herring* and the *Pilchard* take the most adventurous Voyages. The Herring was unknown to the Ancients, and excepting in one instance adduced by DOD, in his Natural History of this fish, of a few being once taken in the Bay of *Tangier*, are never found more Southerly. They are met with in large shoals on the coast of *America*, as low as *Carolina;* in *Chesapeak* Bay is an annual inundation, which covers the shores so as to become a nuisance. They are in the seas of *Kamtschatka*, and possibly reach *Japan*, as in *Kæmpfer*'s account of the fish of that Country, he mentions some that are congenerous; but Herrings are in the greatest abundance in the highest *Northern* latitudes. In those inaccessible Seas, that are covered with Ice for a great part of

the year, the Herring and the Pilchard find a safe retreat from all their numerous enemies; neither Man, nor their still more destructive foe, the *Fin*-fish, or the Cachalot, dares to pursue them thither. The quantity of insect food which these Seas supply is very great, and in that remote situation, defended by the icy rigour of the Climate, they live at ease and multiply almost beyond idea. From this retreat ANDERSON supposes they would never depart, but that their numbers (as Bees in their hive) compel them to leave it. This mighty *Army* begins to put itself in motion from the Icy sea early in the Spring; this body is distinguished by that name, for the word Herring is derived from the *German*, *Heer*, an Army, to express their number, which is so vast that were all the Men in the World to be loaded with Herrings, they could not carry the *thousandth* part away. No sooner, however, is their Asylum quitted, but millions of Enemies collect to thin their squadrons. The Fin-fish and Cachalot swallow barrels at a yawn; the Porpuss, the Grampus, the Shark, and the whole numerous tribe of Dog-fish, desist from making war upon each other, and make the Herring their easy prey; the unnumbered flocks of *Sea fowl*, that chiefly inhabit near the *Pole*, watch the outset of their migration and spread extensive ruin. In this exigence, the defenceless Emigrants find no other safety but by crowding closer together, and leaving to the outermost the danger of being first devoured. Thus, like frighted Sheep, (which ever run together in a body,) each finding some protection in being but one of many that are equally liable to invasion, they separate into Shoals; those to the *West* visit the *American* shores, whilst those holding to the *East*, pour down towards *Europe*, endeavouring to evade their merciless pursuers by approaching the first Shore that presents itself, which is that of *Iceland*, in the beginning of March. Upon their arrival on that Coast, this Phalanx, notwithstanding its diminutions, is still of amazing breadth, depth, and closeness, covering an extent of Shore as large as the Island itself; the whole Water seems alive, and by their foes the Herrings are cooped up so closely, that any hollow Vessel put into it takes them out of the Water without further trouble. The

power of increasing in these Animals exceeds our idea, as it would, in a very short time, outstrip all Calculation. A *single* Herring, it is affirmed, if suffered to multiply unmolested and undiminished for *twenty years*, would shew a progeny greater in Bulk than *Ten* such Globes as that we live upon; but happily the balance of Nature is exactly preserved, and their *consumption* is equal to their *fecundity:* upon this account we must consider the *Fish* and *Fowl* that so incessantly attack them not as plunderers, but as the benefactors of Mankind; without their Aid the Sea would soon be overcharged with the burden of its own productions, and that Element, which at present distributes health and plenty to the Shore, would but load it with Putrefaction.

Those collective Masses that come upon our Coasts begin to appear off the *Shetland* Isles in *April* and *May:* these are only the forerunners of the grand Shoal which comes in *June*, and their arrival is marked by the numbers of Birds, such as Gannets and others, which follow them as their prey; but when the main Body approaches, its breadth and depth alter the very appearance of the *Ocean.* They divide into distinct Columns of five or six miles long, and three or four broad, while the Water before them ripples, as if forced out of its bed: sometimes they sink for ten or fifteen minutes, then rise again to the surface, on which, in bright weather, they reflect a variety of splendid colours, like a field bespangled with the most precious Gems; in which, or rather in a much more valuable light, should this stupendous gift of Providence be considered by the Inhabitants of the *British* Isles: the Fishermen are ready prepared for their reception, and by Nets made for the occasion they take sometimes above *two Thousand Barrels* at a single draught.

After this check from the *Shetland* Isles, which divide this army into two parts, one wing takes to the *Eastern* shores of *Great Britain*, and fills every Bay and Creek with its numbers; the other pushes on towards *Yarmouth*, the great and ancient Mart of Herrings; they then pass through

the *British* Channel, and after that in a manner disappear. Those which take to the *West*, after offering themselves to the *Hebrides**, where the

* In 1773 the *Herrings* were in such Shoals on the Scotch coast for two months, that, it appears on accurate calculation, no less than 1650 boat-loads were taken in Loch Terridon, in *Ross-shire*, every night. These would amount to near 20,000 barrels. A barrel contains from *six* to *sixteen hundred* fish, according to their size. They once swarmed so greatly on the West side of the Isle of *Skye* that, after the boats were all loaded, and the country round was served, the neighbouring farmers made them up into Composts, and manured their ground with them in the ensuing season. Somewhat more than thirty years ago the *Herrings* came into *Loch-Earn* in such amazing quantities that, from the narrows to the very head, about two miles, it was quite full. So many of them were pushed on shore that the beach for four miles round the head was covered with them, from six to eighteen inches deep; and the ground under water, so far as could be seen when the tide was out, was equally so. So thick and forcible was the shoal as to carry before it every other kind of fish, even ground fish; *Skate*, *Flounders*, &c. were driven on the shore with the first of the Herrings, and perished there.

When the Fishermen on the Scotch coast have plenty of salt, *Herrings* sell for about *six shillings* a barrel, as their salt is expended the price falls to *five*, *four*, *three*, *two* and *one* shilling, and even to *Sixpence* or *Eightpence* per barrel; below which prices they will seldom shoot their nets, as less will not indemnify them for the trouble of catching them; but it sometimes happens that a barrel of fine fresh *Herrings* may be purchased for a *single chew of Tobacco*.

The Nets are never stretched to catch *Herrings* but during the night; when dark, and the surface of the water considerably ruffled by the wind, the fishermen always assure themselves of the greatest success. The Nets in the day time are supposed to frighten the fish away. The way in which they are set is by means of buoys fixed to them at proper distances; the weight of the net makes the side sink where there are no buoys, so that it hangs in a perpendicular position, like a screen, and the *Herrings*, when endeavouring to pass through, are entangled in its meshes, where they remain till the net is hauled in, and they are shaken or picked out. After the nets are hauled, the fish are thrown upon the vessel's deck, and each of the Crew has a certain task assigned to him: one part is employed in opening and gutting them; another in salting; and a third in packing them in the barrels in layers of Salt. The *red Herrings* lie twenty-four hours in the brine; they are then taken out, strung by the head on little wooden spits, and hung in a chimney formed to receive them: after which a fire of brush-wood, which yields much smoke but no flame, is kindled under them, and they remain there till sufficiently smoked and dried, when they are put into barrels for carriage.

Herrings die almost the moment they are taken out of the Water, and also become very soon tainted: in Summer they are sensibly worse after being taken a few hours from the Sea; and if exposed some minutes to the rays of the Sun they are perfectly useless for barrelling, as they will not take the Salt.

great stationary fishery is, proceed towards the north of *Ireland*, where being interrupted they make a second division; that to the Western side

Of the practical part of the *Herring* fishery on the Coast of SCOTLAND, the following is added to what has been before mentioned, from most respectable Authority.

" When the *Busses* are at the fishery they are constantly searching for the *Herrings* from *Loch* to *Loch;* when they appear on the Coast the Busses anchor in the nearest harbours to the fishing ground, from whence they send their boats to fish. Each boat requires *four men*, and are in number proportionate to the Tonnage of the *Buss*, on board of which a man or two are left to take care of her. In a scarce fishing, each boat has two *Trains* of Nets, 288 yards long, and from eleven to twelve yards deep; when Herrings are plenty, *half* this quantity is sufficient. The Nets are set beginning with the first end to *Windward*, and stretching the Train right to *Leeward*. If in deep water, (which, until the Herrings set into the *Locks*, it generally is,) both Trains are tied together by the back rope and Sole or *Skonke*, which will stretch 576 yards in length; and in this case the boat is tied to the *leeward* end of the Train, and allowed to drive with the nets to the *leeward*, the fishermen every half hour, or oftener, trying if there are any Herrings in the Nets. This they do by warping along the back rope, and here and there raising a piece of the Netting. By this means they not only find when they are upon good fishing ground, but they see whether the Herrings swim *high* or *low*, and their Nets are raised or sunk accordingly, by shortening or lengthening the ropes that are fastened to the *Buoys* which sustain the nets.

" Should the night not be very dark, they fix a large buoy to the leeward end of the Train, and go with their boat to some distance from their Nets, trying as they go along if there be any Herrings in those of their neighbours. Whenever they find Herrings more numerously in other nets than in their own, they immediately return to and raise their Train; and after shaking out what Herrings there may be into their boat, they set their Train as near the place where they found the Herrings as possible.

" Thus are they employed when Herrings are scarce—traversing from place to place some nights not less than *twenty* miles, and setting their nets in ten or twelve different spots—in the morning they repair to their respective Busses.

" When Herrings are in plenty, they are generally in the *Lochs*, and in the *Shallow* Water: the *Night* toil is here at an end, by setting their nets in the Evening with a stone or small anchor to the end of their Train, and which are not hawled till the next morning. In this case they set their Train separately, and near to the *Busses*, on board of which they pass the night.

" The Crews of the Busses are for the most part engaged by the Month; their Wages upon an average are *twenty-seven shillings per month each*, besides *two barrels* of Herrings to each man, by way of *Portage*, if a full Cargo is obtained, and in that proportion for a less prosperous

is scarcely perceived, being soon lost in the immensity of the *Atlantic;* whilst the other, which passes into the *Irish* sea, rejoices and feeds the Inhabitants of most of the Coasts that border upon it.

In general, the most inhabited shores are the places where the larger animals of the deep are least fond of pursuing, and these are chosen by the Herring as an Asylum from greater dangers; thus along the coasts of Norway, to the German shores, and the northern ones of France, they are punctual in their visitations; and although such numbers perish in the descent from the *North*, yet, in comparison with those that survive, the amount is trifling; and it is supposed, that of those taken by *Man*, the proportion is not *one* to a *Million:* nor by all its Destroyers is this kind of fish visibly diminished. In this point of view the Herring's fate is similar to that of the *Israelites*, of whom it is observed, that not only in Egypt *formerly*, but in every *part* of the world at the *present time*, though crushed and oppressed to the utmost, they do but increase and multiply

capture. There are not above one or two *thoroughbred* Seamen in each Buss, the rest, amounting to *five-sixths*, are *green men*, and who seldom continue at the fishing longer than two or three years, and then go on board Ships in the foreign Trade.

" The materials for fishing, as well as the *Busses*, are much better adapted than formerly. The manner of setting the nets is nearly the same, but the present practice of curing the Herrings differs in many respects from what was formerly followed, nearly double the quantity of Salt being now expended, it being found absolutely needful for the preservation of the fish, especially to the West-India market, where their character is now established.

" The increase of this fishery has opened a grand nursery for Seamen, insomuch that almost all the ships in *Clyde*, and many in the ports of Whitehaven, Bristol, and Liverpool, receive great supplies of Seamen from this Source; and it is believed that nearly one half of the *Scots* Seamen employed in his Majesty's Navy have received their education in that school. These improvements, the extensive scale upon which this fishery is now carried on, and the high degree of credit to which it has arrived, circumstances of the first national importance, can only be attributed to the BOUNTIES. In pursuits of *this sort* they cannot be too much augmented, and can never be misapplied by a *Maritime Nation*; *here* they have been the happy means of thousands of industrious poor being employed in all the various branches of this fishery, and of transforming an indolent people, formerly unaccustomed to any sort of labour, into active, hardy, useful members of Society."

the more. The regularity of the Herring leaving the Shore also at a stated time, would imply that they are not, in their visits, under the impulse of Necessity; in fact, one circumstance shews they are governed by a choice with respect to the Shores they approach, and are not blindly driven from one to another: what is meant is, their regularly visiting some Shores for several Seasons, and indeed for Ages together, and then through seeming Caprice forsaking them, never more to return. The first great bank for Herrings was along the coast of *Norway;* prior to the year 1584, the number of *European* ships that resorted thither exceeded some Thousands, the quantities of Herrings that were there assembled were such that OLAUS MAGNUS asserts, if a spear was put into the Water it would stand perpendicularly, being prevented by the Myriads of surrounding fish from falling: but ever after that period the *Norway* were deserted in favour of the *German* shores, when the *Hanse-towns* drove a very great trade by the capture and sale of the Herring; but for above a Century they have in a great measure forsaken them, and their largest Colonies are seen in the *British* Channel and upon the *Irish* Coasts. Nor is it easy to assign a reason for this apparently capricious desertion: were we inclined to consider this partial migration of the Herring in a Moral light, we might with awe and veneration reflect on the mighty Power which originally impressed on this useful body of his creatures the Instinct that directs the Course that blesses and enriches these *Islands;* which causes them at certain times to quit the vast *Polar* deeps, and offer themselves to our expecting fleets. That benevolent Being has never, from the earliest records, been once known to withdraw this Blessing from the *whole*, although to *particulars* he often thinks proper to deny it: yet this partial failure* (for which no natural reason is seen) should exalt a most grateful sense of his Providence, for impressing such an invariable and general propensity on these fish towards a Southward Migration, where the

* Mr. HUTCHINSON, in his History of Cumberland, says, "At *Allanby* the Herring fishery has much declined, from a singular circumstance in the Natural History of this fish. After remaining in this Channel *Ten Years*, the wonderful Shoals of Herrings leave it, stay away *ten Years*, and then return, and stay away for *ten years* longer. These Revolutions are described to

whole is to be benefited, and to withdraw it only where a *minute part* is to suffer.

This Instinct was given them that they might remove for the sake of depositing their Spawn in warmer Seas, that would more assuredly mature and vivify it than those of the frigid Zone. It is no defect of Food that impels their voyages, for they arrive with us *fat*, and return almost universally *lean*. Of their polar food we know nothing; in our Seas, when in a state of exhaustion, which renders the Herring totally unfit for the purposes to which Man employs them, some vestiges of small fishes are found in its Stomach; but this appetite has evidently been the consequence of disease, as their Maw is never observed to contain any remnants of fish, &c. but under these circumstances, which seem to be produced in a similar manner, as the desires in Children to eat pieces of *Mortar* or *Lime* rubbish, when afflicted by disorders occasioned by *Worms* in the body. It has been said that they feed on the *Oniscus Marinus*, a crustaceous insect, and on their own young; and Mr. Low, a gentleman in the *Orknies*, is said to have caught many thousands with a common *Trout fly;* those so taken are described as young fish, from *six* to *eight** inches long, that were collected in a deep hole in a rivulet into which the *Tide* flowed, at the fall of which he commonly began his fishing.

be as regular as those of any of the *Planets*, the Flowing of the *Tides*, or the vicissitudes of the Season. Unaccountable as this circumstance confessedly is, it is confidently affirmed by most credible Authority to be a fact, and to have been observed for *three* successive periods yet within Memory."

* A *Herring* was taken in *October* 1806, by a *Manx* Fishing Boat, which measured *Sixteen Inches and three quarters* in length, and *Nine Inches* in Girth: its *Weight* was proportionate. The *Herring* Fishery at the *Isle of Man* was the second week in October uncommonly productive. In *two days*, Fish to the value of *Ten thousand pounds* were carried into *Douglas*. The Prices were from 4*s*. 6*d*. to 5 shillings *per Hundred*, in consequence of a number of Buyers having been long waiting there to make Purchases.

The oldest Inhabitants of LONDON never recollect to have seen so great a quantity of *Herrings* as were brought to Market the *Thirty-first* of *October*. In several parts of the Metropolis, *Cart Loads* of them were exposed for Sale at the rate of *Fourpence per Dozen*.

Herrings are in full roe the end of *June*, and continue in perfection until the beginning of Winter, when they drop their spawn. The young Herrings approach the shores the July and August following, and are then from half an inch to two inches long, and are called in Yorkshire *Herring Sile*. As very few young ones are found in our Seas during Winter, it is most probable they return to their parental haunts beneath the Ice: a few old Herrings remain with us the whole year, the *Scarborough* fishermen never putting down their nets without catching some.

The Herring fishery is of great Antiquity: it was first engaged in by the *Dutch*, in 1164; its value brought on those obstinate wars between the *English* and them. One WILLIAM BEUKELEN, of *Biervlet*, near *Sluys*, in *Flanders*, hit on the art of *pickling* Herrings about the year 1390*,

* In 1203 the Men of *Denmark* grew rich by the immense Sale of their *pickled* Herrings to the Nations of *Europe*. (This was nearly 200 *years* before BEUKELEN's discovery of the Art of *Pickling* them.) Their Fishery was on the *Schonen* Coast, which the Herrings have long since deserted. A. D. 1238, the *Swedes* were prevented, by their fear of the *Tartars*, from sending as usual their Ships to the Herring-fishery on the *British* Coast. Herrings were, in consequence, remarkably plentiful in England; whimsical, therefore, as it seems, it is nevertheless true, that the Order of a Mogul KHAN, who reigned on the borders of *China*, lowered the price of Herrings at an *English Market*.

In 1295 appears the first instance of Protection granted to *foreign* Fishermen by the KINGS of ENGLAND. The Custos of the Eastern Seas, and the Bailiffs of Yarmouth, are directed not to injure the Fishers of Holland, &c. To shew the Scarcity of the *Herring* in the fourteenth Century, ANTHONY DE BECK, Bishop of Durham, for *Twenty fresh Herrings* gave a sum equal to *Forty pounds sterling*. In 1449 three thousand *red Herrings* were sold for only *three pounds two shillings* of modern Money. About the year 1423 a large district of HOLLAND, consisting of *Seventy-two* large Hamlets, sunk down, and were overwhelmed with water, and which is now called the ZUYDER-ZEE. It is affirmed that the Alarm was first given by the stange appearance of a HERRING, which, by a subterraneous Communication, had reached, and was taken out of, an *inland* Canal. The exact date of this Awful Event is uncertain, but most Authors agree that the Inhabitants had some kind of notice that the Sea had undermined their Country, and that in consequence the most cautious of them escaped. Ruins of Churches and Houses were plainly seen under the water in 1643.

The Herring-fishery in the *Northern Sea* was first undertaken by the *Dutch* and *Flemings*, A. D. 1429, in Resentment for their having been most irrationally prevented (as is said) by an Ordinance of the Royal Burghs of SCOTLAND, from buying Herrings from the *Scots* Fishermen while at Sea.

of which the Dutch are most extravagantly fond. A premium is given to the first *Buss* that arrives with a lading of this their Ambrosia. *Each keg* brings a great price, and the Inhabitants shew no less joy at its arrival than the *Egyptians* at the overflowing of the *Nile**. With us Yarmouth, in Norfolk, has the whole Herring fishery of the coast, and has been long famous for its Herring *Fair*, which was regulated by an Act, commonly called the Statute of Herrings, in the 31st year of EDWARD the Third. By a charter granted by HENRY the Third the Town is bound to send to the Sheriffs of *Norwich* one hundred Herrings, to be made into twenty-four pies, by them to be delivered to the Lord of the Manor of *East Carleton*, who is by his tenure obliged to present them to the KING, wherever he is. In 1195 *Dunwich*, in *Suffolk*, accounted to the *King*, for their Fee farm rent, 120*l.* one mark, and 24,000 *Herrings;* 12,000 for the Monks of *Eye*, and 12,000 for those of Ely. The *British Herring Fishery* was established the 2d of September, 1750, of which the PRINCE OF WALES was chosen GOVERNOR; the Subscription, amounting to 200,000*l.* was closed the February following. Bounties have ever since been given by Parliament

* The *Curing of Fish* is a means of increasing Food, and of course Wealth, which has occupied the Attention of many of the Maritime Powers of EUROPE. The Legislature of this Country has, in particular, made repeated Inquiries, enacted various Regulations, and given, at different periods, very considerable Bounties for improving and encouraging the *Curing of Herrings*. The great Object has been to imitate, and, if possible, to rival the DUTCH in this Undertaking; but the Inquiries of Committees, the Regulations in consequence of their Reports, the Bounties and Encouragements granted by Law, the Instruction afforded by *Dutchmen* dispersed throughout our Fishing Towns, to teach the Process which has succeeded in *Holland*, have all proved ineffectual. The *Herrings* produced are as *inferior* in Quality as ever to those cured in that Country, and must remain so, if there was even much greater Encouragement given, for the Consumers of the greatest part of the *Herrings* in this Country are the poorest of all Men, Men absolutely deprived of the power of possessing Property—the *Slaves* in our *West India* Colonies; whilst the Consumers of the *Herrings* cured in *Holland* are Men of Property and Affluence in GERMANY, and other parts of EUROPE, at whose Table that Fish is introduced as an article of Luxury. Till, therefore, the *West Indian* Proprietor becomes as nice about the Victuals of his *Slaves*, as a *German Prince* is about the Luxuries produced at his Table, this Country can never expect to see the *Curing of Herrings* brought to an equal state of Perfection as in *Holland:* for the Fortunes of the Consumers in *Germany*, make the *Excellence of the Commodity* the sole Recommendation in that Market; whilst the Situation of the *Slaves*, makes the *Cheapness* the only Recommendation in that of the *West Indies*.

to promote this National undertaking. From the port of Yarmouth, about the year 1790, one hundred and fifty vessels were employed in the Catching, and between forty and fifty in the Exportation, of the Herrings. 50,000 barrels, which some magnify to 40,000 *lasts*, containing 40,000,000 of Herrings, are said to be taken and cured here *Annually*. Doctor FULLER notices the great repute of the county of *Norfolk* for this fish, and with his usual archness calls a red herring a *Norfolk Capon**. As food, the Herring, of all the Sea fish, (as has been before stated,) in the opinion of a celebrated Physician, is the most easily digested; and that even Salt-herrings do not readily putrefy by long keeping; but, if eaten in small quantities, they dissolve the slime in the stomach, and stimulate the appetite.

The *Mackerel* which profitably fills the nets of our Fishermen in the Spring, and affords for its Season a cheap sustenance to many thousands of the poorer classes, is in general about two pounds weight, (Mr. PENNANT records one sold in London in 1775 which weighed five pounds and a quarter,) but is, perhaps, less useful than other Gregarious fish, from being very tender and unfit for Carriage; and from no method having yet been discovered of salting or preserving it like the Herring, for future use. It was a fish highly valued by the ROMANS, because it furnished the precious *Garum*. This was drawn from different kinds of fish, but that made from the Mackerel had the preference. The best was made at *Carthagena*, vast quantities of Mackerel being taken near an adjacent Isle, called from that circumstance, *Scombraria*, and the *Garum* prepared by a certain Company in that City bore a great price, and was distinguished by the title of *Garum Sociorum*. The Mackerel is easily taken by a bait,

* The following curious Oath is administered in the Isle of MAN:—"By this Book, and by the holy Contents thereof, and by the wonderful Works that God has miraculously wrought in Heaven above, and in the Earth beneath, in Six days and Seven nights, I, John F. C. do swear that I will, without respect of favour or friendship, love or gain, Consanguinity or Affinity, Envy or Malice, execute the Laws of this Isle justly betwixt our Sovereign Lord the KING and his subjects within this Isle; and between party and party, *as indifferently as the* HERRING'S *Backbone doth lie in the middle of the Fish.*"

and the best time is during a fresh Gale of wind, which is thence termed a *Mackerel Gale.*

The *Mackerel fishery*, near Abbotsbury in Dorsetshire, is very considerable: they are generally first taken from the middle of *March*, if the weather be not extremely cold, until *Midsummer*, and sometimes after in Nets, some of which are 100 or 120 Fathoms long, and eight and a half deep in the bosom, accounting *five feet* to the *Fathom.* One end is fastened to the *Shore*, the other is carried out to Sea in a boat: they then turn, and row parallel with the Shore, veering out the Net until it is all out; then the boat runs on shore, and the Net is hauled in at both ends, by Men on the land. Sometimes 30 or 40,000 have been caught at a draught; and *One hundred* have been sold for a *penny.* Between 1746 and 1758, very few Mackerel were caught on this Shore, which was imputed to the scouring of Bridport Harbour. The exposed situation of the Coast renders the fishing uncertain. Whenever it blows a *cap full of wind* from the *South* or West points, there is so large a *Surf*, that it is not only dangerous to launch the boat, but the Net could not be drawn with any probability of success, when tossed in every direction by the boisterous waves, which, instead of fish, would load it with pebbles.

The only fish that remains to be noticed of the gregarious Sea fish is the *Pilchard*, which has a general likeness to the *Herring*, but when comparatively described, is essentially different. The body of the Pilchard is less compressed, being thicker and rounder, the back is more elevated, the belly less sharp, the nose turns up, and as well as the under jaw is shorter; the *dorsal* fin is placed exactly in the centre of gravity, so that when taken up by it, the body preserves an Equilibrium; that of the *Herring* dips at the head. The Scales of the Pilchard adhere closely, whereas those of the *Herring* very easily drop off; besides, the Pilchard is fatter, or more full of oil.

About the middle of *July*, the *Pilchards* in vast Shoals approach the

Cornish coasts; the beginning of Winter they disappear, a few returning again after Christmas. Their Winter retreat, and their motives for migrating, are the same with the Herring. During Summer they affect a warmer latitude, no quantities being found on any of our coasts, except those of *Cornwall;* namely, from *Fowey* harbour to the *Scilly* Isles, between which places, for some weeks, the Shoals keep shifting.

The appearance of the Pilchard is known by the Birds* and larger Fishes attendant upon them, and persons called *Huers* are placed on Eminences, to point to the boats stationed off the land the course of the Fish, by whose directions sometimes a Bay of several miles extent is enclosed with their Nets, called *Seans.* By the first of JAMES I. c. 23. Fishermen are empowered to go on the grounds of others to *hue*, without being liable to actions of trespass, which before occasioned frequent Law-suits. The numbers that are taken at one shooting of the nets is astonishing. Upon the fifth of October 1767, there were at one time enclosed in *St. Ive's Bay*, 7,000 hogsheads, each cask containing 35,000 fish, in all 245,000,000. (This account varies extremely from the number at present packed in a Hogshead, which is only 3,000.)

Doctor BORLASE describes the Emoluments accruing to the Inhabitants of Cornwall, from the Pilchard Fishery, in the following manner.

"It employs a great number of Men on the Sea, thereby training them to naval affairs; finds work for men, women, and children, on Shore, in salting, pressing, washing, and cleaning; in making boats, nets, ropes, casks, and all the trades depending on their construction and sale. The poor are fed with the offals of the Captures, the land is benefited by the refuse of the fish and salt, the Merchant finds the profits of commission and honest Commerce, the Fisherman the gains of his labour: ships are

* In the Isle of Man, the coming of the *Herring* is indicated by the quantity of *Gulls* that hover around them. At this period the *Gull* is esteemed sacred, and a Fine of *five pounds* incurred by the wilful destruction of a single Bird.

often freighted hither with *Salt*, and into foreign countries with the fish, carrying off at the same time part of our *Tin*. By the account of the produce in number of hogsheads exported each year, from 1747 to 1756 inclusive, from the four ports of *Fowey*, *Falmouth*, *Penzance*, and *St. Ive's*, it appears that *Fowey* has yearly exported 1,732 hogsheads; *Falmouth*, 14,631 hogsheads, and two thirds; *Penzance* and *Mount's Bay*, 12,149 hogsheads, and one third; *St. Ive's*, 1,282 hogsheads: in all 29,795 hogsheads. Every hogshead for ten years last past, together with the *bounty* allowed for each exported, and the *Oil* made out of each hogshead, has amounted, at an average, one year with another, to the price of 1*l.* 13*s.* 3*d.*; so that the *Cash* paid for Pilchards *exported* has, at a medium, been *annually* 49,532*l.* 10*s.* *"

* The following Statement, relative to the *Pilchard* Fishery in St. ANSTEL Bay, in 1801, is accurate:

" Seventeen *Seans* are employed, and on the Average of *seven* years, about four hundred Hogsheads are taken by each Sean. The price of fish per hogshead is 1*l.* 10*s.*; the *Bounty* on ditto is 8*s.* 6*d.*; total value of each hogshead of fish (in which are three thousand) 1*l.* 18*s.* 6*d.* The quantity of *Salt* used yearly at 84*lbs.* to the bushel, is 40,800 bushels, *viz.* about 20,400 in curing the fish; 10,200 bushels condemned, and sold for the use of the land; and 10,200 bushels left in stock to be used a second time. Price of *new* salt, *two shillings;* of condemned, *ten-pence*, per bushel. Price of *broken* fish, a penny per Gallon; of *Oil*, twenty pounds per *Tun; Garbage* sold to the Soap-boilers, at Sixpence; *Dregs* sold to the Curriers, at ten-pence per Gallon. Ten Women employed in salting fish, at twenty-pence per hogshead. The cost of each Cask is about three shillings. Cellar rent for a *Sean* 20*l.* per Annum. *Seventeen* men employed on each Sean, at Eight shillings each per week. *Tythe* to each *Sean* 1*l.* 13*s.* 4*d.* yearly. The Tythe paid by the fishermen is *one-twelfth* part of their *share* of the *fish-money*, and that Share is one quarter of the whole produce. The *fresh* fish given to the poor of the neighbourhood from the boat's side would amount, if sold, to about five pounds a *Sean* yearly.

" The particulars of the means and implements, and of the charges necessarily incurred by the extent of the operations, are as follow:

" A *Stop-sean* Net, with lead weights at bottom, and corks at top, the Cost of which is about 350*l.* An *Open boat* for carrying the *Sean*, about fifteen Tons burthen, cost 52*l.* 10*s.*; another *Open boat* of similar tonnage and value, to assist in enclosing the fish; a *smaller boat* to carry the men from and to the shore, and for other general purposes, cost 25*l.* One or two *Boats* for carrying the fish to the shore, cost 70*l.* each. A *Tuck-sean*, made like the *Stop-sean*, 108 fathoms long, and ten deep, cost 120*l.* Many other things are also essential, and the expences of the

It is almost impossible to dismiss this Topic, without expressing surprise that a Nation so industrious and enterprizing as our own, should

first out-fit may be estimated from 1,000*l.* to 1,200*l.* exclusive of *Salt*. The number of Men employed on a *Sean* varies from seventeen to twenty-three; the average may be set at nineteen. The modes of compensation vary in different fishing places, but the general amount is nearly the same. At *Newkey* they have seven shillings per week, and *one-fourth* of the *net proceeds* of *fish* and *oil:* and the fish being constant visitors to this spot, the general sum obtained by a fisherman is from *fifteen* to *twenty-five* pounds, *exclusive* of his Wages. The season commences about the middle of *July*, and continues about ten weeks, when the *Pilchards* disappear. The quantity that may be taken depends on many circumstances: such as whether the fish come within the *depth* of the *sean*, the Weather, and the strength of the Tides which frequently break the nets, and set the fish at liberty after they are enclosed; from various other accidents large quantities are often lost. In some instances a *Sean* will take and cure from 1,000 to 1,500 hogsheads and upwards in a Season; when during the same period, some of the neighbouring *Seans* have not a single fish. It is not uncommon for the above quantity to be inclosed in a single *Sean* at one time. The whole number of hogsheads taken in a Season may be estimated from 40,000 to 60,000, of forty gallons each; and each hogshead contains *Three Thousand Pilchards.*

" The *Pilchards* pass the Coast in large Shoals, and when within the *depth* of the Sean, the Boat containing it is rowed round them, the Net being thrown over at the same time; by this means the fish are surrounded with the *Stop-sean*, both ends of which are then fastened together. The bottom of the Net is kept to the ground by the *lead* weights; whilst the *corks* keep the top of it floating on the surface. At low-water the fish are taken up with the *Tuck-sean*, and carried to the *Cellars* or Storehouses, where they are salted, and ranged in heaps from five to six feet in height, and in some instances, ten or twelve feet wide. When a large quantity of fish is inclosed in the *Stop-sean*, it sometimes requires two or three Weeks to take them all out, as they must not be removed in greater numbers than the Women who salt them can conveniently manage. In the course of this time a variety of accidents occur, by which many fish are lost to the collective amount of several thousand pounds Annually.

" When the fish are taken out of the Salt, and packed in hogsheads, they are pressed very hard with great weights, by the power of a strong lever; by this means the Oil is extracted, and which runs out of the casks through holes made for that purpose. The *pressing* continues about fourteen days, when the hogsheads are *headed up*, and the fish are then fit for the Merchant. Some fish are considerably more productive of Oil than others: those taken in the *early* part of the season, in general, produce the most, but the *fish* taken in the *latter* part are commonly the best. Forty-eight hogsheads of *Pilchards* generally yield a Tun, or 252 *gallons* of Oil; the price of which during war is from 24*l.* to 27*l.* per Tun, in peaceable times the value is decreased. The *Salt* necessary to cure a hogshead of fish is about 420 pounds; and the usual quantity of Salt provided for each *Sean* is *three thousand bushels;* on this there is an *import* duty of about *twopence halfpenny* per *bushel* of 84*lbs.* The expences of curing a hogshead of

neglect (as most unaccountably it does) to improve to the utmost a branch of Commerce of which the Advantage seems incalculable, and the Success certain. We are surrounded by a golden Mine, which we look upon with unconcern; at the same time that we exceed our Capital in the most perilous Speculations: that immense superiority of advantage, which an extended line of *Coast* presents to the *British Islands* for the improvement of the *fishing* trade, a Trade which, besides that it is convertible into a source of prodigious wealth, offers considerations of great moment to the *Statesman*, whose first concern it ought ever to be, to meliorate the moral condition of the People. To *colonize our Coasts*, is an object of deeper interest than to populate *new* regions of the Globe, or to subject distant climates to our Empire. In prosecuting the fishing trade, neither *immediate* nor *immense* profit to the maritime Settlers must or can reasonably be looked for; those who engage in it ought to meet on the part of Government with all the Aid which the nature and object of the undertaking demands; let those who enter upon it pursue it with a view to *private* Profit, but let the *Statesman* encourage it as an object of *national* Utility. To prosecute it with effect, its progress must be slow, and its scale moderate; the end can never be obtained through the *wild spirit* of adventure, it must primarily be considered, as finding Occupation for the idle; as it improves, it will furnish employ for the *capital* of the Specu-

fish, for Cask, Salt, Labour, &c. is from 21*s.* to 23*s.* of which the charge for *salt* is nearly 6*s.* The fish have lately sold from 35*s.* to 42*s.* per hogshead, *inclusive* of the *Bounty* of 8*s.* 6*d.* on *Exportation*. The Bounty has lately been extended to those intended for *Home consumption*. The number of persons employed in salting, packing, pressing, and preparing the fish for exportation, of which about two-fifths are Women, the rest Men, is at least *five thousand*. The rope-makers, blacksmiths, shipwrights, sail-makers, &c. are upwards of *four hundred*. The twine-spinners, which are women, are *one hundred and fifty*. The makers and menders of Nets are chiefly Women and Children employed by the Twine-manufacturers, and in all about *six hundred*, but *Nets* are also made during the Winter by the Fishermen and their families. These numbers are exclusive of the Seamen employed in the shipping of the produce of this Fishery, which is almost wholly consigned to *Italy*. The Capital engaged in the Trade is at the lowest 300,000*l.* reckoning the *Seans, Nets, Boats*, &c. at a fair appraisement, and making every allowance for wear; the Cost must have been considerably more. Some attempts have lately been made to open a Market for *Pilchards* with the Metropolis, but the quantity hitherto sold has been insufficient to defray the Expences."

lator. If a *Bounty* were given to the *first Settlers*, and continued *annually* for a time, as circumstances might require, it would be much more beneficially bestowed than *Bounties usually* are. Certain immunities from *Taxation*, for a given period, might be likewise held forth as an Encouragement; and to these might be added such other incitements as wisdom and policy might suggest. The true and effective wealth of a Nation consists not in the *Gold* that accumulates, nor the *Diamonds* that glitter in the coffers of the Rich, but in the sweat wiped from the brow of the Indigent; it is comprised in the augmentation of the *means* of subsistence, in the vigorous and active Habits of the Poor, in the *stability* of their Occupation, in the *sobriety* of their Morals, and in the modes of obtaining *sufficiency* and comfort, through the medium of honest and *unoppressive* Labour. Under this conviction, a wise Government will ever be strenuous to enlarge the sphere of useful traffic, and to expend the industry of its people upon the most valuable objects. *Fishery*, as affording a supply of nutritive and cheap sustenance to all, more especially the inferior classes, is unbounded: the hardy and robust habits of life likewise, which *Fishermen* assume and encounter, are friendly at all times to the strength and independence of a State; selecting, as they naturally would do, with care, the most eligible Station which our Shores (taking in a circumference of more than 3000 miles) presented to their choice, they would become more *peculiarly* so. Stationary in their abode, and multiplying their habitations as their numbers increased, they would, in process of time, form so many frontier Towns; our Coast would not *then*, as *now* it does, leave us naked and exposed to the Descent of our Enemies. These Towns would become the nurseries of healthy and able Seamen, a circumstance of extreme weight in the Counsels of a maritime Nation.

It may perhaps be alleged, that the Fishery could not be a perpetual employment, and that, consequently, the persons engaged in it would be *unoccupied* several parts of the Year: but this Objection has little force; there are many manufactories *inseparably* connected with this branch of traffic, such as dressing of *Hemp*, spinning of *Twine*, making

of *Nets*, *Ropes*, *Boats*, *Barrels*, &c. which would provide sufficient business during those intervals of leisure which the fishery might afford. The same objection moreover might be urged against almost every Trade, since most of them have their several Vacations. Agriculture itself by no means furnishes employment equally active at all Seasons: but private interest will always take care to obviate every inconvenience that might arise from this source, and as the want of work at certain periods enters into the *price* of the *commodity*, this consideration therefore cannot operate as a Discouragement.

In a Country like our own, where the number of Poor is a reproach to the Police, and a heavy burthen to the Nation, a project of this kind deserves peculiar Attention. A late Writer, adverting to this subject, has inforced the importance of the undertaking we would recommend. "To sooth (says he) the smartings of Calamity, to bind up the wounds of those whom Fortune has crushed under her Wheel, is real and exalted Virtue; but there is a Philanthropy of a yet higher Order, which is busied in removing the causes and occasions of Want and Poverty, and enabling *those* exposed to them *themselves* to supply the one, and exclude the other. The establishment of *Friendly Societies* has done much to prevent the increase of *parochial* poor. The *inclosure* of *waste lands*, so rapidly carrying on in various parts of the Kingdom, has likewise, among other essential advantages, contributed to the same good effect. Were our present system of poor Laws (he adds) judiciously *revised*, and a select Committee appointed in *each parish* to *examine* into the Application and Expenditure of the sums *annually* assessed for the relief of the indigent; and were the *reductions* which *might* be effected by a Reformation in those Laws, and a *controul* on that expenditure, applied in *erecting* small dwellings near the *Sea coast*, for the encouragement and extension of our *fishing* trade, and in supplying such as might embark in it with the few materials necessary to their Establishment, great benefit might accrue to the State, and the numbers of its local and vagrant Poor be much more effectually

diminished than in *Workhouses*, or confining them in *common Gaols*, and *Houses of Correction.*"

The above Subject has but incidentally been touched upon: did not the nature of this Work forbid dwelling upon it, much more might be urged. Of what is here said, the intention has been to recommend it to the grave and deliberate Meditation of others. It is indeed a matter of supreme Importance, and most worthy to draw towards it the care of the *Statesman*, and the exertions of the *Patriot.*

WITH a digressive Detail of some of the particularities of Fishes, the Reader's attention has been thus far (we hope not disagreeably) engaged. The **Art of Catching Fish** is the subject now to be proceeded upon, and this is meant to comprehend the Modes, ancient and modern, which, either by the **Angle** or the **Net**, have been employed, and are asserted to have best accomplished that purpose. Directions for the *Situations* and *Forms* of *Ponds* and Pieces of Water, and for the Breeding, Preserving, and Feeding of Fish, together with the Acts passed for their Preservation, and the adjudged Cases upon those Laws, will conclude this department of the Work.

As a guide to the Fisherman, where he may resort with the greater prospect of Success, a description of the different Rivers, &c. of many of the places best adapted for Angling therein, and the various kinds of Fish produced in them, will be first given.

According to Dr. HEYLIN, the Rivers in England amount to three hundred and twenty-five, though others enlarge their number to four hundred and fifty; of these *individually* to treat would be superfluous, and a large Map of the country would shew with more preciseness the Spring head, distance, windings, and confluxes of each particular River; it will be sufficient for the *Angler*'s information, to have those described where the objects of his Amusement most abound, and in this description some of the Lochs or Lakes will also be comprised. The method of Alphabetically classing the Rivers of England, Scotland, and Ireland, pursued by Mr. TAYLOR, is less confused than the accounts of earlier Writers, and seems better adapted for the Fisherman's purpose.

Bedfordshire.

THE OUSE, the chief river in this county, rises in two branches, not far from Brackley and Towcester, on the borders of Northamptonshire and Oxfordshire; it enters Bedfordshire between *Brayfield* and *Turvey*, and dividing the shire in two equal parts, in the distance of twenty miles from its windings, it is computed to run over a tract of near ninety, and leaves the county again at *St. Neots;* it is joined by the *Hyee* from Woburn, and the *Ivel* from Biggleswade, which falls into it a little above Temsford. The OUSE is generally a sluggish stream, its course uniformly dull and unimportant to Buckingham; nor is it at all an object from the princely territory of *Stowe;* it does not much improve as it traverses the level counties of Bedford and Huntingdon, though it adds some consequence to their capitals, being *there* navigable. After rain its inundation of the Isle of Ely is so considerable, that at such times it is a common saying among the inhabitants, that "the Bailiff of Bedford is coming." The OUSE is a good river for *Trolling*, and produces (as do the Hyee and the Ivel) *Pike*, *Perch*, *fine Eels*, *Cray-fish*, *and common fish in abundance.*

Berkshire.

THE principal rivers of this county, (besides the Thames, which will be hereafter noticed by itself) are the *Isis*, the *Kennet*, and the *Loddon;* the first rises in Gloucestershire; the second from the Downs in Wiltshire, near a village of the same name; the third rises in Hampshire, is a small stream traversing a charming country, and adds a considerable ornament to the delightful place of Lord RIVERS, at Stratfield Saye, and then skirts the commons, which unite afterwards with Windsor Forest. There is also the little river *Lamburn*, which is always highest in summer, and in the

midst of winter is said to be entirely dry. Excellent fish are in some of these rivers; fine Trout are taken near *Newbery*, Speenham Lands, and Hungerford; and they are likewise famous for Cray-fish.

Buckinghamshire.

The rivers of this county are the *Thames*, the *Ouse*,

> "The *Ouse* slow winding through a level plain
> Of spacious Meads, with Cattle sprinkled o'er,
> Conducts the eye along its sinuous course
> Delighted."

(which nearly surrounds the town of Buckingham); the *Coln*, descending from the pleasant villages of Bibury and Barnsley; and the *Wick*, which descends from the interior of the County from the North-west, ornamenting the fine seat of West Wycomb, flowing through Lord Carrington's Grounds near High Wycomb, and giving motion to fifteen Corn and Paper Mills; the manufacture of the latter article is probably carried on to as great an extent in this neighbourhood as in any part of England. These Rivers produce very fine Trout, and a variety of good fish.

Cambridgeshire.

The Cam is composed of two branches: the source of the one is near *Ashwell*, in Hertfordshire; and the other, which bears the classic name of the *Granta*, and rising near *Newport*, in Essex, flows through the highly ornamented grounds of Audley End, and after receiving several small streams, unites with the Cam about four miles from Cambridge, from which place it is by locks rendered navigable to Ely. The Cam soon sinks below Cambridge into the *Fens*, where the cathedral of *Ely* appears finely elevated over the level just above the junction of the *Cam* with the

Ouse, (at Harrimere in the Parish of *Stretham,)* which latter in its course passes the towns of Chesterford, Soham, and Ely. A dreary tract of marsh accompanies these united rivers (which now take the name of the *Ouse*) to *Downham*, in Norfolk, nor does the country much improve afterwards; but the Æstuary at last is very considerable, and the exit of these rivers is splendid, where the flourishing and great trade of Lynn presents in its port a crowd of vessels. In many parts of these rivers there is excellent fishing, near the town of Cambridge in particular, both above and below it, there is good *Trolling for Pike*, and *Angling for Perch*, &c.

Cheshire.

The principal rivers are the *Mersey*, the *Dee*, and the *Wever*. The first of these rises in Yorkshire, and, after passing through, or rather dividing this county from *Lancashire* for a course of nearly sixty miles, about thirty-five of which, from Liverpool to the mouth of the river *Irwell*, are navigable for Vessels of considerable burthen, falls into the *Irish Sea* near Liverpool Haven. The second springs from two fountains in Merionethshire, North Wales, which uniting, form the *Lake of Pimble Meer*, the largest in Wales, and which covers one hundred and sixty acres of ground; issuing from thence, it passes through the middle of Denbighshire, runs by *Wrexham*, and, after half encompassing the walls of the city, reaches *St. George's Channel* 16 miles below Chester. The *Dee* is a most beautiful river, and is singular, in increasing in rapidity the farther it leaves its source. The passage of the *Dee* into its great plain, as the mountains recede, is extremely grand, where the *Cerriog* dashes into it from the territory of Chirk Castle, bounding Shropshire, and at length forming the romantic scene of Nant-y-bell, beneath the park of Wynnestay; after which its velocity is abated, and it becomes a deep and tranquil stream before it reaches Chester. The *Alan* meets the *Dee* near the towns of Farnden and Holt; a rapid torrent also issuing from the *Well* of *St. Winnefred*, beneath the town of Holywell, turns a vast

number of mills * in its short course to the *Dee*'s Æstuary, near the ruins of *Basingwork Abbey*, in Flintshire. The *Wever* rises in Shropshire, not far distant from *Hawkestone*, Sir RICHARD HILL's beautiful seat, runs through the central parts of *Cheshire* to Namptwich and Northwich, where it is joined by the *Dane* from the northern confines of Staffordshire, and the *Wednock* from Middlewich; it then proceeds to its port of *Frodsham*, a little below which it is lost in the swelling basin of the MERSEY. In these rivers plenty of *very fine Salmon*, *Salmon Trout*, *Trout*, *Perch*, &c. is taken in the season. In this county are also many waters called *Meres*, as *Cambermere*, *Bagmere* †, and *Pickmere*, and also others called Pools, of almost equal extent, as *Ridley Pool*, *Petty Pool*, &c. and all abounding with *Carp*, *Tench*, *Perch*, *Trout*, *Eels*, and other sorts of fish.

Cornwall.

THE chief rivers are the *Tamar*, the *Camel*, the *Fal*, the *Fowey*, and the *Looe:* the first, which is one of the most considerable in the West of England, rises in the district of Stratton, in this county, runs by the town

* *Water Mills* to grind Corn were invented by BELISARIUS, A. D. 529. The Ancients parched their Grain and pounded it. MACPHERSON in his *Annals of Commerce* says, "*Water Mills* were introduced in Britain by the ROMANS about the Year 550. The Remains of a *Roman Mill* were lately discovered at Manchester, and as they are frequently mentioned during the SAXON period, we may be assured, that an Engine so very useful, and also of such simple Construction, was never allowed to go out of use: about this time they were also known in IRELAND.

† In this Water, according to the Tradition of the Neighbourhood, *Trunks* of *Trees* were observed to rise and float for several days previously to the Death of an Heir of the BRERETONS, whose Property it formerly was. The Circumstance was attested to CAMDEN by several credible persons; and is apparently believed by him, and ascribed to unknown, yet preternatural Causes: but if any Coincidence of time, as the report suggests, was observed between the *Trees* swimming on the Surface and the Decease of an Heir of the BRERETONS, such a Coincidence could only have been Accidental.

of Launceston, and divides, for a long distance, Cornwall from Devonshire; it is joined by the *Lyd* at the rocky bridge of *Lydford*, and then with the *Tavy* from Tavistock; after which that great Æstuary is formed, which, in several bold sweeps from Saltash, incloses the Dock of Plymouth, and afterwards co-operates with the *Plym* to create that large body of water which constitutes *Plymouth Sound.* The *Tamar* is famous for its fine scenery, occasionally enriched with rocks, woods, and the usual appendages of romantic beauty; the fine woods surrounding Saltram, Lord Borringdon's; the enchanting groves, lawns, and plantations of *Mount Edgecumbe*, have all that grandeur and excellence with which Nature and Art can be attended. But the Tamar also presents a far more splendid exhibition, in being the grand Repository of the British Navy, a prospect which admits of no competition, and excites the wonder of the world.

The *Camel* springs near the rocky hills of *Rhuitter*, or Rough-Tor, in the north-east, passes by Camelford, runs down by Bodmin to Wade's Bridge, and thence into the harbour of Padstow. The *Fal* rises not far from St. Columb, and swells into a large basin near Truro, and runs from north to south into the British Channel, forming the Haven of Falmouth. The *Fowey* takes its rise in a downish tract between Bodmin and Launceston, and traverses some of the pleasant parts of the county, forming a valley above Lestwithiel, in which are the pleasing remains of Restormel Abbey. The *Looe* is composed of two branches, one of which descends from Leskard, and both unite where the port of Looe is situated, near their mouth. In excellent *Salmon* the *Tamar* abounds, and there is plenty of fish of the *Salmon kind*, *Trouts*, (particularly good near Lestwithiel,) and others, in all these rivers.

Cumberland.

The Eden finds its source in the Moors of Westmoreland, a little to the south-west of Kirby-Stephen; it passes Carlisle, where the appearance

is handsome, flowing under a fine bridge beneath the walls of the Castle, from whence it is navigable to its mouth, where meeting the *Eske*, both rivers in conjunction form the great Firth of Solway, where a large tract of marshy ground encompasses it on every side, as it becomes a Sea, and prevents the *Solway Firth* from equalling some of the lesser Æstuaries in beauty. Except while it continues within its native moors, the *Eden* is by no means a rapid stream; it traverses a pleasant country between Appleby and its junction with the *Eamont*, which flows from *Ullswater Lake*, on the south-east of Penrith; the *Irthing* joins it from the north-east, and the *Petterell* from the south-west. At the mouth of the *Irthing*, on the coast near *Ravenglass*, are pearl muscles; for which fisheries some persons, not many years since, obtained a patent.

The *Derwent* rises in the wild district of Borrodale, whence emerging towards the north, it forms the justly admired Lake of Keswick, and, after passing by Cockermouth, reaches the *Irish Sea* near Workington. The *Derwent* is throughout a rapid river, and the scenery attending its course is wonderfully striking.

The *Caldew* originates in the moors in the upper part of the county, and pursuing a northward direction to Carlisle, washes its walls towards the west as it advances to meet the *Eden*. The *Irt* and the *Esk* are two small rivers issuing from the mountains. Lord MUNCASTER's splendid house between these two channels, exhibits a paradise strangely placed in the midst of a desert. The *Dudden* rises near the borders of Westmoreland and Lancashire, in the midst of that pile of mountains which separates the waters of Winander Mere and Derwent. This county contains a number of Lakes or Meres, abundantly supplied with fish; and the rivers, especially the *Derwent*, *produce excellent Salmon*, *Salmon Trout*, *Trout*, and various other sorts of fish, that an Angler cannot fail of diversion. It has been erroneously asserted, that in one or more of these rivers the *Charr* is taken, a mistake probably arising from a species of *Trout* caught in the *Petterell*, of the size, colour, and (when potted) in taste not easily distin-

guishable from the *Charr;* but the *Charr* is found in Great Britain only in *Winander Mere*, *Ulleswater**, in this county, in *Llyn Quellyn*, near the foot of Snowdon, and in *Loch Inch*, in Scotland.

Derbyshire.

The Trent, which bounds this county on the south, is inferior to no river perhaps in England, except the Thames. Its rise is in the hills beyond Newcastle, in Staffordshire, adjoining the borders of Cheshire. The *Trent* is generally a full transparent stream, and no where (but when increased by floods) resembles the torrents of the northern rivers, whose origin is mountainous. At *Trentham* Art has swelled it into a Lake, highly ornamental to the park, and soon afterwards it meets the numerous canals of the neighbouring manufacturing districts. Previous to its reaching Nottingham, it receives the *Blythe*, the *Tame*, the *Soar*, the *Dove*, the *Derwent*, and the *Erwash*, and becomes very considerably augmented. It divides itself into two channels before it reaches Newark; from whence, through a broad plain, thickly studded with villages, the surrounding flat seldom allows the *Trent* to be distinguished. Vessels of some size, with the aid of the tide, navigate it to Gainsborough; it there divides a range of Fens until it makes a bold junction with the Ouse of *Yorkshire*, combining to form the grand Æstuary of the *Humber;* to which it largely adds by its tributary waters, and the extensive trade which is carried on through their assistance.

The *Blythe* rises a few miles eastward of the *Trent*, which it joins near Kings Bromley, after receiving the *Soar* from Eccleshall, and the

* Trout of a particular species, and of the weight of Thirty pounds; Eels of large Size; and *Gwiniads* in very considerable quantities, are caught in this Lake. Wild Ducks breed in great plenty by its sides, and in October may be seen with their new broods collected ready for flight to the more Southern parts of the Kingdom.

Peak from Penkridge, near Stafford; its principal feature is Lord BAGOT'S finely wooded park at Blithefield.

The *Tame* springs in two branches, not far from Coleshill, in Warwickshire, and flows westward to its junction with the *Trent* above Burton, and in its short course has nothing but the Castle of Tamworth, on a steep rock above its town, to distinguish it. The *Soar* rises near Hinckley, in Leicestershire, runs to Leicester, washes also the walls of Leicester Abbey, where Cardinal Wolsey finished his life; and, after meeting the *Wreak* from the confines of Rutland, passes near Loughborough, and joins the *Trent* a little below Cavendish Bridge. The rock overhanging the *Soar*, at the town of Mountsorrel, is an extraordinary spectacle in so level a grazing country. The *Erwash* rises about four miles South West of Mansfield, divides Derbyshire from Nottinghamshire during the most part of its short course; it descends southward from the coal countries near Alfreton, and falls into the *Trent* a little below the *Derwent.*

The DOVE, so called from its *blue* transparency, which the inhabitants fancy resembles the feathers of that bird, rises in the rocky hills of the Peak of Derbyshire, afterwards parts that county from Staffordshire: in the early part of its course it forms the beautiful dell of *Dove Dale*, emerging from the hollows under the pyramidical mountain of *Thorpe Cloud*, it soon receives the *Manyfold*, issuing from its subterraneous caves in the gardens at Ilam. The *Dove* then runs near Ashborn, where it is crossed by a long picturesque bridge; it is afterwards joined by the *Charnet* from below Leek, and the borders of Cheshire, and flowing between the wild wooded hills of Needwood Forest, and the old mansion of Lord Vernon, reaches the *Trent* four or five miles to the north of Burton. The current of the DOVE is thought to run through a bed of limestone, as its waters, when overflowing the banks, especially in the spring, add greatly to the fertility of the soil, so as to occasion the pithy Proverb—

"In April Dove's Flood
"Is worth a King's good."

It is famous for *its Trouts and Graylings, which are said to excel all England.*

The DERWENT, remarkable for the *browness* of its waters, springs in the mountainous district of the Peak, nearly on the borders of Yorkshire; various small torrents soon increase it in the dreary waste where it rises, and one of them flows directly from the noted Cavern of Castleton, where it bursts into light under an immense natural arch; soon after emerging from its native wilds, the *Derwent* forms the principal ornament of the superb Domain of CHATSWORTH; shortly after quitting *Chatsworth*, the *Wye*, descending from the bare and bleak heights which environ the melancholy spot occupied by Buxton, joins the Derwent, which then passes by Bakewell to Derby, (where it becomes navigable,) a little below which it enters the wide plain formed by the *Trent* on the borders of Leicestershire, and about eight miles below Derby loses itself in that great river. All the rivers of this county produce excellent fish, *particularly Graylings, a Fish unknown in North Britain or Ireland, and in many parts of England.*

Devonshire

Is well watered by several fine rivers, and by small streams in abundance. The TAMAR, already mentioned, divides this county from Cornwall, and becomes so very large and deep for near two leagues before it opens into *Plymouth Sound*, that the Salmon, which are remarkable for their goodness, have a secure retreat in the salt water. The *Plym* rises on the east side of Dartmoor, and inclining to the south-west, forms a large basin beneath the old town of Plymouth. The *Yealme*, *Erme*, and *Aven*, are three small rivers, also rising in Dartmoor; the pleasant spot and Inn of *Ivy-Bridge* are on the banks of the *Erme*, which is there a mountain torrent. The course of all these rivers is south-west, and each has a considerable Æstuary. The DART is the principal of all those rivers that are produced

by the rocky range of Dartmoor, in the centre of this county, which in wildness at least, though not in height or extent, may emulate most of the mountainous tracts of Wales or Scotland. Rapidity is the *Dart*'s first characteristic, which it retains till it descends into the rich plains of the southern part of the county. At Totness the *Dart* is crossed by its last bridge, and soon afterwards receives the tide; the noble ruin of Berry Pomeroy Castle occupies an eminence on the east; it then runs by Kings Weare and Dartmouth, the ivied walls of whose Castle and its rustic Spire, starting out from beneath a rocky hill, mark the exit of the *Dart* towards the sea. The Ex rises in the wild hills of Ex-Moor, in the western corner of Somersetshire, runs to Tiverton, just below which it receives the small river *Loman*, and soon afterwards the *Creedy* and the *Culm*, keeping on its course to EXETER; from whence it forms a grand Æstuary to Exmouth, where it meets the sea. The OTTER (noted for the numbers of that amphibious animal,) is also remarkable for its Trout and Salmon-peal; the former having a peculiarly rich flavour, and the latter being very large and firm: the SYD, and the AXE, each of them rises near the border of Somersetshire. The TEIGN takes its rise in Dartmoor, near the village of Chegford, and, after forming a broad but short Æstuary, by the junction of its two branches, terminates in the bay of Teignmouth. The TAW and the TORRIDGE contribute to form the great bay of *Barnstaple* and *Biddeford*, on the broad part of *the Bristol Channel*, opposed to Tenby, in Pembrokeshire. The *Taw* has its source in the central mountains of Dartmoor, and is increased by the *Moule* from South Moncton to Barnstaple; from whence it turns westward to meet the *Torridge*, which rises close to the head of the *Tamar*, near the border of the northern part of Cornwall: this river, after receiving the *Okement*, runs due north to BIDDEFORD *, and, after its junction with the Taw, both

* The Bridge here, says Dr. CRUWYS, has the following singularity attached to it. "The Tide flows so rapidly, that this Bridge cannot be repaired by *Mortar*. The Corporation, therefore, keep boats in employ to bring *Muscles* to it, and the Interstices of the Bridge are filled by hand with these *Muscles*. It is supported from being driven away by the Tide entirely by the strong threads these *Muscles* fix to the stone-work; and by an Act or Grant it is a Crime,

streams incline to the north-west to find their mouth, where the *Bristol Channel* loses itself in the open sea. All these rivers abound with *Salmon*, (which, although very fat, are not so large as in the North of England,) *Trout*, and contain such quantities of excellent other fish as to afford the Angler uncommon amusement.

Dorsetshire.

The Charr, the Eype, and the Wey, are the three rivers of this county, bordering upon Devonshire. They all descend from the Dorsetshire Downs; the former makes its exit at Charmouth, on the great western road; the *Eype*, joined by the *Brit* from Beminster, and another stream westward of it, falls into the sea in Bridport harbour, a few miles below that town. The *Wey* is now celebrated for its sea-bathing place, formed by the combined towns of Melcombe Regis and Weymouth, which grace the exit of the *Wey* to the sea; the grand semicircular beach, and its level sands, (advantages for bathing,) added to the preference given to it by the Royal family, have raised Weymouth into high consideration.

The Stoure finds its source in six streams at *Stourton*, in Wiltshire, three of which are in the park of Stourhead: winding through Gillingham Forest, round the hill on which Shaftesbury stands exalted, it runs to Sturminster; afterwards pursues nearly a south-east direction aslant the eastern division of Dorsetshire, joined by the *Allen* from the north at

liable to Transportation, for any person to remove these Muscles, unless in the presence, and by the consent, of the Corporative Trustees." A similar instance of the *adhesive* quality in *Muscles* was noticed at Calais, by a Gentleman, in 1777; in his Walks upon the Pier he remarked that all the Piles and Timbers of every description were covered with Myriads of diminutive *black* spots. These increased in size daily, and, by degrees, eclipsed the appearance of the Wood: he found them to be Muscles, and that they spread to a prodigious extent, keeping their hold so tenaciously that even severe Gales, in one of which a Vessel was driven ashore, did not in the least disturb them. This continued until the latter end of August, when the whole of the Mouth of the Harbour and all the passages to the outer Fortification were perfectly a mass of *Muscles*.

Winborn to Christchurch, in Hampshire, where meeting the *Avon* of that county, after being a little increased by the *Blackwater* from Cranbourn, both fall into the sea opposite to the Isle of Wight.

The FROOME, which may be called the most considerable river in this county, rises in that vast tract of Downs which divides it from Somersetshire; its two channels unite at Maiden Newton, and flows to Dorchester, fed by the various streams from the South Downs; it meets the *Piddle* from the north, then turns eastward to reach Wareham, and forms the great expanse of water constituting *Poole Harbour*.

The *Stoure* is peculiar not only for the *large quantities*, but the *goodness and delicious flavour, of its Tench and Eels:* there are Trout, good Pike, Perch, and other fish, in these rivers; and in Mr. BROWN's water, four or five miles above *Dorchester*, the *Trout* are extremely plentiful.

Durham.

THE TEES rises in that part of Cumberland called *Stanemore;* the mountains from which the *Tees* derives its origin are gigantic, and Teesdale presents a long winding fertile stripe, surrounded by some of the wildest districts in the kingdom. The *Tees* is crossed often; and at Barnard Castle (which it almost encircles) by an extraordinary foot bridge suspended by iron chains: below Rokeby Park it receives the *Greta* from Yorkshire, and another small stream from the Durham Moors, and forms a fine feature in the territory which surrounds Raby Castle. The *Tees* still preserves its rapid character, as it divides this county from Yorkshire, presenting a striking object from whichever side it is viewed. At Stockton this river is affected by the tide, admits ships of considerable burden, and soon loses itself in the sea. The Tees possesses few fish except *Salmon*, the stream is so very rapid and even furious in winter, and in summer is often almost dry: in its deep pits are some *Trout*.

The WEARE finds its source in the same wild range of Moors as the *Tees*, but considerably to the north of that river. The *Weare* may be called a miniature of the *Tees*, much resembling it in character; and Wearedale (like Teesdale) is a very wild district: emerging from hence, the *Weare* flows below the Park of Bishops Auckland, where it receives the *Gaunless*, and observes its winding course in deep dales till arrested by the circular hill crowned by the Cathedral and Castle of Durham, whose walls overhang this river from the summit of a perpendicular rock; the wooded banks of the *Weare* exhibit much romantic scenery about *Cocken*, and its exit to the sea, near the crowded port of Sunderland, is graced with an *iron*-bridge, matchless in its design and architecture, beneath which vessels may pass in full sail. It consists of a single arch, which spans two hundred and thirty-six feet, and rises at its centre *one hundred feet* above high water mark.

The TYNE will be noticed in the county of Northumberland; besides the above are the *Derwent*, *Laden-hude*, *Bander*, *Lune*, and *Skern;* the former has a short course from its rise in the Durham Moors, till it becomes environed with coal-works, and the others run into the *Tees*. These rivers afford *Salmon*, *Salmon Trout*, *Trout*, &c. *Just below Durham* a skilful Angler will obtain as much fish as he can wish for.

Essex.

The BLACKWATER and the CHELMER are the rivers of most note besides the Thames in this county; the *Crouch* and the *Bromhill* being inconsiderable streams, except at their mouths. The upper branch, which bears the name of the *Blackwater* throughout, rises near Saffron Walden, on the borders of Cambridgeshire, runs through Bocking and Coggeshall, and thence nearly southward to *Malden;* the *Chelmer*, which rises near Thaxted, and taking its course by Dunmow, pursues nearly a parallel course with the *Blackwater* to the south-east, as far as Chelmsford, from

whence it makes a compass towards the east to join its sister stream; the Æstuary of the *Blackwater*, which is formed below Malden, after the union of the two rivers, is very extensive. The COLNE is a small river, and rises on the borders of Suffolk, near Clare, runs through Halsted, and from thence to Colchester; below which it empties itself into a creek of the sea, between Mersey Island and the Main. At the mouth of this river, and the salt water inlets, are bred and fattened the famous *Oysters*.

The STOUR of Essex rises at a place called *Sturmer*, not far from Haverhill, on the borders of Cambridgeshire; passes through Sudbury; from which place, by an Act of the fourth of Queen ANNE, it was made navigable to Maningtree, where the tide meets it, and at Mistley it is, at high water, a beautiful object to the Hall, the seat of the late Mr. RIGBY; it is joined by the *Brett* near Neyland, and, dividing this county from Suffolk at Harwich, meets the *Orwell* from Ipswich; and both rivers fall into the sea beneath the batteries of Languard Fort, on the Suffolk shore.

The *Lea* rises near Luton, in Bedfordshire, in a Marsh called *Leagrave*, and pursues a south-east course to Hertford and Ware. Though in itself but a sluggish river, the country through which it flows, particularly near Hertford, is extremely pleasant; about the central part of its course, it is increased by various small streams; of which the *Stort*, the *Quan*, the *Bean*, and the *Maran*, are the principal. Soon after its outset, the late Earl of BUTE swelled the *Lea* into a large lake at his park at Luton Hoo; it undergoes a second artificial enlargement in Brocket Park, the ornamented seat of Viscount MELBOURNE.

The *Lea* divides Essex from Middlesex, bounded on one side by the wooded hills of Epping Forest, and on the other by the heights of Barnet and Highgate; the level afterwards becomes very considerable as this river approaches Hackney, and still more so as it advances towards the THAMES, which it falls into a little below *Stepney*.

These rivers are all slow and deep, produce *Carp*, *Tench*, *Pike*, *Perch*, and *Eels*, but very few *Salmon* or *Trout;* they are so *poached*, particularly near the towns which they pass, as to materially injure the Angler's amusement. A part of the *Lea* is however well looked after, in which there is good angling for *Perch*, *Pike*, *Chub*, *Roach*, *Dace*, *Gudgeon*, and *Barbel*. At Stourmere (the Source of the STOUR) the *Tench* and *Pike* are singularly fine.

Gloucestershire.

THE SEVERN is large, and for the length of its navigation, may be said to rival the THAMES. This river comes into the county two miles above *Tewkesbury*, to which place, and sometimes higher, (although seventy miles from the sea,) the tide flows. The tide swells not by degrees, but the mouth of the river opening to the great *Atlantic Ocean*, pours in with great violence, four or five feet high, and carries every thing before it; and the river growing suddenly narrow, the channel is filled at once: another singular circumstance is, that the tides are highest one year at the *full Moon*, and the next year at the *change;* and also, that in one year the *night* tides are highest, and the next the *day* tides: it is navigable to Shrewsbury, which is by land fifty miles above Gloucestershire. The *Severn* rises in a small lake* on the eastern side of *Plinlimmon Hill*, in Montgomeryshire, and in that county is capable of carrying large barges from King's Road up to Pool-Quay; afterwards, it almost encircles *Shrewsbury*, in the form of a horse-shoe, receiving *the Tern*, a little below, in Lord BERWICK'S grounds: it runs through Colebrook Dale, and then flows southward to Bridgnorth, where it is joined by the *Wort* and by the *Stour* below Bewdley; it then proceeds to Worcester and Gloucester, (whose Cathedrals and numerous Churches present fine objects to the

* Mr. BINGLEY in his *North Wales Tour*, says, "The Stream at the Source of the *Severn* is so small, that a Child may stride across it."

course of the *Severn,)* dividing near the latter city into two channels, which soon reuniting, constitute a great tide river; and, after joining the *Wye* and the *Lower Avon*, assumes the title of the *British Channel*, expanding and insensibly losing itself in the Atlantic Ocean, between the Land's End of Cornwall and the extreme point of Pembrokeshire, just at the entrance of *St. George's Channel*, which separates Great Britain from Ireland. The Severn is so rapid that the stream is *muddy*, and has no great *variety* of fish; it is however well furnished with fine *Salmon*, and in the fishery near Gloucester abundance are taken, and forwarded to the London Markets *. The *Lampreys* of the *Severn* are likewise particularly celebrated.

The Isis, which gives one half of the name to the Thames, and is said to be its *head*, rises in the parish of Cotes, in this county.

The Wye rises on the south side of the *Plinlimmon* mountain; passing between the woods and orchards of *Cabalva* and the village of Clifford with its high Church, and the ruins of that castle which gave birth to Fair Rosamond †, the daughter of Lord Clifford. Various rivulets add to its stream before it reaches the plain of Herefordshire, which it enters beneath the few remaining fragments of Whitney Bridge: at the village of Brockware it meets the tide, and swelling at once into a majestic Æstuary, fills the space between the impending woods and rocks on either side, and with great grandeur winding round the fragments of *Tintern Abbey*, it encompasses the rocky promontory of Lancautin, Gloucester-

* As a proof of the estimation in which the Salmon of this County were held, Henry I. in 1243 ordered the Sheriff of Gloucestershire to send him *twenty Salmon* in Pies;—from *Sussex* he at the same time demanded ten *brawners*, 'Brawns,' with the heads; ten *Peacocks*, fifty *Rabbits*, one hundred *Partridges*, and five hundred *Hens*.

† The anxiety which Henry must have experienced in the progress of his life to conceal this Amour from the high-spirited Eleanor of Guienne, gave rise, probably, to Brompton's Tale of the *Bower of Woodstock;* and of Rosamond's *Death by Poison*. Both may be reckoned *fabulous*. We know not exactly when this fair Lady died, but we are told that her Body was found near *Godstow* Nunnery, cased in Leather, (like that of Henry I.) and in lead; and that when opened, "a very sweet smell came out of it."

shire, while its Monmouthshire bank is enriched by that happy combination of art and nature with which *Persfield* is ornamented. The *Wye* then approaches Chepstow, where there is a wooden bridge of great height; the tide sometimes rising *eighty feet* perpendicular: beneath the flourishing port of this town it is still encompassed by cliffs, through which it rushes into the *Bristol Channel.*

The Upper Avon rises on the borders of Leicestershire, and adding much to the delightful territory of Warwick Castle, glides through a charming country to Stratford-on-Avon, where it receives the *Lesser Stour*, from thence traverses the great level of Worcestershire by Evesham, and meets the *Severn* at Tewkesbury. The *Chelt*, the *Stroud*, whose water is said to have such a peculiar property in dying Scarlet and different ground colours, that no other can give them so fine a gloss; the *Cam*, and the *Little Avon;* all fall into the Severn after its junction with the *Upper Avon.* The Stroud accompanying its canal from the town of that name, and the *Little Avon* washing the memorable walls of Berkeley Castle, where Edward II. was inhumanly murdered, and which is the event alluded to by Gray's Prophetic Bard.

> "The shrieks of death thro' Berkeley's roofs that ring,
> Shrieks of an agonizing King."

The Lower Avon rises not far from Wootton Basset, in the hilly district of North Wiltshire, bordering upon this county. Emerging from the hills, it runs through the *cloathing* part of Wiltshire, bordering upon that of Somersetshire, and for some space divides the counties; at last, encircling Bath on two sides, it proceeds to Bristol; from thence advancing through marshes, it conveys the abundant trade of that opulent city to the Severn, and by its conflux constitutes the *Bristol Channel* at King-Road.

These rivers produce plenty and a variety of fine fish, and afford the Angler great sport.

Hampshire.

The Avon (which enters this county at Charford) pursues a south course from the junction of its three early component branches; one of which rises at the edge of Savernake Forest, near Marlborough, and the remaining two in the downish district between that tract and the Devizes; descending to Salisbury; on one side of that city it is joined by the *Willey*, the *Deverell*, the *Nadder*, and by the *Bourne* on the other. None of these rivers are considerable until their union with the *Avon*, (although the first and the third contribute to adorn the magnificent mansions and grounds of Wardour Castle and Wilton,) which continues its southward direction until the *Stour* meets it at Christ-Church, where it falls into the sea.

The *Anton* and *Test*, the *Alne* and *Itchen*, contribute with smaller streams to form the Southampton River. The *Anton* rises about twelve miles north-east of Andover from two sources; one of these passes Whitchurch, and meeting the *Test* at Wherwell, proceeds to Stockbridge and Rumsey; where, at the first, it forms several Islands: it is there joined by several streams from the New Forest at Redbridge, where it forms the head of the *Southampton River*.

The *Alne* and the *Itchen* rise near Alresford, and unite below that town, bearing the sole name of the *Itchen* afterwards; it runs to Winchester, and is navigable from thence, and falls into Southampton Bay. The Southampton River, composed of those above described, immediately on its formation at *Redbridge* becomes a considerable arm of the sea; flowing to the south-east between the New Forest groves and the venerable remains of Netley Abbey, near which the *Hamble* (swelling from a small river into a broad Æstuary, where two tides meet with great violence) descends into it from the interior of this county. Beneath *Calshot Castle* its proper exit

to the Sea may be determined, where an angular strait divides the Isle of Wight from the Hampshire coast, near the entrance of Portsmouth Harbour. It was on the beach of Southampton water that CANUTE gave that striking reproof to his flattering Courtiers, when the disobedient *Tide* washed his feet; and here the warlike Henry V. mustered his Forces destined to the conquest of France.

The WEY rises in this county and runs into Surry. In the *Itchen*, and in many parts of all these rivers, there is good Angling; they afford *Salmon*, *Salmon Trout*, *Mullet*, *Trout*, in plenty, and various other fish.

Very few years since *Sea* fish were so plentiful in parts of this County, that *Oysters* were *three halfpence* a hundred, and *Prawns*, *sixpence; Mackerel*, *four-pence a dozen; Whitings*, two-pence.

Herefordshire.

THE WYE, which has before been mentioned, enters on the western side near *Hay*, and runs through Hereford, Ross, and many other places in this county. The LUG is a navigable river, which rising on the confines of Radnor, enters this county at Presteigne; runs easterly to Leominster, where it receives the *Oney*, the *Endwell*, the *Arrow*, and all fall into the *Wye* below Hereford. The *Frome* and *Loden* run south until they unite near Stratton, and soon after reach the *Wye*. The *Monow* is a compound of several small rivulets, which rise in Hatterel Hills, and after receiving the *Doyer*, flowing from a valley called, from its superior fertility, the *Golden Vale*, joins the *Wye* at Monmouth. The *Trothy*, from the interior of Monmouthshire, is added to the *Wye* below Monmouth. The *Diffrin Doe* is said to be the only river in the county that does not rise in *Wales*.

These rivers are excellent for the Angler, abounding in *Salmon*, *Trout*, *Grayling*, *Salmon Trout*, and almost every other kind of river fish: the

Salmon in the Wye are *always in season;* in many other parts of England, after spawning, they are deemed *unwholesome*, until they have returned to the sea to recover themselves; but here they are never *kipper*, that is, sick or lean, and always fit for the table. The Graylings, both in the *Lug* and the *Wye*, are also very fine.

Hertfordshire.

MANY small rivers water this county: the principal are the *Lea* and the *Colne;* the former is the only navigable river in Hertfordshire, and to preserve the navigation has been the care of Government ever since the Reign of HENRY the Fifth, by many subsequent Acts. The latter rises near *Titten-hanger*, passes through Watford, where it has two streams, which run separately to Rickmansworth, and reaches the THAMES at Stanes.

The *New River* has its source near *Ware*. The history is so well known, that it is almost superfluous to add that its stream was brought to LONDON in 1614, to supply that City with water, by Mr. afterwards Sir HUGH MIDDLETON, who expended a large property, and was ruined in the execution of the work.

These rivers have variety of fish; *Eels*, *Cray-fish*, *Trouts*, *Gudgeons*, *Bream*, *Carp*, *Tench*, *Perch*, *Roach*, *Pike*, &c. Near *Ware* are good *Trout*.

Huntingdonshire.

THE NEN, or NINE, rises in two branches on the north and south of Daventry, and comes with a winding course from Wandesford round the north-west and northern borders of the county.

The OUSE enters in at St. Neots, and, passing Huntingdon, soon after leaves the county. These rivers produce good *Pike*, *Perch*, *Eels*, and

plenty of common fish. In the *Nen* is found the *Rud* or *Finscale*. There are also many MERES, where the Angler may be sure of diversion, as *Whittlesea*, (which is the largest, being six miles long and three broad, and which is frequently agitated without any apparent cause, by what is termed a *bottom wind*. The Cumberland Lakes undergo similar agitations, and which are described to be as a succession of whirlpools;) *Ramsey*, *Brich*, *Ugg*, *Benwick*, &c. which are full of *very large Pike*, and *Bream; Perch* from sixteen to eighteen inches in length; *Tench* as high as four and five pounds weight: the *Eels* are also of a great size, and abundant.

Kent.

THE MEDWAY rises in Sussex, and enters Kent near Penshurst, and, joined by many rivulets from the *Weald*, crosses this county by Maidstone and Rochester; below which it forms Chatham Dock, and afterwards joins the mouth of the THAMES, between the Isles of Shepey and Grain. *This River produces good fish of several kinds.* In that part of the THAMES which passes this county by Greenwich, a small kind of fish, called *Whitebait*, used to be taken in large quantities, and was in high estimation among those fond of delicious eating: the catching them is now prohibited, as they are alleged to be the small *Smelt*. Not far from Westerham nine springs rise, and uniting at a small distance form the river Dart, which runs through *Dartford*, (upon which stream the first *Paper* mill, and also the first mill for splitting *Iron* into *Bars*, and drawing it into *Wires*, were erected;) and discharges itself into the *Thames*, not far from Long Reach. The *Rother*, from Sussex, forms the limit between the two counties for a small space, and then reaches the sea at *Rye*. There are also the *Len* and the *Tunn;* the last of which runs into the *Medway* near Tunbridge.

The STOUR rises in the Weald, flows by Canterbury, and empties itself into the sea below Sandwich. This river affords plenty of fine *Trout*,

and in the other streams there is no deficiency of fish of various sorts to amuse the Angler.

Lancashire.

The Mersey, by which this county is parted from Cheshire, rises on the west side of *Blackstone Edge;* after receiving above Stockport *the Tame*, (which takes up the boundary where *the Mersey* leaves it,) and several small streams, it unites with the *Irwell* near Glazebrook, and soon afterwards it is increased by the *Bollin* from Macclesfield, bearing now the single name of the *Mersey;* it runs by Warrington, which supplies it with fresh burdens of trade by canals from the north, and the *Wever* with those from the southern and eastern parts of Cheshire, communicating with the numerous navigations of Staffordshire. Below Warrington the great basin of the *Mersey* expands itself, crowded with sails from various quarters, pursuing their destination to the splendid Port of Liverpool and the Irish Sea.

The Irwell rises in the moors which divide this county from Yorkshire, meeting the *Roch* a little below Bury; it runs to the south-east until it reaches Manchester, where it is incorporated with the *Irk* and the *Medlock;* from thence its course is nearly west, until its junction with the *Mersey*.

The Leven rises in Westmoreland, near the borders of Cumberland; it forms the two Lakes of *Grassmere* and *Rydall Water*, and meeting the *Braithy* from *Elterwater*, expands itself into Winander Mere, by far the finest lake in England. The *Crake* is a small rapid stream, descending northward in a most picturesque course from *Coniston Lake*, and forming at last, in conjunction with the *Leven*, a considerable arm of the sea, which terminates in the great Bay of Morecambe.

The Wyre is composed of several small rivulets in the moors di-

viding Yorkshire from this county; it flows to Garstang, and forms its Æstuary near Poulton. This river abounds with *Trout*, *Chub*, *Gudgeon*, and in the Spring, with *Smelts*.

The LUNE rises in the Westmoreland Moors, not far from Kirby Stephen, and in its course finely intersects the district of Lonsdale: from below Hornby its approach to Lancaster is very striking, in sight of which, making some great curves, it falls into the Irish Sea.

The KENT also rises in the Moors of Westmoreland, north of Kendal, which town it passes, and, after a southward direction, falls into Morecambe Bay. This river has some romantic falls, beneath the groves of Leven's Park, belonging to the Earl of SUFFOLK; immediately below which the extension of the Sands indicates the approach to the Sea.

The RIBBLE is one of the largest rivers in the north of England, rising in the high Moors of Craven, in Yorkshire, far to the north of Settle; it enters this county at Clithero, receiving *the West Calder* in its way before it reaches Ribchester, whence it flows through Ribblesdale, and at the part where it encompasses Preston is very grand, being there crossed by two stately bridges; soon after which, receiving *the Darron*, its Æstuary forms a noble arm of the sea, discharging itself by a broad sandy outlet, after flowing through a vale of great fertility and beauty.

These rivers afford *Salmon*, *Trout*, and other fish in plenty; the *Mersey* is annually visited by shoals of *Smelts* (there called Sparlings,) of extraordinary size and flavour; and those caught near Warrington are supposed to be superior to any taken elsewhere in ENGLAND. The *Irk*, near Manchester, is famous for the *largest and fattest Eels* in Great Britain, and which is supposed to be owing to the grease and oil pressed out of the woollen-cloths that are therein milled by the numerous water-mills. At no great distance from both *Lancaster* and *Preston*, the Angler will be satisfied with the abundance of Salmon, Trout, and Salmon Trout, he will meet with.

Leicestershire.

THE SOAR rises in the western part of the county, and, after receiving *the Wreke*, falls into the Trent where this county, Derbyshire, and Nottinghamshire meet, and not far from Cavendish Bridge. The AVON, which flows into Warwickshire, and the ANKER and the WELLAND, (which have a north-east course to Harborough,) also rise in the western part of this county. The river *Swift* belongs likewise to Leicestershire. The Angler may find amusement in many parts of these rivers, but the more remote from the towns, the greater will be his chance of success.

Lincolnshire.

THE TRENT passes the western edge of this county by Littleborough and Grimsby, after which it loses itself in the *Humber*. The WELLAND finds its source in a range of hills between Lutterworth and Harborough, and divides Lincolnshire from Leicestershire, Rutland, and Northamptonshire. This river traverses a fine plain between Harborough and Rockingham, where the Castle, Lord SONDES's ancient seat, overlooks it from a high terrace; advancing from Rockingham Forest, whose abundant woods cover all the Northamptonshire side: the numerous steeples of Stamford mark its entrance into this county, the huge pile of Burghley, and its highly ornamented grounds, adorning the Northamptonshire bank. The *Welland* soon afterwards sinks into the *Fens* of Lincolnshire below *Deeping**, and, passing the monastic ruin of Crowland Abbey, arrives at

* RICHARD DE RULOS, Chamberlain to the first WILLIAM, drained Bogs, inclosed Commons, and (after building the significantly-named Town of *Deeping* in Lincolnshire) changed the Banks of the *Welland* from Quagmires to Gardens and Orchards. The art of *Gardening* had great Improvement from the NORMANS; particularly with respect to the Culture of the *Vine*, which, according to WILLIAM of MALMSBURY, who wrote in 1140, had in his time arrived at

its port of Spalding, and falls into the German Ocean. The *Glean* from *Bourne*, which joins the *Welland* in the Fens at the extremity of its course, adorns the extensive domain of Grimsthorpe, belonging to the Duke of ANCASTER.

The WITHAM rises near a village of that name, about ten miles north of Stamford, and runs by Grantham to Lincoln*, from whence it has a communication with *the Trent* by means of a navigable canal in extent seven miles, (called the Foss-dyke, cut by HENRY I.†;) after which it is met by *the Bain* from Horncastle; it then flows to Boston, and just before it reaches that place, *the Witham* is defended by a curiously constructed Sluice against the inroads of the Sea; this is the last of those numerous streams which contribute to form the gulph between this county and Norfolk; it assists to make the Wash of *Foss-dyke*, which falls into this great gulph considerably northward of that of *Cross-Keys*.

The ANKAM or ANCHOLME is a small river rising in the Wolds of this

such perfection within the Vale of Gloucester, that a sweet and palatable wine, "little inferior to that of France," was made there in abundance. In the two succeeding Centuries, if *Gardening* was more universal and throve better, it was because it flourished by the immediate protection of the Great. Almost every large Castle or Monastery had its *Kitchen*-garden, *Physic*-garden, *Orchard*, and frequently its *Vineyard;* and it appears from Evidence we cannot well doubt, that at the period alluded to there was *Wine* made in ENGLAND in considerable *quantity*, and of a *quality* too which at least is not mentioned to its Disparagement.

* It is singular that by the DOOMSDAY BOOK, (began in 1080, and finished in 1086,) as quoted by CAMDEN, there appears to have been in LINCOLN, when that Survey was taken, no less than *One Thousand and Seventy* INNS for Entertainment. What a place for the residence of the late Dr. JOHNSON? Had he lived at this early period, it must have been a Paradise to him, if what his Biographers have stated be true, that this great Man asserted a *Tavern Chair was the Throne of Human Felicity*.

† He was the first *English* Monarch who probably thought of *Inland* Navigation. He was surnamed BEAUCLERC from his Attention to Learning. He had heard his Father often say, that, "Illiterate KINGS were little better than *Crowned Asses*," and was determined not to come under that Description of Potentates.

county, not far from Market Raisin, and flows northward by Glandford-bridge; from whence it is navigable to the Humber, some miles below the junction of *the Trent*. It is as famous for its *Eels* as *the Witham* is for its *Pike*, and which has given rise to the following proverbial rhyme:

Ankham *Eel*, and Witham *Pike*,
In all England, *is none sike*.

The other rivers produce plenty of *Salmon*, *Perch*, *Tench*, *Trout*, *Pike*, and other fish for the Angler's diversion; in some of the waters about Lincoln, the *Rud* is found.

Middlesex.

THE THAMES, which for its navigation and commerce is said to be unequalled, will be mentioned here. This mighty Monarch of all the British Rivers, superior to *most* in the known world for beauty, and to *all* in importance, has had its birth-place almost as much contested as that of HOMER. Like the sources of THE NILE, the position of the original fountain of *the Thames* has been variously assigned; the dispute, however, is of little consequence, as none of these fountains in their origin differ materially from a common rivulet. The Thames is compounded of two rivers, namely, the ISIS and the THAME; the former of these rises near *Cirencester*, in Gloucestershire, and is by some called the head of the Thames: from that place it runs easterly to Lechlade, in the same county, where it receives *the Coln*, and becomes navigable for vessels of *Fifty* Tons, and this at the distance of about a *hundred and fifty miles* from LONDON; here, with immense expence, a canal has been made to join the SEVERN with the THAMES, perhaps the most important *inland* navigation of Great Britain, by transporting the influx of foreign as well as internal wealth, to and from the CAPITAL. The *Isis* flows north-east to Oxford, receiving in its way the *Windrush*, the *Evenlode*, and a smaller

stream, which forms the great Lake in Woodstock Park, and thus augmented, it washes the ruined walls of *Godstow Nunnery*, whose Chapel contains the Tomb of the unhappy ROSAMOND. At Oxford *the Isis* divides itself into various small channels; these quickly reunite, and a little below the ornamented meads of Christchurch, *the Cherwell* joins it, and flowing through Magdalen Bridge, together with *the Isis*, almost insulate the city of Oxford; from thence *the Isis* runs to Abingdon, and the long straggling town of Dorchester, where *the Thame*, descending from the central parts of Buckinghamshire, (and some of the streams that form it, even from the borders of Hertfordshire,) joins it a little above Shillingford Bridge, and thus uniting their names with their waters, make a beautiful river, which is then known only by the name of THAMES; and which, taking a course by the borders of Berks, Bucks, (where at Great Marlow is the last *lock*, it requiring no further art to navigate it to the sea,) Middlesex, Surry, Essex, and Kent, and increased by *the Kennet* at Reading, *the Coln* near Staines, *the Wey* below Weybridge, *the Mole* opposite to Hampton Court, *the Brent* at Brentford, *the Wandle* at Wandsworth, *the Lea* below Stepney, *the Roding* below Woolwich, *the Cray* and *the Darenth* below Crayford and Dartford, rolls on until its junction with the MEDWAY at the *Nore*, where both Rivers are soon lost in the German Ocean. The Tide of the *Thames* flows above Richmond, which is more than *Seventy* miles from the sea, and the water continues *fresh* as low as Woolwich; and from its mouth to *Lechlade* (where the *Isis* is first navigable) the distance is *two hundred and thirty* miles. The Commercial Importance of the *Thames* scarcely exceeds its romantic beauty. From the CAPITAL of England, it is a superb Tide river, full of Vessels of every description, and from every Clime; and upon the banks, in its passage to the Sea, are constructed many of those floating Bulwarks, which protect the Trade of Great Britain, and defy all the Efforts of the Universe combined to injure it. To the end of its course the *Thames* preserves that air of placid dignity which so eminently distinguishes it. From *Windsor*, it passes into this county about three miles below Colnbrook; and the admirable description of its tributary

waters, as given by Mr. POPE, will probably repay the Reader's patience in the perusal:

In ancient times, we read,
Old Father THAMES advanced his rev'rend head;
His tresses dropp'd with dews, and o'er the stream
His shining horns diffus'd a golden gleam.
Grav'd on his urn appear'd the moon, that guides
His swelling waters, and alternate tides;
The figur'd streams in waves of silver roll'd,
And on their banks *Augusta* rose in gold.
Around his throne the sea-born brothers stood,
Who swell with tributary urns his flood;
First the fam'd authors of his ancient name,
The winding ISIS, and the fruitful TAME;
The KENNET swift, for silver Eels renown'd,
The LODDEN slow, with verdant alders crown'd;
COLE, whose dark stream his flowery islands lave;
And chalky WEY, that rolls a milky wave;
The blue transparent VANDALIS appears;
The gulphy LEA his sedgy tresses rears;
And sullen MOLE, that hides his diving flood;
And silent DARENT stain'd with *Danish* blood. WINDSOR FOREST.

The THAMES produces *Salmon*, (though not in abundance,) which are generally taken about Isleworth: these bear a most extravagant price in the London markets, having been sold at *twelve shillings* a pound; eight shillings and half a guinea per pound are frequently given for the whole fish together, and the average price is five shillings, although the quality is probably equalled in other rivers; and there is no super-excellence in the fish beyond their being caught so near the Metropolis, and not losing their flavour by long carriage before they are used; for Salmon, to be eaten in perfection, cannot be too fresh. Numbers of other fish, such as *Trout*, *Pike*, *Carp*, *Roach*, *Dace*, *Perch*, *Chub*, *Barbel*, *Smelt*, *Gudgeon*, and *Flounders*, are in this river; it abounds also with *Eels* and *Lampreys* *.

* To prevent the fish in the *Thames* from being improperly destroyed, the ACT of the 30th of GEO. II. declares, "That no person shall fish, or endeavour to take fish, in the said River, between *London Bridge* and *Richmond Bridge*, with any sort of *Net*, other than except

Mr. Pope notices some of the Fish in the Thames in the following lines:

Thames' gentle streams a various race supply;
The bright-ey'd *Perch*, with fins of Tyrian dye;
The silver *Eel* in shining volumes roll'd;
The yellow *Carp*, in scales bedropp'd with gold;
Swift *Trout*, diversified with crimson stains;
And *Pike*, the tyrants of the wat'ry plains.

Windsor Forest.

The higher an Angler goes up the Thames, the greater and more various will be the fish he takes. Near Windsor are all sorts of fish, but

For *Salmon*, with a Net of not less than six Inches in the *Mesh*.

For *Pike*, *Jack*, *Pearch*, *Roach*, *Chub*, and *Barbel*, with a *Flew* or *Stream Net* of not less than three Inches in the *Mesh* throughout, with a facing of seven Inches, and not more than sixteen Fathom long.

For *Shads*, with a Net of not less than two Inches and a half in the *Mesh*.

For *Flounders* with a Net of not less than two Inches and a half in the *Mesh*, and not more than sixteen Fathom long.

For *Dace*, with a single *Blay-Net* of not less than two inches in the *Mesh*, and not more than thirteen Fathom long, to be worked by *Fleeting* only with a *Boat* and a *Buoy*.

For *Smelts*, with a Net of not less than one Inch and a quarter in the *Mesh*, and not of greater length than sixteen Fathom, to be worked by *Fleeting* only with a *Boat* and *Buoy*.—

Under the Penalty of forfeiting and paying the Sum of *Five Pounds* for every such offence.

No Fish of any of the sorts or kinds herein-after mentioned shall be caught in the said river of *Thames*, or waters of *Medway*, or sold, or exposed to or for sale if caught in the said river of *Thames* or waters of *Medway*, of less weight or size than herein-after is specified, *that is to say*,

No *Salmon* of less weight than six Pounds.

No *Trout* of less weight than one pound.

No *Pike* or *Jack* under twelve Inches long, from the Eye to the end of the Tail.

No *Pearch* under eight Inches long, from the Eye to the end of the Tail.

No *Flounder* under seven Inches long, from the Eye to the end of the Tail.

No *Sole* under seven Inches long, from the Eye to the end of the Tail.

No *Plaise* or *Dab*, under seven Inches long, from the Eye to the end of the Tail.

No *Roach*, under eight Inches long, from the Eye to the end of the Tail.

No *Dace*, under six Inches long, from the Eye to the end of the Tail.

No *Smelt*, under six Inches long, from the Eye to the end of the Tail.

No *Gudgeon*, under five Inches long, from the Eye to the end of the Tail.

No *Whiting*, under eight Inches long, from the Eye to the end of the Tail.

No *Barbel*, under twelve Inches long, from the Eye to the end of the Tail.

the Court of that town fine highly those fishing *without leave*, if a gudgeon only is caught. Walton and Shepperton *deeps* are famed for their Barbel.

No *Chub*, under nine Inches long, from the Eye to the end of the Tail.—

Under pain to forfeit and pay *Five Pounds* for every such Offence.

No person shall in any wise use or practise *Trinking*, *Stow-beating*, *Trawling*, or catching of any Fish or Bait, in the said river of *Thames*, or waters of *Medway*, on any Lord's Day, commonly called *Sunday*, under the penalty of forfeiting and paying for every such Offence, *Forty Shillings*.

The respective Times and Seasons for Persons going forth to fish, and taking fish in the said river of *Thames*, and waters of *Medway*, shall from time to time be observed by them, and be as follows, *that is to say*,

Flounders—Shall be taken all the Year, except between *Hall-Haven* on the *Essex* shore, and *Fishnesse* on the *Kentish* shore in the river of *Thames*, and the *City Stone* in the waters of *Medway*, between the 21st day of *December* and the 21st of *February*, in every Year.

Smelts—Shall be only taken Eastward of *Purfleet*, from the 1st day of *November* to the 25th day of *March*; and Westward of *Purfleet*, from the 25th day of *March* to the 1st day of *May*, in every Year.

Shads—Shall be only taken from the 10th day of *May* to the 30th day of *June*, in every Year.

Salmon—Shall be only taken from the 25th day of *January* to the 10th day of *September*, yearly.

Trout—Shall only be taken from the 25th day of *January* to the 10th day of *September*, yearly.

Pike, *Jack*, *Pearch*, *Roach*, *Dace*, *Chub*, *Barbel*, *and Gudgeons*—Shall be only taken between the 1st day of *July* and the 1st day of *March*, in every Year, except such as shall be taken in the month of *June* by Angling.

Leaps and Rods for Eels—Shall be laid only from the 21st day of *April* to the 30th day of *October*, yearly.

Lamperns—Shall be only taken from the 24th day of *August* to the 30th day of *March*, yearly.

Whitings—Shall be only taken from *Michaelmas* Day, yearly, to *Ember Week*.

White Shrimps—Shall be only taken from the 24th day of *August*, yearly, to the 25th day of *March*.

Red Shrimps—Shall be taken in the river *Medway* only, and that from the 25th day of *April*, yearly, to the 1st day of *July*.

Buntings—Shall only be taken from the 1st day of *September*, yearly, to the 1st day of *April*.

Hookermen—May Hook for *Eels* all the Year.

Stow Boats—*Trawlermen*, *Trinkermen*, *Hebbermen*, *Draggermen*, and *Bandingmen*, may lay Leaps for *Eels* and *Smelts*, during the time and in the season hereby allowed for taking such Fish respectively. And

Hampton and Sunbury have good angling for *Barbel*, *Roach*, *Dace*, *Chub*, and from the *Aits* for *Trout* and *large Perch*. At Kingston-wick, Teddington Banks, the sides of the *Aits* opposite Brentford, Isleworth, and Twickenham, and Mortlake *deeps*, are noted for *Roach*, *Dace*, *Gudgeon*, *Perch*, and *Carp*. At *Chelsea* the Angler's boat should be fixed almost opposite to the Church, so as to angle in six or seven feet water. Here, as well as at Battersea Bridge, are good *Roach* and *Dace*.

When the air is cold, the wind high, the water rough, and weather wet, it is useless to angle in *the Thames*. The proper hours for angling are from the time when the tide is *half ebbed*, until within *two hours* of *high water*, supposing no land floods come down. Always let the boat be pitched *under the wind*.

The river COLE or COLN rises near North Mims, and not far from Hatfield, in Hertfordshire. The *Gade* and *the Missbourn* increase it before it reaches Middlesex, which it does near *Breakspear*, and divides this county from Buckinghamshire, and passing by Colnbrook, soon after enters *the Thames*.

In *the Coln*, near Uxbridge, there is fine water for angling, which produces excellent *Trout*, *Eels*, and other fish.

And any Person who shall catch any Fish within the Jurisdiction aforesaid, in any other Season of the Year, or in any other manner, shall forfeit and pay for every such Offence the sum of *Five Pounds*."

Formerly the *Fishermen* inhabiting the Villages on the banks of the *Thames* used to inclose certain parts of the river with what they called *Stops*, (but which were in effect *Wears* or *Kidles*,) by Stakes driven into the bed thereof, and to these they tied *Wheels*, creating thereby a current, which drove the fish into those traps. This practice is expressly prohibited by the twenty-third chapter of *Magna Charta*. In 1757 DICKENSON, the then Lord Mayor, sent the Water Bailiff up the *Thames* in a Barge well manned, and furnished with proper implements, who destroyed all those inclosures on this side of *Staines*, by pulling up the stakes and setting them adrift.

Monmouthshire.

The Uske rises in the mountains which divide Breconshire from Caermarthenshire: a peculiar mixture of the grand and the placid in landscape attends this river from its origin; it enters this county a little above Abergavenny, from thence it winds to the Town and Castle of Uske, joined by a small stream from the north-west, which supplies the town and works of Pontypool. It meets the tide before its approach to *Caerleon*, flowing through the singular bridges which lead to that place and Newport. *The Elwy* and *the Sorwy*, rising in the mountainous tract towards the north-west, and after their union passing through the well wooded park of Tredegar, enter the marshes below that place, and join *the Uske* at its mouth, where all contribute to enlarge *the Bristol Channel*.

The Wye parts this county from Gloucestershire, and runs by the town of Monmouth until it joins *the Severn* below Chepstow. The Monow, which divides this county from Herefordshire, runs on the other side of Monmouth, and joins *the Wye;* besides these, there are the rivers *Trothy*, *Lug*, and *Gavenny*.

The *Salmon*, Trout, Salmon Trout, and Grayling, are (excepting the Salmon of the Uske) very excellent, are found in great abundance in all the rivers, and afford great sport to the Angler. The Method of improving the *Salmon* caught in the *Uske*, and practised at *Caerleon* is, so soon as the Fish is caught in the adjacent River, it is conveyed to the Town, and if sold, the Purchaser, after cutting it into pieces of a convenient size, *parboils* it in *Spring* Water; after this, the pieces are allowed to cool, and when required for the Table, they are boiled in the former Liquor. The Fish, it appears, must be parboiled immediately after it is taken, or at the farthest before the *Tide* returns; and, unless this Precaution can be adopted, they tell you, "the *Salmon* is good for Nothing."

Norfolk.

The Yare rises near Attleborough, receives *the Wensum*, *the Tase*, and some other small streams at and near Norwich, and becoming navigable there, flows to Yarmouth, and having received *the Waveney* and *the Bure*, united with *the Thyrn*, (which rises near Holt, and forms a Lake in its passage from North Walsham,) discharges itself into the German Ocean below that town.

The Ouse divides this county from Suffolk and Cambridgeshire, and after receiving *the Little Ouse*, empties itself into *Lynn deeps*. The source of the Waveney is separated from that of *the Ouse*, only by a causeway; it joins *the Yare* a little above Yarmouth, and is navigable from Bungay. The Bure, joined by other streams from the north-east, meets *the Yare* in Yarmouth, and is navigable up its several branches to Aylsham, Walsham, &c. *The Duze* runs by Catton. *The Yare* is remarkable for abounding in that particular fish called the *Ruffe*, and all the rivers produce fine fish of almost every kind: their *Perch* are peculiarly famous. These rivers flowing through a nearly level country, their streams are slow, and in many parts diffuse themselves over the lower tracts in their course, forming shallow lakes, called here Broads. These are most plentifully stored with fish, and the *Pike*, *Tench*, *Perch*, and *Eels*, grow to an immense size in them. The Angler in the waters of this County cannot fail of diversion.

Northamptonshire.

The highest ground in this county is the neighbourhood of Daventry, where the Nyne, the Leam, and the Cherwell, rise very near each other, but they pursue very different courses. *The Nyne*, or *Nen*, runs eastward

to Northampton, by Wellingborough to Wandesford and Peterborough, from whence it soon enters the Fens of Cambridgeshire, which it traverses in a north-east direction, spreading into various streams, one of which (being artificially drawn) leads to Wisbeach, which may be called the Port of *the Nyne*, and which river then divides Lincolnshire from Norfolk, as it advances to form the *Wash* of *Cross Keys*. *The Leam* flows westward, and uniting with *the Cherwell*, makes the west border, dividing this county from Oxfordshire.

The Ouse, rising near Brackley, partly waters this county, but soon leaves it, and enters Buckinghamshire; it discharges itself a few miles on the south-east of *the Nyne*, contributing to form the great Gulph between Norfolk and Lincolnshire.

The *Welland* runs on the north border of the county, and is navigable at Stamford in Lincolnshire, and from thence, by the help of *locks*, to Spalding.

These rivers supply a quantity of fish, *Salmon*, *Smelts*, *Lampreys*, *&c.* There is good angling for Trout in many parts of some of these streams, in others, the *Pike*, *Perch*, *Tench*, *&c.* are more plentiful and large. In the Cherwell is found the *Rud*.

Northumberland.

The Tyne originates in two considerable streams, called the North and South *Tyne;* the latter rises in the north edge of Cumberland, near Alston Moor, but soon enters this county, and after receiving the *East* and *West Alon*, joins the other branch a little above *Hexham*. The former rises near Bilkirk, at a mountain called the *Tyne-head*, in the western part of the county, from thence called *Tyne-dale*, and after receiving *the Shele*, joins *the Read*, (which has its Source in a Mountain called *Readsquire*,)

near Bellingham, at a Hamlet called *Read's Mouth*, and then runs to the south-east till its junction with the *South Tyne*, when forming a large river, and flowing to Newcastle, it discharges itself into the German Ocean, beneath the walls of Tynmouth Castle.

The BLYTHE and the WENSBECK are two small rivers north of *the Tyne*, flowing nearly eastward from the centre of the county to the sea; the Port of *Blythe* is near the mouth of the former, and the latter passes the neat town of *Morpeth*.

The COQUET rises near the eastern border of Roxburghshire, but within the limits of this county, flowing south-east below Rothbury, and reaches the sea at Warkworth. The *Hermitage* of Warkworth, on the bank of this river, is a singular building, and is, perhaps, the only one of that description in England which is in high preservation; at *Felton Bridge*, which the *Coquet* passes, are taken excellent *Trout*, and *Salmon*.

The DERWENT rises north of *the Weare*, in the same range of the Durham Moors; it reaches *the Tyne* at the southern border of this county, a little above Newcastle.

The ALNE rises north of the Coquet, but is a smaller river, and its course is shorter; from beneath the ivied walls of *Hulne Abbey*, it emerges into a spacious Park, where it is widened by art, and proudly overlooked by the almost regal splendour of *Alnwick Castle*, the superb seat of the NORTHUMBERLAND Family. *The Alne* afterwards passes the town of Alnwick, and meets the sea at the little port of *Alemouth*.

The TILL rises somewhat south of the Cheviot hills, and is fed by many springs from that wild expanse, as it encompasses it at a considerable distance; its course is first to the east, and afterwards, with a great sweep and various windings to the northward, it falls into the *Tweed* below Cornhill.

The TIVIOT and the TWEED may be called the boundary rivers between England and Scotland, though they appertain more peculiarly to the latter country. The source of the former is in the wild hills not far from Moss-paul Inn, on the Carlisle road. In the centre of Roxburghshire it receives *the Jed* and *the Kale*, and at its junction with the *Tweed*, a little southward of Kelso, forms a charming scene; the elevated seat of the Duke of ROXBURGH no where appears to so much advantage as from the high bank above the point of their union. The latter finds its distant origin in the mountainous district a little northward of the celebrated springs of Moffat: nothing can be more dreary than the early course of *the Tweed*, which enters this county just below Kelso, and flowing to the north-east to Berwick, below which it enters the German Ocean. The *Tweed* is, however, a celebrated Pastoral Stream, giving name to many of the most beautiful *Scottish* Melodies.

All these rivers so abound with fish, that the Angler cannot fail of sport. A vast quantity of *Salmon* is caught and pickled at Berwick, and by contract forwarded to the London markets, where it is sold under the appellation of *Newcastle* Salmon. Of late years much has been sent fresh to London, packed *in Ice*.

Nottinghamshire.

THE chief river of this county is *the Trent*, which enters it at the south-west point, where it joins *the Erwash*, and passing through to the north-east, enters Lincolnshire; and, after having run nearly two hundred miles from its source, falls into the HUMBER. The IDLE springs in Sherwood Forest, and is formed by several small streams issuing from the upper part of that sandy district. This river contributes to adorn the extensive Parks of Welbeck, Clumber, and Thoresby: its course is north-east through the Forest; afterwards inclining towards the east to meet *the Trent* at the entrance of the Isle of Axholme. The *Idle* is navigable from East Retford,

and the Chesterfield canal crosses the northern extremity of the county, and enters *the Trent* near the mouth of *the Idle*. The stream called *the Old River Don* advances at the edge of the Fens, almost parallel with *the Trent*, but not reaching it until near its mouth.

The Trent is famous for angling. It produces some *Salmon*, but abounds with *Trout*, *Pike*, *Grayling*, *Perch*, and other fish. Near the towns of Newark and Nottingham is very good fishing.

Oxfordshire.

The Thames, the Isis*, (increased by the Windrush and Evenlode,) and the Cherwell, are the principal rivers: the first two have been already mentioned in Middlesex. *The Windrush* flows out of the Cotswold hills, coming down from Burford and Whitney, and runs into *the Isis:* after this conflux, *the Isis* has a north-east course to Eynsham, and then unites with *the Evenlode*, which also rises in the Cotswold, and descends from Whichwood Forest and Charlbury. *The Cherwell* rises in Northamptonshire, out of a hill whence spring three rivers running different ways, and, after parting Northamptonshire from this county for some distance, it enters it near Banbury, and passes through the middle of it until it joins *the Isis*.

In all these rivers the Angler will find some *Trout*, abundance of common fish, excellent *Perch* and *Pike*, and for fine *Eels* they are also noted. The *Rud* are generally most plentiful near where *the Cherwell* joins *the Isis*.

* To shew the abundance of Fish in this River, in 1674 the Mayor of Oxford appointed two days for fishing between Swithin's Wier and Woolvercot Bridge, a distance of about three miles, when *fifteen hundred* Pike were taken, besides Fish of other kinds.

Rutlandshire.

This is the smallest county in England, and although washed by *the Welland* on its south and south-east borders, and by *the Chater*, (which, rising in the forest of Liffield, on the confines of Leicestershire, joins it at Ketton,) is yet said to have but *one* native river, and which is called the Guash or *Wash*. To this *Drayton* the Poet alludes, when he celebrates Rutlandshire as containing, in its limited compass, three objects of great beauty and utility.

> Small Shire that can produce to thy proportion good
> One Vale of special name, one Forest, and one Flood.
>
> Polyolbion.

The Vale is that rich one of *Catmose*, comprehending the county town of Okeham, near which the elevated Palace of Burley on the Hill, the seat of the Earl of Winchilsea, presents the finest Terrace and Court-yard in England. The river is the *Guash* or *Wash*, which rising in Leicestershire winds through the county from east to west. The Forest is that of Liffield, which formerly occupied the south-western part; of which a portion still remains in its original state, and is stocked with Deer.

There are many inconsiderable streams in this county, wherein *Pike*, *Perch*, and common fish, are in plenty.

Shropshire.

The Severn (already noticed in Gloucestershire) is the chief river, and enters this county just at its conflux with *Wirnew*, and runs through it from west to south-east, being navigable in its whole course through

Shropshire, and affording a great convenience for the transport of its commodities. Fine *Salmon* are taken near *Shrewsbury*, and numbers of these fish run up *the Severn* quite into Wales. They are said to be sooner in season than those of any other river in *England*, though in some parts of *Ireland* and *Scotland* the fish come in earlier. *Salmon Trout*, *Pike*, *Trout*, *Carp*, *Perch*, *Roach*, *Dace*, *Chub*, and *Grayling*, are likewise in abundance near the above-mentioned town; and an instance has been known of a *Grayling* being taken there which weighed *five* pounds. *Ruff*, *Gudgeon*, *Flounder*, *Eels*, *Salmon-fry*, and *Gravlings*, or *Gravel-last-springs*, (called in this county *Sampsons*,) are also in plenty, and afford fine diversion to the Angler.

The TEME or TEMD rises in those mountains which divide Radnorshire from Montgomeryshire, and enters this county at the village of *Ruthin-Rugante*; after which it is joined by *the Clun*, which rises not far from Bishops-castle in Shropshire, and passes by Ludlow, where it is joined by *the Corve*, and proceeding to Tenbury, reaches *the Severn* near Worcester, after traversing a romantic hollow through which the road from Bromyard to Worcester passes. This river abounds with excellent *Grayling* and *Trout*.

The *Wevel* rises in Shropshire, and runs north to Cheshire. The *Tern* has its rise and name from a large Pool in Staffordshire, and empties itself into *the Severn* about four miles below Shrewsbury; it is famous for its *Perch*, which are so large as to weigh from two to four pounds a *Perch*. In *Lee Brook*, about two miles from *Wem*, there is fine angling, as it produces good *Pike*, *Perch*, *Eels*, &c.

In the *Clun* water there are numbers of Trout, which do not grow very large; but the Angler will often here take *barren* Trouts, that in winter, when other Trouts are good for nothing, are excellent. In *Meel Brook*, there are *Trout*, *Carp*, *Ruff*, and common fish; the *Eels* also are particularly fine.

Somersetshire.

The Yaw has its origin on the eastern side of the Mendip hills, and flows in a north-west direction to the *Bristol Channel*; its course is short; it passes the town of Wrington, the native place of the famous John Locke.

The Axe rises in two small branches on the western side of the Mendip hills; one of which has its source in the cavern called *Wokey*, or *Ochie Hole*, which is a natural perforation of the rock, not unlike those so much celebrated in Derbyshire: after passing the little town of Axe-bridge, it winds through a tract of marshes to fall into the *Bristol Channel.*

The Avon enters this county four or five miles to the south-east of *Bath*, is the boundary between this county and Gloucestershire, and passing by Bristol, runs into the mouth of *the Severn*, and terminates in the *Bristol Channel.*

The Brent rises on the eastern edge of the county, and runs westward by the noble remains of Glastonbury Abbey; below which it becomes a large Lake, and then runs into the river *Parrett.* The Brue takes its rise from Selwood Forest, on the edge of Wiltshire, and meets the *Bristol Channel* near the mouth of the *Parrett*, in the Bay of Bridgewater.

The Frome rises in the ornamented grounds of the Marquis of Bath at Long-Leat. The Parrett has its source in the most southern part of the county, bordering on Dorsetshire. This river and the Thone form their junction * near the centre of Somersetshire; the latter rising in the

* A river-island called *Athelney*, at the conflux of the *Thone* and *Parrett*, is memorable for having given shelter amidst its inaccessible Morasses to the great Alfred after a defeat he sustained from the Danes.

Quantox hills. The *Parrett* likewise receives *the Yeo* and *the Ivel*, and, after traversing the extensive marsh of *Sedgmoor*, passes by Bridgewater, and forms a Bay in the *Bristol Channel*, nearly opposite to Cardiff, in Glamorganshire *. A small distance above *Bath* there is good *Trout* angling, and most of these rivers produce other good fish, and are remarkable for the excellence of their *Eels*.

Staffordshire.

The Trent issues from three springs between Congleton and Leek, in what are termed *the Moorlands*, and augmented by *the Sow* and *Eccleshall Water*, passes *Stone*, and many other towns in this county, and runs easterly to Derbyshire, which it enters just after its junction with the Dove, which river rising also on *the Moorlands*, divides this county from Derbyshire to the place where it meets *the Trent*, having received from the north of Staffordshire *the Manyfold*, *the Churnett*, and several other streams. The Sow rises a few miles to the west of Newcastle-under-Line, and, passing by *Stafford*, runs parallel and near to *the Trent*, until its junction with it below that town; previous to which it receives *the Penk* from Penkridge, celebrated for its capital Horse Fair. The Stour runs through the western angle of the county in its course to meet *the Severn* in Worcestershire.

The Tame (not that which joins *the Isis)* rises in the hundred of *Sersden* in this county, where being joined with *Walsal* water, it passes into Warwickshire, and entering Staffordshire again at *Drayton Bassett*, runs by Tamworth, and being increased by the *Black Brook*, and other

* A variety of small Streams contribute to form a Basin in one of the Streets of Chard in this County; and this curious circumstance attends it: A person, by stopping one of the little rivulets with the foot as it bubbles along, may at will direct it into either the English or the Bristol Channel.

rivulets, falls into *the Trent*. This county has Meres, Pools, and Lakes; as *Ludford Pool*, which contains sixty acres, *Cock Mere*, Eccleshall Castle, New, and Mare, Pools, and many others, all abounding with various kinds of fish. The rivers also afford much sport to the Angler, and particularly the *Trout* and *Grayling of the Trent*.

Suffolk.

The Lesser Ouse rises on the north side of this county, and for a considerable distance divides it from *Norfolk*. The source of the Waveny is likewise in the north, and so near as to be separated by no very broad causeway from *the Ouse;* it runs to the north-east, and, after passing *Beccles*, forms two streams; one of which runs to the east towards *Lowestoff*, where at a short distance from the town it stops in a piece of water a mile and a half in length, called *Lake Lothing;* the other flows to the north, and joins *the Yare* near Yarmouth.

The Ald, the Deben, and the Blyth, are three rivers penetrating through the county; the first has a long winding Æstuary to Orford. The second rises near Rendlesham, passes by Debenham to Woodbridge; from whence it is navigable to the German Ocean, which it enters a little to the north of Harwich harbour. The third proceeds from two small springs, which unite near *Halesworth*, and, running to Roydon, empties itself into the sea at *Southwold*.

The Orwell or Gipping rises in the centre of Suffolk, at a place called *Wulpit*, near Stowmarket, pursuing a south-east direction to Ipswich, (from which place to the former the navigation of this river is now completed;) it then makes a curve to the south, and meets *the Stour* opposite to Harwich. The banks of this river are singularly picturesque, and when it becomes an Æstuary below *Ipswich*, are adorned with several fine Seats; among which Mr. Berner's at Wolverston is most conspicuous.

The Stour, already noticed, divides this county from *Essex*, until it falls into the sea with *the Orwell* at Harwich. The Larke, rising in the south-west, runs to Bury, and a mile below that town becoming navigable, passes Mildenhall, and joins *the Great Ouse* near the north-west angle of this county. The Brett passes by *Lavenham*. There is very good angling in most of these rivers, which contain a variety of excellent fish, abundance of Eels, and some Crayfish.

Surry.

The rivers (beside the Thames) are the Moulsey or Mole*, which

* Mr. Manning in his History of *Surry*, thus speaks of this River.—"The Mole," says Camden, "coming to White Hill (the same probably that is now called Box Hill) hides itself, or is rather swallowed up, at the foot of the Hill there; and for that reason the place is called the *Swallow;* but about two miles below it bubbles up, and rises again; so that the Inhabitants of this Tract, no less than the *Spaniards*, may boast of having a *Bridge* that feeds several *Flocks of Sheep*." From this fabulous Account, plainly founded on an Idea suggested by common report, a Reader might be led to imagine that the River actually disappears at this place, forms a Channel *beneath* the Surface of the Earth, and, at a certain distance, rises again, and pursues its course *above* Ground. But the Truth of the matter seems to be this:—The Soil, as well under the bed of the River as beneath the surface on each side, being of a spongy and porous texture, and, by degrees, probably became formed into Caverns of different Dimensions, admits through certain passages, in the Banks and Bottom, the Waters of the River. In ordinary seasons these receptacles being full, as not discharging their contents faster than they are supplied by the River, the Water of the River does not subside, and the Stream suffers no Diminution. But in times of Drought, the *Water* within these Caverns being gradually absorbed, *that* of the *River* is drawn off into them; and in proportion to the degree of Drought, the Stream is diminished. In very dry seasons the Current is, in certain places, (particularly at Burford Bridge, near Box Hill, and a little lower, between that and Norbury Park-gate, and at that Gate and Norbury Meadows) entirely exhausted, and the Channel remains dry, except here and there a standing Pool. By the Bridge at Thorncroft, it rises again in a strong Spring, and after that the Current is constant. At a place called the Way-pool, near the Turnpike-gate, but on the side of the River next to Box Hill, the method in which the Water is thus occasionally drawn off, is *visible* to the Observer. It has here formed a kind of circular Basin, about thirty feet in Diameter, which is supplied, in the ordinary state of the Current, by an Inlet from the River of about *two feet* in *breadth*, and *one* in *depth*. This Inlet being stopped, the Water in the *Basin* is soon observed to subside, and in less than an *Hour* totally disappears;

rises in the forest of *Tilgate*, just within the borders of Sussex; it has the peculiar attribute of burying itself under ground, and, after pursuing a subterraneous course for some miles, bursting again into sight: the spots where this incident takes place, bear the denomination of *the Swallows*. Some have supposed this river to have been entirely lost when it goes under ground, and that its *apparent* reappearance arises from a *new* source near *Leatherhead*. After passing Leatherhead, it flows to Cobham and Moulsey, where it joins the THAMES opposite to *Hampton Court*. This river is noted for large *Bream*.

The WEY rises in two branches in the eastern part of Hampshire, bordering on Surry; one of which forms a pleasant vale to Farnham: after this union, their course is eastward by Godalming, until joined by a third stream from the south; after which *the Wey* flows north-easterly to Guildford, and reaches the THAMES a little below Weybridge. *The Wey*, besides other good fish, produces very fine *Carp*, some of eight or nine pounds weight.

The WANDLE rises at Carshalton, and is joined by other streams springing from Croydon and Beddington; it runs by Mitcham and Merton, and enters the THAMES at Wandsworth. These rivers are well stored with *Pike*, *Roach*, *Dace*, *Perch*, *Chub*, *Gudgeon*, *Barbel*, and very large silver *Eels*. The *Wandle* is also particularly famous for *Trout*, and the Angler need not fear diversion in any of the others. In this county are likewise many large Ponds; that of Frensham, near Farnham, is almost three miles in circumference, and noted for its *Carp*.

when the Chasms through which it passes off, at different depths from the upper edge of the Basin, may easily be discerned. And from this circumstance of betaking itself occasionally to these Subterraneous passages, the River probably derived its present Name of the MOLE.

Sussex.

The Arun rises in St. Leonard's Forest near *Horsham*, and passing by Arundel, falls into the sea two or three miles below it. This river is famous for its *Mullets*, which come in from the sea in shoals, and it is imagined, that by feeding upon a particular weed which grows in *the Arun*, they acquire that delicious taste for which they are so highly esteemed. The Mullets during the summer months frequent in great numbers the *Black-water* below Malden, but from the vast quantities of weeds in that river, very few are taken.

The Adur rises in the same forest with *the Arun*, and discharges itself at New Shoreham. The Ouse, (a name common to so many rivers,) and the Cockmare, rise in that deep tract called *the Weald;* the former from two branches, one of which has its spring in the same forest, and the other in the forest of *Worth;* they soon unite near Lewes, and run to the sea at Newhaven.

The Rother rises near the picturesque village of *Mayfield*, in Kent, which county it separates from Sussex; it no where approaches the Downs, but becomes a sluggish stream, and follows a south-east direction. *The Breke* joins *the Rother* below Winchelsea, and a few miles to the north of Rye, making an angle to the south, it falls into the great basin to the east of the port of Rye, and forms Rye-Haven. *The Lavant* runs by Chichester. These rivers have their share of various sorts of fish, and in which the Angler will not complain of want of sport.

Warwickshire.

The Avon, which rises in Leicestershire, enters this county a little above *Rugby*, and passing Warwick, Stratford, and Bidford, runs into

Worcestershire. The TAME, which comes from Staffordshire into this county at *Wolford Bridge*, receives several currents; among which are *the Anker* and *the Blyth*. The ARROW rises in Worcestershire, and joins *the Avon* near Bidford. The LEAM rises in the eastern borders of this county, and joins *the Avon* near Warwick. There is very good angling in *the Avon*, not far from Warwick, and plenty of fish in the other rivers. *The Blyth* and *Tame* are particularly noted for *their Bream*.

Westmoreland.

THE EDEN, the LUNE, and the KEN, have been mentioned in other counties; the LADER or LOWTHER rises out of the Lake called Broad-water. WINANDER MERE is situate among the mountains in the southern part of this county; it is more than ten miles in length, and produces that scarce fish the *Charr*. In *the Ken*, a little below Kendall, the Angler may expect fine sport with the *Salmon Trout*, which from the sea run up that river: abundance of Trout is found in all the other rivers, whose bottoms are mostly rocky, and their streams rapid.

Wiltshire.

THE *Upper* and *Lower* AVON have been mentioned in the account of Gloucestershire. The NADDER rises in the south-west border of this county, and runs by Chilmarck, noted for its quarries. The WILLEY rises near Warminster, and runs by Yarnbury and Wilton. The BOURNE springs in the easternmost part of Wiltshire; the first and the three latter rivers unite in the neighbourhood of Salisbury, and then flow on to Christ-church, in Hampshire. The KENNET springs almost in the centre of the county, and not far from Marlborough, which town it passes, and takes

an easterly course to Berkshire. These rivers have *Trout* and *Grayling* in abundance; about Salisbury there is very good Angling, both for these and other fish. The *Kennet* is particularly famous for its Crayfish*.

Worcestershire.

The Severn (noticed in Gloucestershire) enters this county from Shropshire, runs through its whole length, and, passing by *Worcester* and *Upton*, soon reaches Gloucestershire. The Tame, which enters this county on the north-west, runs south-east until its junction with *the Severn*, about two miles below Worcester Bridge. The Avon enters on the east side, and passing by Pershore and Evesham, leaves this county at its southermost point. The Bow rises in Feckenham Forest, and passing by Pershore, falls into *the Avon*. The Salwarp comes from the north-east, and runs by Droitwich and Bromsgrove. The Stour rises in the celebrated groves of the Leasowes, and proceeds through Stourbridge to Mitton, and discharges its waters into *the Severn* a little below *Stourport*; from whence by the canal there is a most valuable communication to the principal Ports of the British Ocean, the Irish Sea, and St. George's Channel.

In these rivers the Angler will find *Salmon*, *Trout*, *Grayling*, *Salmon Trout*, and most other river fish. Near Kidderminster, the Trout in *the Stour* are very fine. The Lampreys taken in *the Severn*, between the Cities of Worcester and Gloucester, are large and excellent; they are

* It is a curious circumstance that *Cray-fish* will live in no stream that does not run towards the South. The Gentleman who favoured me with it, has tried to stock, and it invariably happens that they disappear from waters that run in opposite directions, however apparently well adapted, from having plenty of their favourite food, *Water-cresses*, &c. In confirmation of this remark, the rivers of *Surry* have no Cray-fish, whilst those of *Hertfordshire* abound with them. Yet these both empty themselves into the *Thames*, the first in a *Northern*, the second in a *Southern* Direction.

somewhat like the *Eel*, slippery, of a dusky colour, irregularly marked with dirty yellow, but are rather bluish on the belly: on each side of the throat they have seven holes, serving the purpose of *Gills*, of which they are destitute; they will sometimes weigh as much as four or five pounds. Their mouth is round, and placed rather obliquely below the end of the nose; they have twenty rows of small teeth, disposed in circular order, and placed far within; the edges of the mouth are jagged, which enables them to adhere the more strongly to the Stones, which they do so firmly, that a Lamprey of *three* pounds was taken out of *the Usk*, adhering to a Stone weighing *twelve* pounds, which was suspended at its mouth, and from which it was forced with no small difficulty.

The Lamprey is a Sea fish, but, like the Salmon, the latter end of winter, or early in the spring, ascends into the fresh waters, and after a stay of a few months, returns again (with the exception of a very few) to the Ocean. It is reckoned a great delicacy, either when potted or stewed, but is said to occasion surfeits; a fatal instance of this occurred to HENRY I. Notwithstanding this accident, this fish continued in high esteem, for HENRY the Fourth granted protections to such Ships as brought over *Lampreys* for the table of his royal Consort. It has been an old Custom for the City of *Gloucester* to present his Majesty *annually* with a LAMPREY Pie, covered with a large raised crust. As the gift is made at *Christmas*, it is by *great exertions* the Corporation can procure *any fresh* Lampreys at that time, though they give a Guinea a-piece for them. They are in best season in *March*, *April*, and *May*, being firmer at their first coming from the Salt water, and are observed to waste much, and to become very flabby at the approach of *hot* weather. It is also said that the string within them which performs the office of a Back-bone grows hard in Summer, and they then lose their flavour. There is a much smaller kind of Lamprey, which is potted, and made also into Pies. This is the *Petromyzon Fluviatilis* of LINNÆUS: it is a small fish, and it was formerly, whatever it may be at present, of great and national importance. Vast quan-

tities were taken in the THAMES about *Mortlake*, and indeed the whole way between *Battersea* Reach and *Taplow* Mills, (a space of about Fifty miles,) and sold to the DUTCH as bait for *Cod* and *Turbot*. Above 450,000 have been sold in a season at *Forty shillings* a thousand, sometimes at *three pounds*. (The *Dutch* contracted for them at that price for three years.) Formerly the THAMES has furnished from a million to twelve hundred thousand *annually*. It is said the *Dutch* have the Secret of preserving them *fresh* for their *Turbot* fishery.

In the *Salwarp*, and the Brooks that run into it, the *Trout* and *Eels* are peculiarly excellent.

Yorkshire.

THE DON rises in the high Moors of this county, adjoining to Derbyshire, not far from the dismal hamlet and public-house of *Wood-end*, at the junction of four roads in that dreary waste. Except among the Moors, which form its source, this is not a rapid river; the great manufactures of Rotherham and Sheffield flourish on its banks, and cover all the adjoining country with their works. At Rotherham it receives *the Rother*, where the hills towards the north are adorned with the plantations and splendid mansion of Wentworth. The Vale in which this river flows to Doncaster is extremely beautiful, to which the ruin of *Conisburgh Castle*, nearly encompassed by it, is no small addition. *The Don* is afterwards joined by *the Went*, and dividing, meets the *Northern Ouse* at Goole in one branch, and passing under Lord DOWNE's Seat at Cowic, joins *the Aire* below Snaith in the other, and this appears to be a navigable cut, and is called the Dutch river.

The CALDER's source is on the borders of Lancashire, not far from Burnley; its stream is more rapid than *the Don*, and is intersected by various Canals in the manufacturing countries it passes through, which

form a junction between the eastern and western Seas, across the kingdom, from Liverpool to Hull. *The Calder* leaves the flourishing town of Huddersfield on the right, and passing under Wakefield, joins *the Aire* near Ferrybridge, at the village of Castleford.

The AIRE is longer than *the Calder*, and much its superior in navigation, being also joined by numerous Canals from the west; it rises from a small Lake, in the midst of the wildest Moors, not far from the source of *the Ribble* of Lancashire, and somewhat of the north-east of *Settle*, descending through Aire-dale to form the district of Craven, which is singularly romantic, being a rich vale, bounded by high hills, with the town of Skipton in the centre. In its course to the south-east, *the Aire* passes by the ruin of Kirkstall Abbey, in its way to Leeds, after which it divides one of the richest plains in England, and meeting *the Calder*, passes under Ferrybridge; thence traversing the flat of Yorkshire, north of Snaith, where it receives *the Don*, it soon joins *the Ouse*, a little above Booth Ferry, near Howden. It is remarkable, that this river, from Skipton to Gargrave, is passed over eight times in the compass of three miles.

The RIBBLE, noted for its *Salmon*, rises also in the Craven hills, and after running forty miles in Yorkshire, enters Lancashire, in which county it is mentioned.

The WHARFE, although not equal in size to *the Aire*, is infinitely more rapid, by which rapidity its navigation is restricted. At Weatherby it is yet a *Mountain* torrent, and still more so at the spot where the medicinal spring of *Thorp Arch* attracts public notice. *The Wharfe* rises in the Yorkshire Moors considerably northward of *the Aire*, and, increased by the small stream which forms Langther Dale, the *Washbrook*, and *Cock*, flows eastward by Otley to Weatherby, and joins *the Ouse* near Cawood, once famous for its Castle, which was the last residence of Cardinal WOLSEY, after he was disgraced at Court. This river is famous for its *Smelts*, *Trout*, and *Eels*.

The NIDD has all the rapidity of a mountainous stream, and preserves that character throughout its course; it dashes over a rough bed of rock to reach Knaresborough, and from one of the heights in Scriven Park, the windings of this river appear to great advantage. The dropping well at Knaresborough, the most noted petrifying spring in England, runs into *the Nidd*, where the petrifying quality of the water has formed a rock that stretches some yards into the river. *The Nidd* rises in Nithersdale Forest, in the Moors, bounding the north riding of this county; its course is rather more eastward than that of *the Wharfe*, and inclines almost to the north from Ribston to meet *the Ouse*.

The YORE or URE, like the rivers lately described, assumes a similar rapidity, which is fed by cataracts from the hills, and sometimes it falls itself from a considerable height. Hackfall and Studley, including the superb ruins of Fountain's Abbey, are its most striking beauties. *The Ure* finds its source on the borders of Westmoreland, in the northern Moors of this county, flows first eastward, and then inclines to the south to Rippon, and again eastward to Boroughbridge and Aldborough, soon after which, it receives *the Swale* from Richmond, both these rivers forming *the Ouse*. *The Ure* is particularly celebrated for the abundance and flavour of its *Crayfish*.

The SWALE, though less, is equally rapid, and rises northward of *the Ure*, in the same wild range of Moors, not far from Kirkby Stephen, in Westmoreland; its course is at first south-east, but afterwards turns to the north-east to Richmond; from whence it proceeds again south-easterly, until its junction with *the Ure* below Boroughbridge.

The NORTHERN OUSE differs materially from the streams which contribute to form it, all their rapidity subsiding at the time of the junction of *the Ure* and *the Swale*, and first taking its name near the village of *Ouseburn*, below Aldborough; it thence becomes a sluggish stream, like its namesake of Bedfordshire. *The Nidd* meets *the Ouse* at Moncton, a few

miles before it reaches York, where it is crossed by an ancient stone bridge, and advances to Cawood, where *the Wharfe* joins it: at Selby a curious wooden bridge is thrown over this river, which turns upon iron grooves, and is so constructed, that, although estimated to weigh upwards of seventy tons, it can be opened or shut for the passage of vessels in *one minute:* above Howden *the Ouse* receives *the Aire,* and soon afterwards is increased by the DERWENT, which rising at Lebberston, near the sea, and dividing the north and east ridings of this county, falls into *the Ouse* at Barmby, a few miles before its great junction with *the Trent.*

The HUMBER, the most violent current in all the Island, from the reception of so many rivers, makes that Æstuary in the north of England, which is the seat of so much commerce, and where the port of Hull displays such numbers of ships; and which Port the small river HULL, descending from the eastern edge of the Wolds, not far below Driffield, contributes to form at its junction with *the Humber,* the town bearing the name of *Kingston-upon-Hull;* from thence *the Humber* discharges itself into the German Ocean, between Yorkshire and Lincolnshire.

The TEES comes into Yorkshire at Rokeby, from the county of Durham, dividing the two counties, and running easterly through Gisborough, empties itself in the German Ocean.

Most of these rivers present to the Angler a certainty of amusement, from the great variety of fish that they produce, which consist of *Salmon, Pike, Salmon Trout, Eels, Perch,* and *Crayfish;* together with all the more common kinds. In the East Riding there is a small but rapid stream, called *Duffield,* or *Driffield Beck,* which is as noted for its Trout as any river in England; the fish seldom weighing less than *two* pounds, and frequently increasing to *five* or *six.*

The *Humber* is said to afford, beyond any other river, the greatest

quantity of what in this part of the country is called the *Golden Umber*, in others, the Grayling; and the Smelts are of extraordinary bigness.

The *Hull*, near Beverley, is remarkable for its *large Pike*, which are often caught from ten to eighteen pounds weight. In this county are also many Lakes; in some of which are taken the *Rud*, or *Finscale*, and in others, the Pike, Eels, and Perch, are of singular size, abundance, and goodness.

NORTH WALES.

Anglesea, Isle of.

THE BRANT, the ALOW, and the KEVENEY, are the chief rivers of this Island; the first rises near *Llanredevel*, on the east side, and running mostly south-west, falls into the *Meneu*, near the south point; the second rises near to *Llanvaier-Ugaradog*, and, after a winding course of some length, discharges itself into the Irish Sea. The last issues from the high hills to the north of *Coydana;* from whence it runs south to *Langristolis*, where it receives *the Gynt*, and then gliding to the south-west falls into the Irish Sea.

Of Salmon Trout (by some called *Sea* Trout) there is abundance in all these rivers; they come up from the Sea in great numbers, and afford excellent amusement to the Angler.

Caernarvonshire.

THE CONWAY (which for its length, about twelve miles, is a very noble river, receiving many other streams, which render it navigable for ships) issues out of a Lake on the south-east side of the county, where this Shire, Denbighshire, and Merionethshire, join, being the boundary between the first two. It is very rapid in its origin, and *the Machno*, *the Cierw*, and *the Llugwy*, which contribute to form it, are all furious torrents, rising in different tracts of the same mountainous region. The *Conway* having united these, runs beneath the elegant bridge of Llanrwst, and flows

in various curves along the level, until it at length receives the Tide, and swelling into a broad channel, falls into the Irish Sea soon after it has passed the town and Castle of Conway. In the streams of this county there is plenty of *Trout*.

Denbighshire.

The Clwydd rises beneath the northern termination of the Berouin mountains, near the centre of the shire; it runs northward through the celebrated vale which bears its name, until it enters Flintshire; where, after its junction with *the Elwy*, below St. Asaph, it enters the Marsh of *Rhydlan*, and falls into the sea beneath its Castle. The Elwy has its source on the south-west edge of the county, and runs mostly north-east until it meets the Clwydd. The Dee parts Denbighshire from Cheshire, entering this county from that of *Merioneth*, a little to the west of *Llangollen*. These rivers present to the Angler a great profusion of *Trout* throughout their whole course.

Flintshire.

The Wheeler rises near King Offa's Dyke, in the centre of the county, and falls into *the Clwydd*. The Sevion rises to the north of *Caerwis*, and joins the *Clwydd* below Rhydlan Castle. The Alen has its source in Denbighshire, and near *Mold* enters this county, flowing eastward until it falls into *the Dee*, which it does near the town of Alen, to which it gives the name. The *Clwydd* and *Elwy* have been before stated to unite their streams at St. Asaph; and the *Trout* there are supposed to be of superior flavour to those taken in England.

Merionethshire.

The Dee rises in the east part of this county, and flows into the *Lake of Bala*, or *Pimblemeer*, but only receives the name of *the Dee;* on leaving the Lake, (with whose waters it is supposed not to intermix,) its course is north-east into Denbighshire. The Drwydd flows from a Lake in the north of this Shire, and pursuing a short winding course to the south-west, meets the Irish Sea at *the Traeth Bychan Sands*, which unite in the Bay of Cardigan with those of *Traeth Mawr*. The Dovey, or Dyffi, has its spring on the southern side of those mountains which range themselves round the *Bala Lake;* emerging from thence, it traverses a well-inhabited vale to *Machynleth*, and then receiving the tide, it becomes crowded with vessels, and forming the boundary between North and South Wales, at length discharges itself into Cardigan Bay.

The Mawdoch and the Avon are the two most considerable rivers of which this county can boast as belonging entirely to itself: the former rises on the south side of those mountains which form the barrier of the valley of *Festiniog*, and its course is mostly south, until it meets the latter, about a mile below *Dolgelly*. The Avon has its spring in *Berose Wood*, on the east side of this county; and after taking a north-westerly course, and uniting with the Mawdoch, both these rivers form a grand Æstuary, and lose themselves in St. George's Channel.

All these rivers produce such great plenty of fish of the *Salmon* and Trout kind, that the Angler is secure of diversion. Some of the Lakes, particularly that of *Llyn Raithlyn*, afford Perch and Trout, with backs crooked in a very singular manner.

Montgomeryshire.

Many small streams water this county, flowing from all quarters of it to join the Severn, a river which adds greatly to the beauty of the country, and takes its spring in the huge mountain *Plinlimmon*, (the *Rhydel* and the *Wye* issue from the same mountain, but soon leave the county,) situated partly in this Shire, and partly in that of Cardigan; it runs first almost across the southern side of this county, passes by *Welshpool*, a little below which it is navigable, and then turning northwards, enters Shropshire from the east above the Brythen hills.

The Vyrnew, formed of two uniting branches of the same name, crosses the county from its western side, and runs into the Tannat, which rising towards the north-west side of this Shire, takes an eastward direction, becoming part of the northern boundary between this county and Denbighshire; and, after meeting *the Vyrnew*, joins *the Severn*. The Turgh has its source on the western side of the Shire, and, until it comes to the foot of Mount *Golway*, runs eastwards; it then makes an angle to the north, and, after receiving *the Warvay*, joins *the Tannat*, not far from *Landefilis*.

The Angler may be assured of excellent diversion in these rivers; they all contain a variety of fish, and the Salmon penetrate up the *Severn* almost to the foot of Plinlimmon.

SOUTH WALES.

Brecknockshire, or Breconshire.

THE USK, rising from a spring on the east of the Black Mountain, in the south-west part of the county, takes a westward course until it reaches Ire-castle; after which it winds to the east, passes by *Brecknock*, and leaves the shire a little below Crick-Howel. The WYE, which forms the north boundary between Brecon and Radnorshire, enters Herefordshire at *Hay*. The IRVON rises among the hills on the north-west side of the county, takes its course southward, and thence to the north-east, and falls into the *Wye* at *Bealt* or *Builth*, as does *the Crewyn* from the edge of Cardiganshire; and as *the Wye* approaches the Black Mountain, *the Llevenny*, issuing from *the great Pool of Langors* in this county, descends by the old town of Talgarth to join it. The TAVYE, or TAAFFE, issues from the foot of the Black Mountain, and runs into Glamorganshire, as does *the Rhymny* soon after its rise in this county. The rivers in this county will well recompense the Angler's resort to them. The *Salmon* of the *Usk* are said to be inferior to those caught elsewhere. Near the town of Brecon the *Trout* are fine and in great plenty. *Brecknock Mere*, about two miles east of the town, abounds with *Tench*, *Perch*, and *Eels*, in so extraordinary a quantity, that it is a common saying with the people, that *the Mere has two-thirds water to one of fish.*

Carmarthenshire.

THE TOWEY is the most considerable river, finding its source not far from that of the TIVY, in the distant wilds of Cardiganshire. The *Towey*

flows southward through the dreary waste of Roscol Forest to *Llanymdovery;* a most varied district attends the whole course of this river, which gradually divesting itself of the wild character marking its origin, at Llanymdovery waters a fine plain, well peopled and cultivated: at Llandilo it takes a different aspect, passing between the woods of Dinevawr Castle and the opposite seat of Golden Grove, to form the rich vale of Carmarthen; after flowing under the old bridge of Carmarthen, it meets the tide, and becoming navigable, is soon an Æstuary crowded with vessels, and discharges itself into the Bristol Channel with much grandeur, beneath the rock on which Llanstephan Castle is built, near the centre of the great Carmarthenshire Bay.

The Cothy rises on the north side of the Shire, and runs mostly south until it joins *the Towey*, about five miles above Carmarthen. The Lwghor is inconsiderable, except at its mouth, flowing directly southward from the mountains which enclose Llandilo, and dividing for some distance the counties of Carmarthen and Glamorgan. At Pontardillas it receives the tide, falling at length into the recess of the Bay of Cardigan, called *the Burry;* within this vast expanse of water, *the Taave*, *the Towey*, and the *Lwghor* find their passage to the sea. The Taave, or Tivy, rises in Cardiganshire, and soon becomes the boundary between that county and this, the north-west side of which it waters, until joined by the river *Reach;* afterwards it divides this county from Pembrokeshire. These streams afford the Angler plenty of *Salmon*, *Trout*, *Salmon Trout*, and other good fish. *The Towey* has a peculiar sort of *Trout*, called by the inhabitants *Sewen* or *Souen*, which yields great sport to the Fishermen, and much esteemed.

Cardiganshire.

The Rhydol rises in this county, on the south-western border of Montgomeryshire, being one of the principal rivers produced in that rocky district which forms the base of Plinlimmon. It is a rapid stream

throughout, and runs through a most wild country; its course is southward until it receives *the Monach*'s torrent at the Devil's-bridge; it then flows westward, turning a little to the north, as it reaches the sea at Aberystwith, which is its port.

The YSTWITH takes its origin in the ridge of bare mountains which divide this county from Radnor, considerably to the south-east of Plinlimmon. The aspect of this stream is less savage than that of *the Rhydol*, as some shew of population and a few fine seats occasionally grace its course: among these *Hafod*, Mr. Johne's, is most conspicuous. The *Ystwith* at last discharges itself into St. George's Channel, very near the mouth of *the Rhydol*, contributing to form the harbour of *Aberystwith*, the principal haven in the *Bay of Cardigan*; and of late years this town has been much frequented as a sea-bathing place.

The EIRON is a small river flowing westward into the Bay of Cardigan. The TOWEY rises in this county, and runs into Carmarthenshire. The TEIVI, or TIVY, is the chief river of this county, pervading great part, and dividing it from Carmarthen and Pembrokeshire during the latter part of its course; *the Teivi* rises from a Lake of the same name from among those mountains which form the barrier of Radnorshire. The *Tivy* becomes a placid stream soon after it leaves its native hills, and continues so as it flows by the remains of Strata Florida Abbey: as it approaches *Newcastle*, it gradually confines itself within steep banks fringed with wood; soon after it becomes suddenly engulphed within two piles of high rocks, from which it acquires the rapidity of a cataract, precipitating itself in a fall, called the *Salmon Leap*. Augmented afterwards by the tide, *the Tivy* proceeds in a broad stream across a small but populous plain; at the extremity the handsome town of Cardigan appears, below which this river loses itself in St. George's Channel.

These rivers produce great plenty of fish, and the latter is particularly famous for its *Salmon*.

Glamorganshire.

The Rhymny rises in Breconshire, a little before it enters this county, and is the boundary between it and Monmouthshire, and at last falls into the mouth of *the Severn*. The Lower Taave rises in the mountains which separate this Shire from Brecon, and, after passing the busy town of Swansea, reaches the Glamorganshire Bay. The Neath is a larger river than the former, finding its origin somewhat to the eastward in the same range of mountains, descending from them with great velocity. At Pont-Neagh-Vaughan it receives several other streams, and afterwards a canal; and its attendant works are parallel with the course of *the Neath*. The plantations and buildings of *Gnoll* next appear, a broad marsh succeeds, where the tide meets *the Neath;* after which, the entrance of *the Neath* into the Bay of Glamorgan is embellished with the groves encircling the beautiful territory of Lord Vernon, at Briton Ferry.

The Avon rises among the hills on the north-side, and runs to the south-west until it reaches the sea at Aberavon. The Ogmore springs not far from *the Avon*, in a small Lake among the mountains, is soon joined by *the Llanvy*, and runs south through the middle of the county, and receiving *the Ewenny* in its course, passes by Bridgend into the Bristol Channel. This river abounds with *Salmon*, *Sewen*, *Trout*, and variety of other fish.

The Taaffe, or Taave, boasts the same mountainous origin with the rest of the Glamorganshire rivers, but is larger; its source is eastward of that of *the Neath*, within the limits of Breconshire, and on the south side of that huge pile of mountains which encircle the two lofty summits of the *Van* of *Brecknock*. From a torrent tumbling in successive cataracts, *the Taaffe* precipitates itself with vast force into the abyss of a vale,

whose opposite banks are distinguished by a canal keeping pace with it as it descends by a quick succession of Locks on one side, while a road is curiously conducted from terrace to terrace on the other. The river, increasing in rapidity, forces its way with fury between mountains, woods, and impending cliffs, until it is crossed by the wonderful structure of the stone bridge of *Pont-y-Prydd*, presenting a single arch, which springs from rock to rock with infinite lightness and beauty: this arch is supposed to be one of the widest *(of masonry)* in the World, being one hundred and forty feet in the span, and thirty-four high, and was planned and executed by the untaught genius of a common Mason in this county. Several miles lower, after passing under the ruins of *Castle Coch*, which was built to defend the entrance of this valley, *the Taaffe* runs through a well-inhabited plain; in which Llandaff and the county town of Cardiffe are situated. Flowing through their bridges, it meets the tide, and traversing a broad marsh, for near three miles, falls into the Severn Sea, or Bristol Channel, opposite to the high rock of Pennarth. There is also *the Elwy*, and many other small streams; and in all of them there is such an abundance and variety of fish as to fully gratify the Angler's search after diversion.

Pembrokeshire.

The Clethy has its spring at the foot of *Wrenyvaur-hill*, and glides southward until its junction with *the Dougledye*, and then runs into Milford Haven. The Dougledye rises near the middle of the county, and bending towards the south-west, joins *the Cledhew* (or *Sword)* a little above *Redbaxton;* it passes by Haverford-West, and at length, after receiving *the Clethy*, continues its course to Milford Haven, where it meets the salt water. The Teivi parts this Shire from Carmarthenshire. The Hiog (one of the numerous streams which become Æstuaries from mere rivulets, of which there are many, forming the main basin) rises near the village of St. Catharine, in the north-west part of *Pembrokeshire*, not far from Fisgard, and passing

Haverford-West, it becomes navigable, and meeting with other branches of the Haven, which unite beneath the park and woods of Laurenny, the Æstuary swells into various bays, and inclines towards the west, being soon afterwards joined by another branch from the ancient town of Pembroke; here the grand basin opens, and appears perfectly land-locked when viewed from within. The ports of Hubberston, Haikin and Milford, occupy one of the *Bays*, (of which the Haven is said to have five, sixteen *Creeks*, and thirteen *Roads*, distinguished by names,) near the centre of this great sheet of water, which undoubtedly constitutes the most spacious Harbour in the British Island.

Such is the actual display of Milford Haven, abundantly favoured by Nature, and immortalized by the description of our first Dramatic Bard in his play of CYMBELINE, as an object of Utility to a *maritime* Nation. *Milford Haven* suffers from a want of that attention which has been profusely bestowed on Harbours *much inferior;* and, except where some absurd and expensive Fortifications have been erected *too far up* the country to be serviceable, it languishes in undeserved obscurity, instead of being a favoured Arsenal of the British NAVY.

The TAAVE rises in the range of hills called Procellê, which form the only mountainous district of this county; its course is short, and the country through which it flows uninteresting; it becomes very wide towards its mouth, and falls into the Carmarthenshire Bay, beneath Llaghuarne and its Castle.

The rivers of this county are all famous for *Trout*, and produce such plenty of other fish, that those who pursue the recreation of Angling will never seek it in vain.

Radnorshire.

The Teme, or Temd, on the north-east, divides this county from Shropshire. The Wye is the boundary between this Shire and Brecknock, and crosses the west angle of Radnorshire, forming, in its rapid course through the rocks, several cataracts, and receiving *the Ithon*, *Weverley*, and other streams. The Ithon, or Ython, is the river peculiar to the county; into which run *the Dulas*, *the Clowdick*, and *the Cameron*; it rises among the hills on the north side, and falls into *the Wye* a little below Dyssart, on the south-west side of the county: after it has passed Llanhadern, its windings are so short, that it runs nearly *six* miles before it reaches a *mile and half* beyond the town.

The Somergill runs near the town of Radnor; several other streams rise also in this county, and run into Shropshire and Herefordshire. The *Trout* and *Grayling* are in all the rivers very fine and plentiful; these, and the variety of other fish, will amply repay the exertions of the Angler.

SCOTLAND.

Aberdeenshire.

THE Dee rises at the western extremity of the *Grampian* hills, near the borders of Inverness-shire, in a hill called *Gaibb-chor-Dhe*. The country encircling this fine river in the early part of its progress is wonderfully bold and romantic, especially about the Castle-town of *Brae-Mar*, and the wells of Pannanach, where the heights are clothed with forests of Pines. The *Dee* afterwards forms a more expanded valley, as it crosses the northern corner of Kincardineshire, and re-entering Aberdeenshire, passes under a noble Bridge, a few miles before it falls into the sea, on the south side of the flourishing Port of *New Aberdeen*.

The Don finds its origin in the *Grampians* somewhat northward of *the Dee*, and about four miles north from the Castle of Brae-Mar, on the borders of Banffshire, near Cock-bridge; this is throughout its course a rapid river, buried within its steep banks, and even as it approaches the sea, it remains enclosed in a deep hollow, fringed with brush-wood, where a singular bridge of one pointed arch crosses it. The *Don* is not navigable, and is in no part of its course above fifteen miles distant from *the Dee*, and at its reaching the sea somewhat northward of *Old Aberdeen*, within two miles of it. The Urie, which rises in the district of Garioch, joins *the Don*, a little below Inverury. The *Salmon* fishery in both these rivers is a lucrative branch of commerce. The produce of the *Dee* alone is nearly 8000*l.* sterling *per annum*. A space of between two and three hundred yards on the Don, has been known to yield to the value of *two thousand pounds* sterling in *one year*. The Salmon are for the most part sent to

London; sometimes to France and Italy. These fisheries are carried on by Companies, and divided into many *shares*, of which no person can hold above *one* at a time. *The Don* has more Trout than *the Dee*, and they are supposed to excel in flavour those taken in any other water either in Great Britain or Ireland.

In making a comparison of the soil on the Banks of the *Don* and *Dee*, the latter has so much the advantage, as to occasion the following rhyme:

"A foot of *Don*'s worth two of *Dee*,
Except it be for Fish and Tree."

The YETHAN and the UGIE are the two northern rivers of this county, both flowing through an uninteresting wild; the former descending from the north-west, by Ellon, to the coast below Newburgh, (at the mouth of this river there is a Salmon fishery, which lets at 120*l.* sterling of yearly rent;) and the latter pursuing nearly an eastward course, until it meets the sea a litte northward of Peterhead.

The DEVERON rises in the mountainous districts of Banffshire, not far from the source of *the Don*, dividing that county from Aberdeenshire throughout: this river is rapid, and its course winding; it meets *the Bogie* near Huntley; the ornamented grounds around DUFF House extend for a great way about its banks, where it is crossed by an elegant stone bridge; soon afterwards it reaches Banff, and loses itself in the German Ocean.

These rivers are all famous for *Trout* and *Salmon*; they abound also with *Grills*, *Whitlings*, and other fish of the *Salmon kind*, which afford the Angler great diversion.

Ayrshire.

The Ayr rises in the mountains in the eastern angle of this Shire; after passing Muirkirk, the river is increased by *the Lugar*, and by numerous streams in its course through a rich country, until it empties itself into the sea at the town of Ayr. The Doon finds its origin in a *Loch* of the same name, on the borders of Dumfries-shire, which is of considerable breadth, and six miles long, and whose waters produce *Salmon*, and both *red* and *white Trout*. The river *Doon* flows in a winding course toward the north-west, and reaches the sea a little to the south of the Ayr. The Girvan is a small stream from the north-east; its course is mostly westward, and reaches the sea at the town which bears its name, nearly at the southern extremity of this county. The *Stincher*, joined by *the Dusk*, descends in nearly the same direction as the former, and has the small port of Ballantrae at its mouth; and the short course of the little river *Glemap* terminates Ayrshire, falling into *Loch Ryan* at its extremity. The Irvine descends from the mountains on the east, and, after passing *Newmills* and *Riccarton*, proceeds to the town of *Irvine*, and falls into the sea a little below it. These rivers all present to the Angler a choice of fine fish, particularly of *Salmon* and *Trout*.

Argyleshire, or Inverary.

This county possesses numerous *Lochs* or *Lakes*, which abound with fish. The Awe rises from Loch Awe, (near thirty miles in length, and in some parts two miles broad; at the head of which stands the ruins of Kilchurn Castle,) which is fed by the waters of *the Urchy* from the valley of *Glenorchy;* it flows to the north-west through the county, until it falls into the arm of the sea, called *Loch Etive*, (much noted for its Salmon,) beneath the town of *Bunawe*, where there is a large Salmon fishery. Both

Loch Awe and the river flowing from it have plenty of *Salmon*, *Charr*, *Trout*, and *Eels*. It is singular, that *Seals* find their way up this rapid river, into the Loch, in summer, but retire into the ocean on the approach of winter.

The AOREIDH, or ARAY, is a very small stream, rising in the Argyleshire mountains, between *Loch Awe* and *Loch Fyne*, descending southward to the latter. The plantations and lawns which encircle the Duke of ARGYLE's territory at Inverary receive from the rapid and winding course of *the Aray*, and two superb bridges over it, a very splendid addition. In front *the Aray* precipitates itself into that beautiful arm of the sea, called *Loch Fyne*, whose sheet of water near forty miles in length, and bounded on each side by bare and lofty mountains, grandly contrast the woods of Inverary. The average breadth of this Loch is not more than four miles, and its depth sixty or seventy fathoms; it receives and returns a tide on each side of the *Isle of Arran*, which stands directly opposite to its entrance; it is beautifully indented with bays, and surrounded with well-wooded hills: from July to December its waters are filled with *Herrings*, which are of a superior quality, when it is crowded with fishing vessels. The fishers express in very strong language the quantities of *Herrings*, asserting that the Loch contains one part of water and *two* of fish. There are annually caught and cured in this arm of the sea upwards of 20,000 Barrels. In the *Isle of Arran* there are rivers abounding with *Trout* and *Salmon;* and there are in this county many small Lochs all full of fish. LOCH LEVEN, a magnificent sheet of water, very broad, but irregularly indented, is about twelve miles in circumference. Some Islands are dispersed in this great expanse of water; the most remarkable is that standing alone in the middle of the Lake, and distinguished by the captivity of MARY STUART, in *June* 1567: her escape was effected the *May* following, by the assistance of Young DOUGLAS, brother of the Governor of the Castle. Historians differ respecting the motive which influenced him: some attributing it to avarice, others to one more probable, of a generous passion for the QUEEN; which, considering her Charms, and the Youth of her deliverer, has the greatest

appearance of truth. The castle, and the ruins of a building, where it is said this ill-fated Princess was lodged, still remain. Some trees are yet standing on this spot, probably coeval with MARY, under whose shade she may have sat, expecting her escape, which was at length effected by the enamoured DOUGLAS. Its present state has been thus described by one whom a premature fate alone prevented from arriving at high poetic excellence.

> No more its arches echo to the noise
> Of joy and festive mirth. No more the glance
> Of blazing taper thro' its windows beams,
> And quivers on the undulating wave:
> But naked stand the melancholy walls,
> Lash'd by the wintry tempests, cold and bleak,
> That whistle mournful thro' the empty halls,
> And piecemeal, crumble down the tow'rs to dust.
> Equal in age, and sharers of its fate,
> A row of moss-grown trees around it stand;
> Scarce here and there, upon their blasted tops,
> A shrivell'd leaf distinguishes the year.
>
> BRUCE.

Loch Leven produces *Pike*, *Perch*, *Trout* of peculiar redness and excellence, and of about six pounds weight; of which great quantities are sent at certain seasons to the market of Edinburgh. There is also a species called the *Gelly Trout*, which are only caught by the fishermen from October to January, and are split, salted, and dried for winter provision: by the description, Mr. PENNANT supposes them to be *Charr*, only of a size superior to any caught in *England* or *Wales;* some being two feet and a half long. In the month of September great numbers of *Eels* are caught; they are then going down the stream of *the Leven* towards the sea, and nets are placed across the river during the night, wherein astonishing quantities are taken.

All the waters of this county hold out to the Angler an assurance of amusement, from their variety and great abundance of fish.

Banffshire.

The Spey is by far the most rapid river yet described; nothing can be imagined more desolate than the commencement of its course, as it tumbles in a succession of cataracts from the base of the vast mountain of *the Coriaraich;* a small lake of the same name in the centre of the rocks and precipices of the northern highlands of Inverness-shire for a time conceals its force; from whence, with various windings and an unparalleled velocity, it pursues a north-east direction. *The Spey* afterwards divides this county from that of *Moray* and *Inverness,* passing through the great Pine forests which encircle *Castle Grant:* long before it reaches the small town of Fochabers near its mouth, *the Spey* widens considerably, and, becoming navigable, transports the abundant Pines which clothe its hills; preserving, however, to the last, strong traits of its native rapidity. Its impetuosity after much rain, when swelled by the torrents from the neighbouring mountains, is almost beyond conception: in 1768 this river overflowed the adjacent fields to a vast extent, swept off the corn, and tore up the trees; Salmon were found dashed among the rocks at a hundred yards distance from its channel. The extensive and magnificent territory of Castle Gordon is a new feature to *the Spey,* which, notwithstanding, is sometimes a dangerous neighbour from its furious inundations, and which render the bed of the river wide and full of gravel, and the channel very shifting. About three miles north of Fochabers, this river (after receiving numerous streams in the course of above seventy miles) empties itself into the sea at the village of Speymouth. From this river the Highland district of *Strathspey* is called, which is famous for its Soldiers, and for giving name to a very striking and popular species of Scottish Music.

The Salmon Fishery on this river is very great; sufficient fish to fill seventeen hundred barrels are caught in the season, and the shore is rented for 1,200*l. per annum.*

In the south-west angle of the county rises the river AVEN or AAN, which, dividing part of Inverness from Banffshire, falls into *the Spey* at Inveraan. The DEVERON rises on the south side, and reaches the sea below Banff; and the UGIE, which runs on the south, divides this from Aberdeenshire.

These rivers, especially *the Spey*, produce Salmon and fine fish of various other sorts. The *Aven* abounds with Trout.

Berwickshire.

THE BLACK-ADDER has its source near the town of Greenlaw. The WHITE-ADDER descends from the north-eastern part of the county; these streams unite near the village of *Chirnside*, are then called the ADDER, and flow into the Tweed near Berwick. The small river EYE comes from the north-east, and terminates its short circular course at the port of Eyemouth.

The LAEDER (perhaps a corruption of LAUDER) flows along the east side of the town of Lauder; over which, as well as *the Tweed*, (which river it afterwards joins,) an elegant bridge is now built. The TWEED is a large beautiful river, partly bounding the county on the south, and reaching the sea below Berwick. All these streams contain great abundance of various kinds of fish.

Caithness.

THE river or water of THURSO gives name to the town of Thurso, which it passes on the west side, and descends into Dunnett Bay, at its south-west extremity. It rises from *Loch More*, a beautiful Lake in Halkirk Parish in Caithness. It abounds with *Salmon*, and is noted for a draught of that fish on the 23d of July O. S. 1743-4, when at ONE Haul

there were caught *Two thousand five hundred and sixty* ordinary sized *Salmon*. The WICK, originating in the lake of *Wattin*, forms a fine bay beneath the port situated on its northern shore, from which it derives its name. Much *Salmon* is also taken at *Dunnett* and *Wick*. The Salmon are said to keep in the river *Thurso* all the year.

The small river *Rice* descends from Wester Loch to Sinclair's Bay; both the Loch and river are well stored with excellent *Trout*. In the river *Berrindale*, near the castle of that name, there is very good Salmon fishing.

Dumbartonshire.

THE CLYDE finds its source in the great hills which bound Lanerkshire towards the south, between Elvan foot and Moffatt, on the high road from Carlisle to Glasgow. This is one of the finest Rivers in Scotland, rapid in its origin, and precipitating itself in three picturesque yet tremendous falls; the first two are called *Cora Lyn* and *Boniton Lyn*, and beautifully ornament the grounds and plantations of Sir JOHN LOCKART Ross, by which they are encompassed. After passing the Duke of HAMILTON'S palace at Hamilton, (where there is a bridge over the river,) it again engulphs itself between vast rocks, clothed with brush-wood, as it sweeps furiously round the eminence on which are the ruins of Bothwell Castle: emerging from these barriers, it rolls proudly to Glasgow. Two magnificent stone bridges cross *the Clyde* at this City; (another near Lanerck exhibits an elegant structure:) navigation here adds its consequence, as crowded with Vessels, and gradually widening, it divides this Shire from that of Renfrew; transporting all the riches of Glasgow to the sea, to which the manufactures of Paisley are added by *the Cart*, and those of Stirlingshire by the *Grand Canal*, which joins *the Clyde* at Kilpatrick, and forms a communication with the Capital, and the interior parts of the Country, by means of *the Forth:* on this navigation there are thirty-nine Locks in the distance of thirty-five English miles. The branches of *the*

Clyde are principally *the Douglas* water, the *Aven*, and *the Giel*, from the south-west; *the Calder* from the south-east; *the Cart*, flowing by Paisley, and *the Grief* of Renfrewshire. After *the Clyde* meets Loch Long, it turns to the south, and makes its exit between Ayrshire and the Isle of Bute.

The LEVEN, issuing from Loch Lomond, at Ballock, is a very considerable river, remarkable for the softness of its waters, and the clearness of its stream; during *May*, *Parrs* appear in such numbers in *the Leven*, that the waters seem quite animated with them. The LEVEN descends from the *Loch* in great beauty for about six miles: its whole course, including the windings, does not exceed ten, and is navigable with flat-bottomed vessels for one half of the year. The excellence of its waters for bleaching purposes has induced many to establish *Print-fields* and *Bleach-fields* on its banks. Some idea may be formed of the large scale on which these works are conducted when it is known that two of the largest *Print-fields* pay a duty to Government of upwards of 40,000*l.* *per annum*. Could Dr. SMOLLETT now view his native vale, instead of the Pastoral quiet Scenes he has so POETICALLY described, he would find it the busy haunt of Men eager after riches; and though, as a Patriot, he might rejoice at the increasing Wealth of the Country, yet it is probable he would regret the loss of that calm repose, that innocent Simplicity of Manners, which its inhabitants enjoyed when it was so dear to him. Near the birth-place of Dr. SMOLLETT there is an elegant Monument erected to his Memory. The citation of those beautiful lines in which Dr. SMOLLETT (who was born upon the banks of it) celebrates this Water, will, it is hoped, not unpleasantly revive in the Reader the delight with which he may elsewhere have perused them.

ODE TO LEVEN WATER.

ON Leven's banks, while free to rove,
And tune the rural pipe to Love;
I envied not the happiest swain
That ever trod th' Arcadian plain.

Pure stream! in whose transparent wave
My youthful limbs I wont to lave;
No torrents stain thy limpid source;
No rocks impede thy dimpling course,
That sweetly warbles o'er its bed,
With white, round, polish'd pebbles spread;
While lightly poised, the scaly brood
In myriads cleave thy crystal flood;
The springing Trout in speckled pride;
The *Salmon*, monarch of the tide;
The ruthless *Pike*, intent on war;
The silver *Eel*, and mottled *Par**.

Devolving from thy parent lake,
A charming maze thy waters make,
By bowers of birch, and groves of pine,
And hedges flower'd with eglantine.
Still on thy banks so gaily green,
May num'rous herds and flocks be seen,
And lasses chanting o'er the pail,
And shepherds piping in the dale;
And ancient faith that knows no guile,
And industry imbrown'd with toil,
And hearts resolv'd, and hands prepar'd,
The blessings they enjoy to guard.

Loch Lomond is the most extensive of all the Scottish Lakes; is formed by several small streams, originating in the western corner of Perthshire. The length of this charming Lake is twenty-four Scotch miles, its greatest breadth eight; and its surface covers upwards of 20,000 Acres: its utmost depth (which is between the point of *Firkin* and *Ben Lomond*, and where, however intense the frost, it never freezes) is one hundred and twenty, while towards the south end it is only from fourteen to twenty fathoms. Its course is almost directly south for thirty-six miles; and near its extremity *the Endrick*, flowing westward from the heart of Stirlingshire, discharges itself into it: about thirty Islands are scattered over the Lake; some have arable and pasture land, but most of them are covered with

* The *Par* is a small fish, not unlike the Smelt, which it rivals in delicacy and flavour.

wood. The oaks and other trees thrive amazingly in the vicinity of Loch Lomond: at Bonhill there are two ash trees, one of which measures twenty-five, the other thirty-three feet in circumference at the root; three feet above the surface the former measures nineteen feet and a half, and where the trunk is smallest, eighteen feet; from the outside of the opposite branches the distance included is ninety-four feet. At the beginning of winter *Woodcocks* abound in the covers near the lake; the fish of almost every sort in the Lochs hold out to the Angler variety of amusement. It abounds particularly with a kind of *Eel* called *Poans*, or *Pollac*, of very delicious flavour. Mr. Pennant remarks, that besides the common kinds of fish, there are *Gwiniads*, called here *Poans;* but these can never be the *Eel* above-mentioned. In 1755, when Lisbon was thrown down by an Earthquake, the Waters of Loch Lomond were greatly agitated: they rose rapidly several feet above the usual level, and as quickly sunk many feet below it, continuing to ebb and flow for some Hours, when it again became calm. In the Clyde there is plenty of *Salmon*, *Perch*, *Trout*, and other fish.

Dumfries.

The Nith rises from some small Lakes near Cumnoch, in Ayrshire, not far from the source of *the Lugar*, one of the branches of *the Ayr*. *The Nith* is a very rapid stream, forcing its way between steep banks thickly fringed with wood; the grand but deserted palace of Drumlanrig, now stripped of its plantations, makes a naked figure on its banks, yet is still to be admired as the finest specimen extant of an old Scottish castle. The river *Cairn*, called also *Cluden*, rises near the Base of the Criffel Mountains, forms for some space the western boundary of the county, and joins *the Nith* before it reaches Dumfries; below which the river, becoming navigable, widens considerably as it approaches *the Solway Firth*. The Annan rises above Queensberry-hill, westward of Moffatt; it is a clear and rapid river, and pursues a south-easterly direction, receiving

many auxiliary streams in a course of thirty miles, through a wild district to the town of Annan, where it is crossed by a handsome bridge, just before it falls into *the Firth of Solway*. *The Eske* rises in Eskedale Moor, in the midst of wild mountains, and flowing to the south-east, after a course of about twenty miles, meets *the Ewes* from the north at Langholm; it is then joined by *the Liddel*, of Roxburghshire, from the north-east, after which it approaches the English boundary, passing through a corner of Cumberland: turning to the south-west until joined by *the Lyne*, it contributes with *the Eden* to form *the Solway Firth*. The SARKE is a small river, and is the proper boundary here between England and Scotland, and runs near GRETNA, a place better known by the name of *Gretna Green*, the resort of many young ladies and gentlemen from England, who have the misfortune to differ from their Parents and Guardians on the subject of Matrimony.

These rivers, and their component streams that run into them, all produce very fine *Trout;* the Angler will in *the Annan*, in particular, find excellent diversion with Salmon Trout and other fish.

Edinburghshire, or Mid Lothian.

THE WATER OF LEITH, a small river, rises some considerable distance above Edinburgh, in the Western extremity of the County. In a course of fourteen miles, it drives no less than *eighty* mills of different kinds, and some of them rent so high as twenty pounds *per foot* of waterfall. It runs very rapidly after rains, has a winding course, in which it passes by Edinburgh castle, and joins the Firth at *Leith*. The ALMOND runs in the north-west angle of the county, and joins *the Forth* near the village of Cramond. From a wild waste, south of the Pentland hills, descend those smaller streams, which, when joined, form the river ESK, which passes the town and magnificent palace of Dalkeith; a little below which the north and south *Esk* unite, and flowing to *Inveresk* and Musselburgh, loses itself in

the sea. There is good Angling in all the waters of this county: and the *Almond* is celebrated for a particular species of fine *White Trout.*

Elginshire, or Moray.

The Spey, which, next to the Tay, is accounted the most considerable river in the North of Scotland, and the most rapid of all in the kingdom, has been already noticed. The Findhorn has its spring in the highland mountains of Inverness-shire, and pursues a course nearly parallel with the *Spey;* is less than that river, but imitates it in rapidity, having a peculiar transparency in its waters, which reflect their pebbly beds so strongly as to dazzle the stranger when he fords it. *The Findhorn* forms a large basin as it admits the tide below Fores; from whence it opens into the sea through a narrow strait; on the eastern shore of which the Village and Port bearing its name are situated. The Lossie springs near the last river, and in its course almost surrounds the town of Elgin, abounding in Salmon from its very head to the port of Cullen, where it reaches the sea. The first two of these rivers have excellent Salmon fisheries, where the numbers taken are almost incredible; they likewise present to the Angler a profusion of *Trout,* and other good fish. The Lossie is remarkable for an excellent red Spotted Trout, which arrive at four pounds weight.

Fifeshire.

The Leven and the Eden are the only streams of note, and the course of each is short. The Leven flowing eastward from *Loch Leven,* after being joined by the united small streams of *the Orr* and *the Lochty,* falls into the *Firth of Forth* at Largo Bay. The Eden, rising in the central parts of Fifeshire, and watering its fertile plains, passes beneath the handsome town of *Cupar,* and discharges itself into the sea somewhat northward of St. Andrews. In this county, west from the village of Abbot-Hall, are several small Lakes, the chief of which is *Loch Gellie,*

which gives name to a village on its banks. The *Salmon in the Leven* are esteemed the best in this part of Scotland, and in the *Loch* are *Trout* from four to fourteen pounds weight: *the Eden* is also famous for its fish.

Forfarshire, or Angus.

The North and South Esk are the rivers of Angus. Both rise in the Grampian mountains, which extend along the northern part of this shire; the hills which terminate this vast ridge are called the *Braes of Angus*, from whence these streams descend; they are both rapid, though short in their course. *The South Esk*, traversing nearly the whole breadth of the county, flows eastward beneath the eminence where *Brechin* is situated, and at last expands into a large basin in front of the well-built town of *Montrose*, before it reaches the sea. *The North Esk* runs through a wilder district as it divides the counties of Angus and Kincardine, and inclining to the south-east, empties itself into the German Ocean, four miles north of Montrose. The Tay enters this shire a little above *Dundee* *, from whence *Tay* Salmon is taken to London in packages of *Ice*, and the fishery lets at 3000*l. per Annum*. A few miles below Dundee this river falls into the *Firth of Tay*. These rivers abound with *Trout* and *Salmon*, and in the *North Esk* is great plenty of *Whitlings*; these fish are in high estimation, and afford great diversion to the Angler. In the winter they are found in this river where the Tide flows; and in the spring and summer high up the river, and in the most rapid Streams.

Haddingtonshire, or East Lothian.

The Tyne rises in the hills near *Yester*, and, after watering a pleasant vale, runs through the town of Haddington, terminating at the rock of the

* The *Salmon* Fishings, belonging to the Town of *Dundee*, were formerly let at £80 *per Annum*, and last Year, for the next Twelve months, at £100. On the 21st August 1805, the Town Council met to decide on the written Offers that had been received, when the *Fishings* were let at *Six hundred Pounds* per Annum, on a Lease for *seven* Years.

Bass Isle, and marking the mouth of the great Firth of Forth. Haddington has suffered frequently from the inundations of this river; in 1775 its waters rose *seventeen feet* perpendicular, continued in this state several hours, and then gradually subsided. *The Tyne* produces good *Trout*, and other fish, but in no great abundance.

Inverness.

The Ness rises in Loch Oich, which is a narrow Lake, extending about four miles from east to west, in the midst of the central mountains of this county, and whose waters flow through *Loch Ness* into the eastern sea. The early course of *the Ness* is uncommonly wild, *Loch Oich* being surrounded by mountains generally capped with snow, and the heights of *Ben-nevis* (the Atlas of North Britain) appearing at a distance in the west; while those of *Coryuragan* and *Coriaraich* (in which the Spey is produced) frown over it on the south. This river inclines invariably to the north-east, as it forms the great Lake of Loch Ness, which is about twenty-four miles long, and for the most part nearly two broad: the depth is very great; opposite to the rock, called *the Horse Shoe*, near the west end, it has been found to be one hundred and forty fathoms. By reason of its depth the water of this Lake never freezes, and during cold weather a violent steam rises from it as from a furnace. Ice brought from other parts, and put into it, instantly thaws; but no water freezes sooner than that of *Loch Ness* when brought into a house: it is deemed so salubrious that people come or send thirty miles for it. Old Lord Lovat, in particular, made constant use of it. In 1755, the time of the Earthquake at *Lisbon*, the water, like that of *Loch Lomond*, was extraordinarily affected, rising and flowing up the Lake with such impetuosity as to be carried two hundred yards up the river *Oich*, and breaking on its banks in a wave near three feet high. *Loch Ness* is remarkable for its uniform straightness, as well as for the bold rocks and lofty hills which encompass it, clothed with forests of Pines and Birch. From the south the river Fyers

descends towards this lake: over this stream is a stupendous bridge *, built on two opposite rocks, the top of the arch being above one hundred feet from the level of the water. A little below is the celebrated *Fall of Fyers*, of which BURNS wrote the beautiful description, as he was standing by it.

> " Among the heathy hills and ragged Woods
> The roaring FYERS pours his mossy floods,
> Till full he dashes on the rocky mounds;
> Where, through a shapeless breach, his stream resounds.
> As high in Air the bursting torrents flow,
> As deep recoiling Surges foam below,
> Prone down the rock the whit'ning sheet descends,
> And viewless Echo's Ear, astonish'd, rends.
> Dim seen, through rising mists and ceaseless show'rs
> The hoary Caverns, wide surrounding, low'rs.
> Still thro' the Gap the struggling River toils,
> And still, below, the horrid Cauldron boils."

The river DUNDREGGAN, forming various lakes in its course from the north-west, falls into *Loch Ness; the Clonnie* also, descending from the north, forms a large basin as it reaches the centre of the *Loch*, into which the

* The only Passage formerly over the Torrent was an ALPINE Bridge, consisting of sticks thrown over the Rocks and covered with Turf, at the distance of two hundred feet from the Water, at the lowest part of the Fall: it was crossed by the Peasantry on foot, but must have turned giddy the steadiest head, unused to such Scenes. About *three* years before the present Bridge was built, a neighbouring Farmer called at the *General's Hut*, to shelter himself from the Inclemency of the Storm; here he met with some old acquaintance, and the glass circulated freely: the Snow continued to fall, but, at last, when the liquor had raised his Spirits to no ordinary pitch, he determined to go home. When he came to this place, having been accustomed to cross the rude Bridge on foot, he habitually took this road, and forced his horse over it. Next morning he had some faint recollection of the Circumstance, though the seeming impossibility of the thing made him suspect it was a Dream; but, as the ground was covered with Snow, it was easy to convince himself. He accordingly went; and when he perceived the tracks of the Horse's feet along the Bridge, such was the impulse occasioned by the Horrid danger he had escaped, that he immediately was taken ill, and died shortly afterwards.

Colonel THORNTON, in his Sporting Tour, gives a curious account of crossing the Alpine Bridge before-mentioned, with a favourite Pointer in his arms; and in which exploit the Dog and his Master narrowly avoided being dashed to Atoms.

picturesque ruin of *Urquahart Castle* protrudes itself. *The Ness*, emerging from its Lake, and bearing the appearance of a wide river, flows through a fine valley until it arrives at the large town of Inverness, the proper capital of the northern Highlands; a little below which *the Ness* discharges itself into *the Murray Firth.* The fish of *Loch Ness* are *Salmon*, which are in season from Christmas to Midsummer, *Trout* of about two pounds weight, *Pike*, and *Eels.* The Salmon fishery in the river, which is very considerable, is let to London Fishmongers, and the Salmon are larger than in any other part of Scotland.

Loch Lochy is a fine piece of water, fourteen miles long, and from one to two broad; from the west the waters of *Loch Archeig* run into this Lake, from which issues the river Lochy, and at about a mile below receives *the Spian*, which originates in *the Lakes of Laggan and Troig*, in the southern mountains of this county; it takes a south-west direction to Fort William, forming a great Æstuary below that place, which by a narrow inlet communicates with a large arm of the western sea, called *Linnhe Loch*, the mouth of which fronts the Isle of Mull.

In the extensive district called Badenoch, in this county, lies Loch Spey, the source of the great river Spey, already noticed. It is very singular, that most of the great Lakes in this county, notwithstanding the coldness of the climate, are seldom or never known to freeze; much less are the arms of the sea, even in the most *northern* parts of Scotland, subject to be frozen in the hardest seasons; while the *Texel*, and many Bays and great Rivers in Holland and Germany, are covered with Ice.

Many of the Scottish *Lochs* are formed of rivers, which descending in rills from their springs, and augmenting their streams, become rivers; then meeting with hollow places in their passage, expand into *Lakes* or *Lochs*, until, finding a proper channel, they resume their form of *rivers;* and thus will some of them extend themselves at various places before their course to the Sea is finished. All the waters of this large County

will yield excellent sport to the Angler, both as to the variety and goodness of the different kinds of fish they produce; and in the waters in the district of *Lochabar*, *Phinocs*, a species of *Trout*, are caught in great numbers, fifteen hundred having been taken at a single draught. They come in *August*, and disappear in *November;* are about a foot long; their colour grey, spotted with black; their flesh red; they rise very eagerly to a fly, and contribute much to the Angler's amusement. The fishermen believe them to be the young of what they call Sea Trout, weighing thirty pounds: Mr. PENNANT supposes this to be *the Grey Trout*, and that the *Phinocs* of Scotland are the same species as migrate out of the Sea into the river ESK, in *Cumberland*, from *July* to *September*, and are called *Whitling*, or *White Trout*, although their flesh when dressed is *red*. They are most delicious eating.

Kincardineshire, or Mearns.

THE BERVIE is the only proper river of this county, *(the Dee* of Aberdeenshire forming its northern boundary, and *the North Esk*, of Angus, its southern; both of which have been before mentioned;) it has its source in the *Grampian Hills*, but soon leaving them takes its course with considerable windings towards the south; the country it traverses is unequal, nor is the stream itself considerable; on the southern shore is the small town and port of *Bervie*, where it reaches the Sea. In these rivers is plenty of fish.

Kirkcudbright, or Lower Galloway.

THE NITH, the DEE, and the ORR, are the chief rivers of this county. The former has been spoken of. *The Dee* is formed by *the Deugh*, from the northern parts of Kirkcudbright, and *the Ken* from the north-west of Dumfries-shire; both of which united, bear the name of *the Ken*, until they reach

the town of *New Galloway:* below this place, the river, assuming the name of *the Dee*, pursues a south-east course, forming *Loch Ken* (about four miles long and one broad) in its passage; after which its course is so remarkably winding, that although not more than seventy in a line, it is said to run two hundred miles before it reaches the Sea, below the town of *Kirkcudbright.* This river has some fine features; the afore-mentioned towns make a handsome appearance on its banks; its Lake also, with its Æstuary, are fine Expanses of water, and it produces *Salmon*, *Pike*, *Perch*, and *Trout*, in great abundance.

The Orr is a small stream which descends among the hills that divide Kirkcudbright from Dumfries-shire, from a Lake of that name, which is about three miles in circuit: there are three bridges over *the Orr*, to the lowest (of one lofty arch lately erected) the tide flows, and the river forms a small Bay at its exit. The Fleet, which takes its rise from a lake so called, in the mountainous part of the county, winds through a beautiful valley, skreened by woody hills, which open towards the south; near its mouth the village of Gatehouse is situated, which has been built, and risen into notice for its manufactures and cattle markets, within forty years; small sloops come up the river to within a short distance of the town. The Lakes are very numerous in this county, and, as well as the rivers, present to the Angler all the amusement a variety of fine fish can afford him.

Lanerkshire, or Clydesdale.

The principal rivers are the Clyde, which almost divides this county into two equal parts, the Annan, and the Tweed; the two former rising from a mountain called *Errick Hill*, and the latter discharging itself into the German Ocean, near the mouth of *the Firth.* These rivers have been already described. There is also the river Douglas, which falls into *the Clyde* a little below the town of Lanerk. South-west from Lanerk

the small river NETHAN descends from the borders of Ayrshire, and holds its course north-east to join *the Clyde.*

The AVON is another tributary stream, which, nearly parallel to *the Nethan*, flows from Ayrshire to swell the waters of *the Clyde*, into which it runs a little above Hamilton. Besides *Salmon* and *Trout*, this river abounds with *Parr;* and all the others produce fish of various kinds in great perfection and plenty.

Nairnshire.

THE NAIRN rises a little to the north-west of the course of the river *Findhorn*, (noticed in Elginshire,) in the same pile of mountains of Inverness-shire, and pursues a parallel line towards the north-east, murmuring through a wild country from Straith Nairn; it crosses the two military roads, and passes near the Castle of *Calder*, celebrated for the murder of DUNCAN, King of Scotland, by *Macbeth;* the bed is here shown on which, tradition says, the murder was committed; the drawbridge too, which is entire, exhibits a curious specimen of antique architecture. This river, over a marsh, approaches the Port of Nairn; from whence a noble view extends across the north-east bay of Scotland, to the bold rocks called *the Sutters of Cromartie*, the level point of Tarbet Ness, in Ross-shire, the rude coast of Sutherland, and the promontory of *the Ord* of Caithness. There are in this Shire many Lakes and small rivers, all abundantly productive of *Salmon*, *Trout*, and other fish; the Angler who is drawn to them by the hope of sport will at no time be disappointed.

Peebleshire, or Tweedale.

THE TWEED derives its source from innumerable springs amid the sterile mountains of *Tweedsmuir*, in the southern part of this county, and

passes from west to east, almost dividing it into two equal portions. In the northern corner of this shire is the LYNE, which rises on the south side of the Pentland hills, and runs into the *Tweed*, which also receives from the opposite mountains the river *Manor*. From the north descends the water of *Eddlestone*, which flows into the *Tweed* at Peebles. Upon the top of Genen-hill is Loch-genen Lake, from which a river rises that falls into Annandale, from a precipice computed to be two hundred and fifty feet high, and where many of the fish are killed by the fall of the water. Salmon and Trout in plenty are found in all these waters.

Perthshire.

THE TAY is one of the most beautiful and considerable rivers in the Island, traversing this whole county, amidst the richest districts of the middle range of Scotland, and forming of itself the principal ornament to some of the most romantic tracts in nature: its source, where it has the name of Fillan, is in one of the highest and widest eminences in the western highlands, where the extremity of Perthshire borders on Argyleshire; from whence it rushes with singular velocity through the gloomy hollow of Glendochart: pursuing a north-east direction, it passes Killin, pleasantly situated on a neck of land between the two points, where the placid *Lochy* and the turbulent *Tay*, strongly contrasting each other in character, form the great expanse of water called LOCH TAY, which is fifteen miles long, and more than one broad: lofty mountains surround this charming lake, encircling a wooded, populous, and well-cultivated district; two good roads pervade the whole, on eminences over-hanging each side of the water, and command every species of the sublime and beautiful in landscape: these scenes are varied happily by the three great bends of *Loch Tay;* the last of which discloses all the ornamented demesne of Tay-mouth, the Earl of BREADALBANE'S. *Loch Tay* is in many places a hundred fathoms deep, and within as many yards of the shore, fifty-four: until of late this Lake was supposed to be as incapable

of freezing as Loch Ness; but, about the twentieth of March, 1771, so uncommon was the cold, that this vast body of water was frozen over, in one part, from side to side in a single night, and so strong was the Ice as greatly to damage a boat which was caught in it. In the morning of September 12, 1784, an unusual agitation of the Loch was observed near the village of Kenmore, ebbing and flowing in a most extraordinary way, and this for the space of two hours. On the next and four succeeding days, the same Phænomenon took place at the same hour, and continued, but with less violence, for the same time. On the 13th of July, 1794, the Loch was affected in a similar manner, though not so violently, and yet upon inquiry no motion of the Earth was felt in the neighbourhood at either period, or was the water disturbed any where but near the above village. Loch Tay abounds with *Pike*, *Perch*, *Eels*, *Salmon*, *Charr*, and *Trout*; of the last some have been taken that weighed above thirty pounds. The exclusive privilege of Fishing belongs to Lord Breadalbane. *The Tay* makes its exit from the Lake through an elegant stone bridge of five arches at Kenmore, a village beautifully situated, and overlooking the Lake, and the river issuing from it. Burns gives the following poetical account of the scene:

> Th' outstretching Lake, imbosom'd 'mong the hills,
> The Eye with wonder and amazement fills:
> The Tay, meand'ring sweet in infant pride;
> The Palace rising on its verdant side;
> The Lawns Wood-fring'd in Nature's native Taste;
> The Hillocks dropt in Nature's careless haste;
> The Arches striding o'er the new-born Stream;
> The Village glitt'ring in the noon-tide beam.

The Lyon, descending from *Loch Lyon*, in that division of Perthshire called *Breadalbane*, falls into *the Tay* below Fortingal. The Tumel issues from *Loch Rannoch*, (which is about eleven miles in length, and one in breadth, and in which are no other fish than *Trouts*, small *Charr*, and *Bull Trouts*; which last, according to Mr. Pennant, are sometimes taken four feet and a half long,) and, after forming a small Lake, which bears its name, falls into the Garry, which descends from the Mountains

eastward of *Loch Ericht.* It was on a part of this river, at the pass of Killicrankie, that in 1746 a body of Hessians made a halt, and refused to march further, it appearing to them as the *ne plus ultra* of habitable country. The *Garry*, increased by the BRUAR and TILT from the northern Mountains, meets *the Tay* below the romantic (and of late, the much talked of) spot of *Fascally.* The *Tay*, afterwards joined by the river BRAAN, coming from the hills east of *Loch Tay*, flows to Dunkeld, the venerable remains of whose Abbey present a fine object, close to the river, and in the midst of the Duke of ATHOL's numerous plantations and pleasure-grounds, which cover more than a thousand Acres. The *Tay* makes a considerable circuit to meet the ISLA from Angus. The ALMOND or AMON, from the Grampian hills, reaches the *Tay* nearly opposite to *Scone*, from whence it passes to Perth; and so beautiful is its approach to this town, that the Roman Legions burst into the exclamation of *Ecce Tyberim!* From Perth the export of *Salmon* to *London* and the *Mediterranean* is extensive: three thousand Salmon have been caught in one morning, weighing one with another sixteen pounds a-piece; the whole capture being forty-eight thousand pounds. The fishery begins on *St. Andrew*'s day, and ends *August* 26th Old Style; the rents of the fisheries some years since amounted to three thousand pounds sterling a-year, but are now supposed to be more than double this sum. *Loch Earn* is a beautiful lake, from which issues THE EARN; and between this lake and the village of Crieff, no fewer than five stone bridges are built across it. The course of the Earn is parallel with the *Tay*, through the fertile vale of *Strathearn*, until, after a course of about thirty-four miles, the two rivers join near Newburgh. Thus is formed that vast Æstuary called the *Firth of Tay*, at the head of which is the flourishing Port of Dundee; this Firth narrows much as it approaches the sea, into which it falls beneath *Broughty Castle.*

The Lakes in this county are very numerous, which, as well as the rivers, present to the Angler ample sources of amusement. The Salmon, Trout, Whitlings, and variety of other fish, are every where abundant.

Renfrewshire.

The Clyde (before mentioned) and its Æstuary, passing by Glasgow to the sea below Greenock, bounds this county on one side; the Grief and the Duchal, rising from the hills behind Port Glasgow, join their streams before reaching the town of Renfrew; the Black and White Cart, descending from the southern and eastern parts of the Shire after the Calder runs into the first, unite with *the Grief* before that river falls into *the Clyde*. *Loch Winnoch* is a beautiful water, about three miles in circuit, from which the *Black Cart* issues; the *White Cart* passes the Village of Eaglesham, it next reaches *Pollochshaws;* near this place is *Lang Side Hill*, noted for the defeat of Queen Mary, after her escape from *Loch Leven Castle*, in 1568: a little farther down the river is *Crookstone Castle*, the once favourite retreat of the same Princess. Strangers are here shewn to this day the inauspicious Yew, under whose shade, tradition says, she first commenced her fatal connection with her then beloved Darnley; this river then flows to *Paisley*, which stands on its west side, and afterwards joins *the Clyde*. In these Waters the *Trout*, *Perch*, and other fish, will furnish a sufficient portion of entertainment to the lover of Angling.

Ross.

The Beauley, or Bewley, finds its source in *the Lakes of Archieg and Maddy*, in the most northern part of Inverness-shire, and shapes its course chiefly to the south-east until it constitutes *the Firth of Beauley*, which, turning to the north-west, contracts itself into a narrow strait opposite to the mouth of *the Ness;* the junction of these waters forms *the Murray Firth*, which, as it turns by the north-west, round the points of Fortrose and Fort George, divides Ross from Inverness-shire: the course of this river from its native mountains is singularly wild, until it reaches

the district of Straithglass, where the river *Glass* joins it. *The Beauley* particularly abounds with *Trout* and *Salmon*. The fisheries are valuable, (that belonging to the *Lovat* estate alone rents at 120*l. per ann.)* and are farmed by a Berwick Company. The CONAN and ORRIN descend from the west through woody banks, and uniting their streams, meet the sea near *Dingwall*. *The Orrin* rises in the mountains of this Shire, a little north of *the Beauley*, and meeting other streams flowing from *Loch Gillon* and *Loch Luichart*, forms the beautiful *Firth of Cromartie*. *Dingwall*, the small capital of Ross-shire, is situate at the head of this fine bay, (which divides this county from *Cromartie,)* where the whole Navy of Great Britain might lie with ease; and ships of two hundred tons may sail up above two thirds of its length, which extends thirty miles from the *Sutters of Cromartie* (which are two hills that form its entrance, projecting considerably into the water) to a small distance beyond Dingwall.

Loch Maree, near eighteen miles long, and in some parts four broad, abounds with *Salmon*, *Charr*, and large *Trout*. There are many other *Lochs*, which, as well as the rivers, will to the Angler supply much amusement. Many of the *Lochs* are properly inlets of the Sea, where the Fisheries are already productive, and promise to be highly improved.

Roxburghshire.

THE TWEED (already noticed) enters this county at the mouth of the river *Ettrick*, and the richness and beauties of the valleys through which it flows, recall to the Traveller's memory the old song, "How sweet are the banks of the Tweed." The TIVIOT descends from the mountains in the south-west angle of this shire, and passing nearly through the centre of it, after receiving many streams in its course, mixes its waters with *the Tweed* near Kelso; at which place, in 1797, a handsome stone bridge of six arches over the *Tweed*, below its confluence with the *Tiviot*, was swept away by their impetuous current. Jedburgh stands

upon the west side of the river JED, above its junction with the *Tiviot;* opposite to their confluence is placed the elegant villa of the Marquis of LOTHIAN. The ALE is the only river that falls into the *Tiviot* from the north-west. The town of *Hawick* is situated at the mouth of the *Slitridge*, by which it is divided: in 1767, by the bursting of a cloud upon the higher grounds, this river rose twenty-two feet, and swept away several houses so entirely, that not a vestige of them remained. The LIDDAL runs through the southern angle of the county, from thence called *Liddisdale*, (chiefly employed in pasturage;) is the only river in the shire that flows in that direction, and joins the *Esk* at Solway Moss. Dr. ARMSTRONG, a native of this pastoral district, in his Poem on the "Art of preserving Health," thus commemorates the *Liddal:*

——————— Such the Stream,
On whose Arcadian banks I first drew Air,
LIDDAL, 'till now, except in Doric lays,
Tun'd to her Murmurs by her love-sick Swains,
Unknown in song; tho' not a purer stream,
Thro' meads more flow'ry, or romantic groves,
Rolls toward the western main. Hail, sacred flood!
May still thy hospitable swains be blest
In rural innocence; thy mountains still
Teem with the fleecy race; thy tuneful woods
For ever flourish; and thy vales look gay
With painted meadows, and the golden grain!

The Angler that repairs to the waters of Roxburghshire will ever find them pay ample tribute to his skill.

Selkirkshire.

THE TWEED runs into this county near the seat of Lord ELIBANK, and crossing it toward the east, is augmented by the small rivers that descend from the heathy and rugged hills of *Caddon Head*, and at the north-east angle receives the water of *Gala*. The Scenery on its banks

has induced many Poets to celebrate its beauties. "*The braw lads of Gala Water*" is a famous Scots Song. The Ettrick is formed by the confluence of all the waters that are poured from the mountainous regions in the south-west of this shire, and from the woods formerly on its banks, the county it ran through obtained the name of Ettrick Forest: at present few trees are to be seen. The Yarrow, a celebrated pastoral Stream, rises in the western part of the county, from two contiguous Lakes, about six miles in circuit, called *St. Mary's Loch* and the *Loch of the Lows*, and joins *the Ettrick* near Selkirk. Mary Scott, "the flower of Yarrow," so highly extolled in Song, was a native of the Parish of Yarrow: she is said to have been the daughter of Mr. Scott of *Dryhope*, and was married to Mr. Scott of *Harden:* from this Union sprang a Daughter, almost as much celebrated, who married the Heir of Stobs, commonly called "Gibby with his golden Garters," the Ancestor of the Elliots of *Minto* and *Stobs*.

These rivers produce plenty of good fish; and the quantities of Eels, particularly in those Lakes from whence *the Yarrow* issues, are incredible.

Stirlingshire.

The Forth is the first river of much note northward of *the Tweed*, and perhaps the most important of any in Scotland, from the profusion of its commerce, and its proximity to the Capital. Its proper rise is in the wild tract of mountains in the western Highlands, at the back of the great Ben-Lomond, towards the north-west extremity of this Shire: a little before it reaches Stirling, it is joined by *the Tieth* from the north-west: the two principal branches which form *the Tieth* descend each from a chain of Lakes; the one on the north, and the other on the south side of the lofty mountain *Ben Liddie*. The northern branch passes through and forms three Lochs, *Doine, Voil*, and *Lubnaig;* the last, or "the Winding Lake," bends round a point of Ben Liddie, the rock rising nearly perpendicular

from the water's edge to an amazing height: almost opposite lived for some time the late Mr. Bruce, while composing the History of his Travels; pleased, it is said, with tracing in the rude grandeur of this lake and rock a faint resemblance to the lakes and mountains of *Abyssinia*. The southern branch forms Loch Ketterin and Loch Vanacher, and joins the *northern* at Callendar; they descend together to Doune, famous for its manufacture of Highland Pistols, which was introduced here by Thomas Cadell in 1646. The Allan afterwards joins *the Forth*, flowing by Dumblaine to the south-west from Perthshire, where it rises near *Gleneagles;* and also the Devon, rising in Kinross-shire, and running in the same direction: *the Devon* is, from the rugged nature of the ground, forced to take a very circuitous course, and although its track would measure forty miles, yet it falls into *the Forth* at Clackmannan within the space of only *six* from its source, in a straight line. The serpentine course of *the Forth* from Stirling to Alloa, which is towards the south-east, is most beautiful, and may be conceived when it is mentioned that the distance between the two places is twenty-four miles by *water*, and scarcely four miles by *land:* the incessant curves of this river, when viewed from any eminence, exhibit an apparent labyrinth of pools of water, which deceive the eye in seeming *distinct* from each other. Near the spot where *the Forth* becomes increased by the tide, *the Carron*, descending from the south-side of the Campsey hills, and tinged with the produce of its *iron* works, falls into it, as does the great canal from *the Clyde*, transporting the rich manufactures of Paisley and Glasgow, and the trade of the western sea. The Avon from the south joins *the Forth*, below where the *Queen's Ferry* is established. *The Forth* immediately spreads into a vast arm of the Sea, and receiving the Almond from the south, approaches *Leith*, the grand and crowded Port of Edinburgh, and at last discharges itself into the German Ocean.

The Endrick descends from the north of the Campsey hills. The Blane proceeds from the *Lennox hills;* the *Spout of Ballagan*, a cascade of seventy feet, is a remarkable fall in this river: below the junction of *the Blane* with *the Endrick*, their united streams slowly meander through a

tract of low land, which they frequently overflow and enrich, until they reach *Loch Lomond*, near Buchanan; at their fall into the Loch there is a good Salmon fishery. The rivers and waters of Stirlingshire produce *Salmon* and *Trout* in such abundance, that the Angler has no reason to fear a want of diversion.

Sutherlandshire.

THE DIURNESS, which rises on the southern mountains, terminates in a great inlet of the Sea, called *the Kyle;* the village of *Tongue* is here situated, and surrounded by morasses, lakes, and rivers, where the Sportsman may find an inexhaustible fund of amusement. The NAVER descends from a spacious Lake near the centre of the county, and, after running by several small villages, falls into the sea at *Farr,* where there is an excellent Salmon fishery. The STRATHY passes through a plain and fertile country, and glides into a bay covered by a large promontory; both of which bear its name. *Halladale*, and several smaller streams, descend from the mountains bordering on Caithness; from their south side springs the HELMSDALE, which, rolling over its rocky bottom toward the Ord of Caithness, becomes at that place deep and dangerous to the traveller, having no bridge over it. At its mouth there is a good fishery for Salmon, rented by a Company in London at 133*l.* sterling *per annum.* The BRORA, issuing from a beautiful Lake of the same name, forms several fine cascades; near this river are seen the remains of several of those circular towers, of which the use and origin have still baffled the researches of the Antiquary. Near the town of *Brora* is Dunrobin Castle, the Earl of SUTHERLAND'S; and on the south side of an arm of the Sea, called Fleet Loch, is Skibo, famous for its gardens, as the former is for its beautiful situation. At *Embo*, a village in this neighbourhood, in 1727, a Female was burned for the imaginary crime of *Witchcraft*, which, so far as we know, concludes these frantic executions in Scotland. The last instance of national Credulity on this head was the story of the Witches of *Thurso*,

who, tormenting for a long time an honest fellow under the usual form of *Cats*, at last so provoked him, that one night he put them to the rout with his broad sword, and cut off the leg of one less nimble than the rest; on his taking it up, to his amazement, he found it belonged to a female of his own species, and next morning discovered the owner, an old Hag, with only the twin leg. The horrors of the Tale were considerably abated in the place I heard it, continues Mr. PENNANT, by an unlucky enquiry made by one in company, *viz.* In what part would the old Woman have suffered had the Man cut off the Cat's Tail?

The FLEET has its origin in a wild and hilly district, and flows to the south-east with no remarkable feature.

The FIRTH OF DORNOCH is formed by a junction of the rapid river SHIN (issuing from its Lake, which is eighteen miles long, and situated in the south-west part of the shire) and the AILISH, with various other small streams from Ross-shire; it is a large winding Æstuary, abounding in bays: near the mouth, which widens to a great expanse, the town of *Tain* appears on its Ross-shire bank, opposed by *Dornoch*, the capital of Sutherland.

The Lochs and rivers of this county are most abundantly stored with fish. Those that are *fresh* present to the Angler *Salmon*, *Trout*, and a variety of other sorts of fish; those of *salt* water (and most of the Towns are washed by one or the other) produce to the inhabitants a profusion of *Cod* and other *sea*, and most kinds of *shell* fish. At *Invershin* there is a *Salmon-leap*, where those fish that fail in the leap are frequently caught in baskets placed purposely below. *Sturgeons* are often found in *the Shin*.

Wigtonshire, or Upper Galloway.

THE *Piltaton Burn*, a little stream, traverses the whole of the Peninsula of this shire, flowing eastward somewhat below *Stranrawr*, which may be

called its capital. The Luce, rising on the borders of Ayrshire, is crossed by the great Irish road at the town of *Glenluce*, and makes its Bay between the *Mull of Galloway* and the *Burrow-head*. The Cree, springing from a lake in Carrick, divides this county from those of *Ayr* and *Kirkcudbright*, and with a considerable Æstuary, reaches the sea a little before it comes to *Wigton*, forming the large Bay which bears that name, bounded by Burrow-head on one side, and the Ross-Island, at the mouth of *the Dee*, in Kirkcudbright, on the other. This river is rapid; its course is through a mountainous country, and passes the town of Newton Douglas, where there is a valuable Salmon fishery.

The Tarf and Bladenoch, descending from lakes in the moors on the borders of Carrick, in Ayrshire, unite their streams at Kirkcowan; the Bladenoch from thence winding to the south-east, falls into Wigton Bay. Several Islands are formed in its course, which are famous for the resort of Eagles.

The waters of this shire are plentifully stocked with fish, and are noted for the prodigious quantities of fine *Eels*.

The rivers of Scotland have in general *rocky* bottoms, and the same uneven substance lines the sides; so that fishing *with Nets* can never here interfere with the Angler's diversion, as it frequently does in Streams less rapid, and where the Bottoms and Banks either present no Shelter for the Fish, or where, by lowering the Water, the Fish are compelled to abandon them.

IRELAND.

THE most considerable RIVERS and LOUGHS of this Country will be now mentioned. It is to be remembered, that there are Rivers of the same name in England, Scotland, and Ireland, and also that each Country possesses innumerable *Brooks* and *Rivulets*, which to the Sportsman are as productive as the larger waters; the Size of the stream will often betray the judgment, if estimated by that circumstance alone, as to the Bigness of the Fish contained in it.

The SHANNON, the principal river in Ireland, and which runs from North to South, takes its rise from a spring among the mountains near *Swadlingar;* it then expands into LOUGH ALLEN, which lies at the northern extremity of the county of Leitrim, encompassed by high mountains, and is more than thirty miles in circuit. From this great collection of water, swelled by the accession of numberless rivulets from the hills, the *Lough*, as if surcharged, throws forth *the Shannon* at Belat-nava; it next forms *Lough Ree*, about fifteen miles long, diversified with many Islands, and afterwards *Lough Derg*, which is still larger, and upon which there are about fifty Islands. At Killaloe is a bridge over *the Shannon* of nineteen arches; below which there is a ledge of *rocks*, preventing the navigation of this river up to *Lough Derg;* here is a considerable *Salmon* and *Eel* fishery. From hence *the Shannon* flows to Limerick, (having in its course many beautiful waterfalls, the *Dip* being one hundred and fifty feet, in one hundred and twenty-eight miles,) and increasing as it flows through several counties, forms the largest river in the United Kingdoms; and, considering the shortness of its course to the Sea, is superior in bigness to any in Europe. *The Shannon* is navigable from Limerick, and about sixty-three miles from that Port discharges itself into the Atlantic Ocean. This river, which divides the Province of Connaught from Leinster and Munster, has in various places a rapid current, particularly after

first leaving the *Loughs;* it presents likewise many fine streams, and produces, besides a profusion of other fish, *Pike* (some as much as fifty pounds weight,) *Eels,* and *Perch* of uncommon magnitude. In the flat spaces on the banks of *the Shannon* are small but deep *Lochs,* which are covered in winter, and in floods; when the river withdraws, it leaves plenty of fish in them, which are caught to put into *Stews;* at *Johnstown,* the seat of Mr. Holmes, Mr. Young describes one of these Stews as having a small stream that feeds it, and that with a trolling rod a bite of a *Pike* from twenty to forty pounds is soon obtained; one weighing twenty-seven pounds so taken he ate of. To evince the quantity of fish in this river, he instances a fisherman bringing three Trouts, weighing fourteen pounds, and selling them to Mr. Holmes, for *sixpence* sterling each: a couple of boats lying at anchor, with lines extended from one to the other, and hooks baited and affixed at proper distances, have been known to catch an incredible number of Trout, which in general run from three to nine pounds. Perch swarm, and what is singular, they first appeared in *the Shannon* about thirty-six years since, and *then* in such plenty, that the poor lived on them. There are also Bream weighing six pounds; Salmon, especially above *Limerick,* in abundance; and some of the Gillaroo Trout. The Angler cannot fail of sport in every part of this river.

The Suir, the Neor, and the Barrow, spring from a mountain called *Slieu-Bloom. The Suir* flows from a branch of it, called *Bien-Duffe,* in the county of Tipperary, and after a course of many miles, at length receives *the Neor* and *the Barrow.* Clonmell and Carrick are situated on this river, over which, at the former, there is a bridge of twenty arches; and from both which places it is navigable to Waterford. The Angling for *Salmon* and *Trout,* near both Carrick and Clonmell, is very good.

The Neor rises from the same branch, and running to the south-east, falls into *the Barrow. The Barrow,* from the same mountain, after taking a northerly course, turns to the south, and before it reaches *Ross,* is joined by *the Neor;* from this place it runs southerly, and is called *Ross* River, and after meeting *the Suir,* they all, below Waterford, lose themselves in

St. George's Channel. These rivers abound with *Salmon*, *Trout*, and other good fish. *Kilmachow* river, which falls into *the Suir* about two miles, and another river, which, after running through the Marquis of WATERFORD'S Park, joins *the Suir* eight miles above Waterford, are both famous *Trout* streams.

The BLACKWATER springs from a mountain in the county of Kerry, and receiving many streams, continues its course to *the Bay of Youghall**. Other rivers have this name; one of which falls into *the Shannon*, another into *the Boyne*, and a third in the county of Wexford runs into the Sea.

The BANN rises out of a mountain in the county of Down; after flowing northward near thirty miles, and receiving *the Tanwagee*, it falls into *Lough Neagh*, and, passing through the Lake, keeps on a northerly course, dividing the counties of Antrim and Londonderry, and reaches the Sea below Coleraine. *The Bann* is famous for its *Salmon Leap* near Coleraine, and for its Salmon fishery, which is the greatest in the kingdom.

* In the Gardens belonging to Youghall the POTATOE, it is said, was first planted. This improvement is ascribed to Sir WALTER RALEIGH, and with much probability, for this was a part of the Estate he sold to the Earl of CORK. It seems, however, that no proper instructions were given to the person who cultivated it; since, upon its coming up and growing pretty high, he attempted to eat the *Apple*, which he took to be the *Fruit* of the plant, but finding it unpleasant, considered his pains as lost, and utterly neglected it. At some distance of time, when the earth was turned up, the *Roots* were found spread to a great distance, and increased to a large quantity; and from this place the whole kingdom was gradually furnished. POTATOES were also said to be first brought from America by Sir FRANCIS DRAKE, 1586; introduced into IRELAND 1610; into ENGLAND 1650: but GERARDE (who flourished about 1535) speaks of them as "a food, as also a meat for pleasure, being either roasted in the Embers or boiled and eaten with Oile, Vinegar, and Pepper, or dressed some other way by the hand of a skilful Cook."—Mr. LYSONS, in his *Environs*, observes, the *Potatoe* was introduced into ENGLAND about the latter end of the *sixteenth Century*, and was then cultivated only in *Botanical Gardens* as a Curiosity: that its taste and Virtues were nearly similar to those of the *Batata Hispanorum*, then in much esteem in this Country. When PARKINSON published his "*Paradisus Terrestris*," our common *Potatoes*, there called *Batatæ Virginianæ*, were become more frequent, and were prepared the same way as the *Spanish* Potatoes, being roasted under the Embers, and eaten with Sack and Sugar, or baked with Marrow, Sugar, and Spices, or candied by the Comfit-makers; in all which ways, says PARKINSON, the *Virginian* Potatoe, being dressed, maketh almost as delicate meat as the former.

The Salmon spawn in all the streams that run into *the Bann*, about the beginning of *August*, when they retire to the Sea, and begin to return to the fresh water in *January*, continuing to do so until *August*. The nets are set the middle of *January;* but by Act of Parliament no Nets or Weirs can be kept down after the *twelfth of August*. All the fisheries let at 6000*l*. *per annum*. The space from the Sea to the rock above Coleraine, where the Weirs are built, belongs to the London companies; the greater part of the rest to the Marquis of Donegall: the young Salmon are called *Grawls*, and grow faster, it is supposed, than any other fish commonly known, for within the year some of them will be increased to sixteen or eighteen pounds; in general the growth is from ten to twelve: such as escape the first year are, at two years old, called *Salmon*, and will generally weigh from twenty to twenty-five pounds. In 1780, 1452 Salmon were taken at one drag of a single net; the next greatest hawl was in 1758, when 882 were caught. Fish, in the former year, sold at a penny and three halfpence a pound *fresh*, and at 18*l*. and 20*l*. per ton *salted;* in the latter state they are sent to London, Spain, and Italy: the fishery employs eighty men, and the annual expences, it is calculated, equal the rent. The *Eel* fisheries at Coleraine let at 1000*l*. *per annum*. The Eels make periodical voyages as the Salmon, but instead of spawning in the fresh water, they retreat to the Sea to Spawn, and the young fry return against the Stream; to enable them to do which with greater ease, at the *leap*, straw ropes are hung in the water for them to adhere to. The Eels here sometimes arrive at the weight of nine or ten pounds.

Lough Neagh is the largest lake in Europe, those of Ladoga and Onega in Russia, and that of Geneva in Switzerland, excepted; it being twenty miles long, and fifteen broad, and the area is computed to be 100,000 acres. It is fed by six large rivers, and four of less note, and having but one narrow outlet for discharging this great flux of water, it frequently overflows the low grounds on its banks. A healing virtue is ascribed to it, and many, by bathing, have experienced benefit from it: it is also celebrated for petrifying wood, which is not only found petrified in the lake itself, but in the adjacent soil, at a considerable depth. This

water contains plenty of fine fish; and one sort, called the *Dolochan* or *Buddagh*, a species of large *Trout*, weighing sometimes thirty pounds, is peculiar to it; the *Pike* are likewise of very great size. *Lough Beg* is joined to *Lough Neagh* by a narrow channel at its north-west end, and is four miles in length, and four in breadth. The price of fish is half a crown for a *large Pike; Trout* twelve inches long a penny each; *Eels* ten a penny in Summer, three in Winter.

The Lee rises in the mountains near the village of *Inchigeela*, and about a mile from it opens itself into a fine lake, called *Lough Allua;* it afterwards has an easterly direction for thirty miles; it then becomes much enlarged by the reception of a number of streams, and, passing by *Cork*, discharges itself into the Sea. This river produces excellent fish, particularly *Trout* and *Salmon;* the latter are always in season, like those of the river Wye in England; the former are very large, and afford the Angler much diversion. In the neighbourhood of Cork are several smaller rivers, abounding with fish.

The Liffey has its origin in the County of Wicklow, and takes a circling course through that and the counties of Kildare and Dublin, passing by Leixlip (where there is a *Salmon Leap)* to Dublin, and discharges itself into Dublin Bay. Some good *Salmon* are to be found in this river, and plenty of *Trout*, which, although they will afford the Angler great sport in the taking, are of a very inferior kind for the table. In a small stream that runs into *the Liffey*, called Castle-Knock river, the Trout are in plenty, and are excellent.

The Boyne rises in the King's County, and falls into the sea at *Drogheda;* it abounds with Salmon, Trout, and a variety of other excellent fish. The Nure, Slaine, and May, are rivers in the province of *Leinster*. The Moy rises at the foot of the mountain Knockneshee, in the county of Sligo, and dividing that county from Mayo, and also the coun-

ties of Donegal and Fermanagh, after meandering about forty-five miles, and passing *Belleek*, where the Salmon fishery lets for *52l. per annum*, discharges itself below the port of Killala, into the Atlantic Ocean.

Lough Erne, one of the largest lakes in Ireland, has two branches, which extend through the whole county of *Fermanagh*, dividing it into nearly two equal parts; its length is said to be thirty miles, and to contain near four hundred islands, some of which are inhabited; its breadth is unequal: among the islands that of *Belleisle*, the seat of the Earl of Ross, is extremely beautiful. The fish in this part of the lake are *Pike*, to the weight of forty pounds, *Trout*, *Eels*, *Bream*, *Perch;* and it is extraordinary that the latter fish should have appeared in *all the lakes* of Ireland, and in *the Shannon*, at the same time, nearly thirty-six years ago. *Mary Island*, belonging to Lord Erne, is equally beautiful with Belleisle; and Castle Caldwell, on the borders of the Lake, vies with either of the former. The *Trout*, *Perch*, *Pike*, and *Bream*, were at that part of the lake so plentiful as to have no price; and Sir James Caldwell has taken seventeen hundred weight of *Bream* and *Pike* in one day: a fish peculiar to this lake, about the size of a Herring, called *Goaske*, is taken only in May.

The Suck divides Roscommon from Galway, and joins the *Shannon* near Clonfert. The *Drosos*, a river in the county of Clare, also falls into the *Shannon*. At Galway, in the river which runs from Lough Corrib, is a large Salmon fishery. Lough Corrib is upwards of twenty miles in length, and some parts six broad, having many fine islands upon it: near this lake is that of *Lough Mask*, almost half the breadth of the first, and nearly as long; the former is *wholly* in the county of *Galway*, part of the latter in that of *Mayo;* in both are found the *Gillaroo Trout*, which is generally from twelve to eighteen, but increases so high as thirty pounds weight; these fish are esteemed for their fine flavour, which is supposed to exceed that of any other Trout; their make is similar to the common, except being thicker in proportion to their length, and of a redder hue

both before and after being dressed. The Gillaroo is remarkable for having a *gizzard* resembling that of a large Fowl or Turkey; it is usual to dress the *gizzards* only, which are considered as very favourite morsels.

The famous JOHN HUNTER made this curious fish an object of his attention, and an extract from his observations upon it may not improperly here find a place: He states, that "one of the digestive Organs of this *Trout* being so very extraordinary as to have given name to it, and to be looked upon as its distinguishing characteristic: to throw some light upon the question, whether its resemblance to a *gizzard* be such as to render the appellation proper, it is expedient to state some general facts. Food of animals may be divided into two kinds; what does require mastication to facilitate digestion, and what does not: all *animal* food is of this latter kind; but *grain*, and many other substances which serve for aliment, require a previous grinding or trituration; and therefore animals which live on such food are provided with organs for that purpose. Such birds as live upon food, to digest which trituration is indispensable, have the power of masticating and digesting united in one part, *the gizzard*, which is for that end peculiarly constructed. In granivorous Birds, therefore, a single organ answers both to the teeth and stomach of granivorous Quadrupeds, (who have two powers distinct from each other, to masticate and digest their food; the first being executed by teeth of a particular form, which serve as so many grindstones, for reducing their food to powder, before it is conveyed into the stomach for digestion,) and consequently the gizzard *alone* of Birds will point out the food of the species as clearly as the teeth and stomach *together* do in those Animals in which the two offices of mastication and digestion are not joined together in the same part.

"As it appears then to be the *difference* of the *stomachs only* that fits birds for their different kinds of food, it is evident that every gradation of stomach must be found among them from the true *gizzard*, which is one extreme, to the mere *membraneous stomach*, which is the other; since the

food of the various species is from the hardest grain to the softest animal matter. The two extremes above-mentioned are easily defined, but they run so into each other that the end of one and beginning of the other are quite imperceptible: similar gradations are observed in the food, the kinds suited to the two extremes, mixing together in different proportions, adapted to the intermediate states of stomach.

"A true gizzard is composed of two strong muscles placed opposite, and acting upon each other, as two broad grindstones. These muscles are united at their sides by a middle tendon, into which the muscular fibres are inserted, and which forms the narrow anterior and posterior sides of the flat quadrangular cavity, wherein the grinding is performed: the upper end of this cavity is filled up by the termination of the œsophagus, and the beginning of the intestine; the lower end consists of a thin muscular bag, connecting the edges of the two muscles together. The two flat lateral sides of the grinding cavity are lined with a bony substance, similar to a hard and thick cuticle.

"The two large muscles may be considered as a pair of jaws, whose teeth are taken in occasionally, being small rough stones or pebbles which the animal swallows; and from the feeling on the tongue it can distinguish such of them as are proper from those that are smooth, or otherwise unfit for the purpose, which last it instantly drops out of its mouth. There are other animals which masticate their food in their stomach, but their teeth are by nature placed there: *Crabs* and *Lobsters* are thus formed. Some Birds with gizzards have also a Craw or crop, which serves as a reservoir, and for softening the grain; but as all of them have not this Organ it is foreign to our present purpose.

"The gradation from gizzard to stomach is made by the muscular sides becoming weaker and weaker, and the food keeps pace with this change, varying gradually from vegetable to animal; and we find that in granivorous animals of all sorts there is an apparatus for masticating their

food, although of various kinds and differently placed." After describing the manner of carnivorous quadrupeds and birds taking and digesting their food, Mr. H. thus proceeds:—" Of all the fish I have seen, the *Mullet* is the clearest instance of the structure of its stomach approaching to that of birds; its strong muscular stomach being evidently adapted, like the gizzard of birds, to the two offices of mastication and digestion. The stomach of the *Gillaroo Trout* holds the *second* place; but still neither of these stomachs can be justly ranked as gizzards, since they want some of the most essential characters; *viz.* a power and motion fitted for grinding, and the horny cuticle. The stomach of the *Gillaroo Trout* is, however, more circumscribed than that of most fish, and endued with sufficient strength to break the covering of small shell-fish, which will most probably be best done by having more than one in the stomach at a time, and also by taking large and smooth stones into it, which will answer the purpose of *breaking*, but not so well that of *grinding;* nor can this fish's stomach possess scarcely any power of grinding, as the whole cavity is lined with a fine villous coat, and whose external surface every where appears to be digestive, and by no means fitted for mastication.

" The stomach of the English is exactly of the same species with that of the *Gillaroo Trout*, but its coat is not so thick by *two-thirds* *: how far this difference in thickness of stomach avails to make a distinct species, or barely a variety of the same, is only to be determined by experiment, which might be tried by putting some *Gillaroo Trout*, male and female, into water in which there are no Trout, and observing if they continue unaltered.

" The Œsophagus in the Trout is considerably longer and smaller than in many other classes of fish. The intestines are similar to those of the Salmon, Herring, Sprat, &c. the pancreas is appendiculated (this name to the pancreas Mr. H. has adopted from its appearance). The teeth shew

* The English Trout swallows shell-fish, and also pretty large smooth stones, which serve as shell breakers.

them to be a fish of prey. So far, therefore, (concludes Mr. HUNTER,) as warranted by analogy, we must not consider the stomach of this fish as a *gizzard*, but as a true Stomach."

Respecting the *Gillaroo Trout* Mr. PENNANT has the following remarks:—"The Stomachs of the common Trouts are uncommonly thick and muscular; they feed on the shell-fish of lakes and rivers, as well as on small fish; they likewise take into their stomachs gravel or small stones to assist in comminuting the testaceous parts of their food. The Trouts of certain lakes in *Ireland*, as those of the county of *Galway*, and some others, are remarkable for the great thickness of their stomachs, which, from some resemblance to the organs of digestion in birds, have been called Gizzards: the *Irish* name the species that has them Gillaroo Trouts, and their stomachs are sometimes served up to table, under the former appellation. It does not appear to me," continues Mr. P. "that the extraordinary strength of stomach in the *Irish* fish should give any suspicion, that it is a distinct Species: the nature of the waters might increase the thickness; or the superior quantity of shell-fish, which may more frequently call for the use of its comminuting powers, than those of our Trouts, might occasion this difference. I had an opportunity of comparing the stomach of a great Gillaroo Trout with a large one from the *Uxbridge* river; the last, if I recollect, was smaller, and out of season, and its stomach (notwithstanding it was very thick) was much inferior in strength to that of the former; but on the whole," says Mr. P. "there was not the least specific difference between the two subjects." From the foregoing investigations the *Gillaroo* does not seem to constitute a new Species of *Trout*.

The *Pike* in LOUGH CORIBB are of immense bigness, and also the *Perch;* of the former, one of the great weight of sixty-eight pounds, and of the latter, one weighing nine pounds, were taken: Salmon and Trout are in prodigious quantities, and the Eels are noted for their rich flavour, size, and abundance.

Lough Lene, or Killarney, in the county of Kerry, is singular for its beauties, and can scarcely be said to have a rival: the extent of water in Loch Erne is indeed much greater, the Islands more numerous, and some parts near *Castle Caldwell* of as great magnificence, but imagination cannot form a more delightful scene of romantic beauty than the peninsula of *Mucruss* affords; add to this the growth of the *Arbutus*, and the uncommon *Echoes*, and it will appear, upon the whole, superior to all comparison. The prevailing character of *Killarney* is Variety; the second Beauty: Magnificence is subordinate. Here Beauty, by her magic and diffusive influence, gives a grace to Variety; whilst Variety furnishes her benefactress with flattering contrasts: united, they present the Fancy with the most pleasing images of repose, unstudied order, and an uncommon display of natural grandeur and rural wildness. The Lake, or rather Lakes, (for there are three branches connected by a winding river,) cover about six thousand Irish acres: occasionally Lord Kenmare gives a Stag hunt on the water; the Deer is started on *Glenaà* mountain, and bounds from rock to rock to gain the summit of the hill, but being hunted down to the wood near the water, and finding himself closely pressed by both men and dogs, he collects at one effort his remaining strength, gives a desperate bound, and plunges into the Lake; the Company following in boats, until fatigued and overpowered, the animal is seized, his antlers decked with Arbutus boughs, and he is borne in triumph to the Shore.

In these Lakes there is good Angling, and they possess a variety of excellent fish, particularly great abundance of Salmon, Carp, Tench, Trout, Eels, &c. The surrounding mountains and woods abound with Red-deer and game, particularly Grouse; and formerly that scarce bird, the *Cock of the Wood*, was met with. Eagles constantly breed here; there are always Wigeon, Teal, and Wild Duck, and in the season plenty of Woodcocks.

The river Boyle rises in a fine sheet of water, called *Lough Gara;*

thence meandering through woods and dales, it enters *Lough Kay*, interspersed with several Islands; some covered with lofty timber, and others with everlasting verdure: *the Boyle* again emerges out of the east side of the Lake, and runs on to join *the Shannon*.

There are many more extensive and beautiful *Loughs*, all abounding with fish. *Lough Conn* is noted for the quantity of its *Gillaroo Trout*.

In *Lough* Esk the *Charr* is found in great abundance, (a circumstance of which Mr. Pennant was not apprized;) it is described to be there about nine inches long, and in some degree resembling a Trout; the male, or milting Charr, has a *red* belly, but the flesh is generally *white;* the female, called the roeing Charr, has a paler belly, but the flesh is of a brighter *red*, and the fish is commonly larger; the third sort, called the *gelt* Charr, and frequently (though it may be corruptly) the *gilt* Charr, is without roe. These fish are not to be caught by bait, and are taken only in *Nets*.

Lough Sheallin is of considerable magnitude, extending to Finae, where it communicates with *Lough Inny*. Strangford *Lough*, in the county of Down, extending near twenty miles from *Newtown* in the north, to *Strangford* in the south, is in some places more than five miles broad, and has near fifty small Islands. It abounds with excellent fish, particularly with *Smelts*. Inchiquin *Lough* is very famous for its delicious fish, as well as for the delightful prospect near it. At *Cong*, about five miles from Ballingrobe, is a subterranean cave, to which there is a descent of sixty-three steps, called *the Pigeon-hole;* at the bottom runs a clear stream, in which the Trout are seen sporting in the water; these fish are never known to take a bait, but are caught with landing nets.

In the Lake of *Castle Bar*, near that town, is the *Charr* and the *Gillaroo Trout;* and it is remarked, that there are no Pike in this and some of the adjacent Lakes.

Mr. YOUNG mentions that, at Pakenham, Lord LONGFORD informed him respecting the quantities of fish in the Lakes in his neighbourhood; that the *Perch* were so numerous, that a Child with a packthread and a crooked pin would catch enough in an hour for the daily use of a whole family, and that his Lordship had seen five hundred Children fishing at the same time; that, besides *Perch*, the Lakes produced *Pike* five feet long, *Trout* of ten pounds each, whose flesh was as red as Salmon; and likewise *Bream*, *Tench*, and *Eels*.

At *Bally-Shannon* there is a Salmon Leap, which lets for four hundred pounds a year; it is scarcely credible that these fish should be able to dart themselves near *fourteen feet* perpendicular out of the water; and, allowing for the curvature, they leap at least *twenty*. They do not bound from the surface, and it cannot be known from what depth they take their spring. At high water the fall is hardly three feet, and then the fish swim up the acclivity without leaping. At low water, when the height is as above mentioned, there will sometimes be fifty or sixty leaps in one hour, and Salmon have been shot whilst in the air. At *Athlone* the Eel fishery is very considerable.

There are many salt-water *Loughs*, which are properly inlets of the Sea; such as *Lough Foyle*, *Lough Swilly*. The *Lagan Water*, which passes by Lisburn and Belfast, and the *Newry Water*, which falls into Carlingford Bay.

The Waters of IRELAND abound in all that can invite the Angler to their banks; perhaps they are better stored, and the Fish contained in them of a Size superior to those generally found elsewhere in the United Kingdom.

Angling.

SUCH is the natural progress of Man in Society, that the wearisome pursuits, which are the first and sole means of his Subsistence, often rank afterwards among the prime sources of his diversion and enjoyment.

In that state of Barbarism which precedes the introduction of the Arts, Fishing and Hunting form the chief employ of the savage Adventurer, who, finding in them the means of life, naturally makes their improvement an object of his skill and perseverance. The method by which the first Men drew their prey from the Waters was, without doubt, sufficiently simple; but after a long and steady application to the same pursuit, the most unskilful in time become expert, contrivances are suggested, improvements are discovered; and the mind, travelling in one tract, goes slowly on towards the last stage of proficiency. When, at length, the Æra of commerce and refinement arrives, the seas and rivers, which before drew only the necessitous to their shores, now present a recreation to the sedentary, and an amusement to opulent leisure.

> Atque alius latum fundâ jam verberat amnem
> Alta petens: pelagoque alius trahit humida lina.

Angling, or the taking of Fish with a rod, hook, and line, is said to have been practised 1498 years previous to the Christian Æra; some have carried its Antiquity to a period still more remote, and have insisted, that the elder children of SETH'S (one of ADAM'S Sons) family were instructed by their Father in this pastime, and that from them the present race of Men have derived and continued it: on this subject, however, tradi-



Names.	Where found.	Season.	Time to Angle	Depth from Ground.	Baits.			
					Worms. N.o	Flies. N.o	Pastes. N.o	Fish and Insects N.o
Bream	In Rivers. in soft Streams in the deepest and broadest parts near Weeds where the bottom is clay or sand. In Ponds. in the quietest and deepest parts.	From May to September.	Three in the Morning untill Eight, and from Five in Afternoon untill dark.	Touch the ground.	2.3.7	2 Under Water	1.2	8 In June or July.
Chub	In Angles and deep Holes of Rivers where the Stream is not quick, under shade of Trees Weeds or hollow Banks in a clayey or sandy bottom.	From August 'till March. best in Winter Months.	In mild cloudy weather will bite all day, in hot from Sun rise 'till 9, and from 5 P.M till Sunset; in cold the middle of the day	In fishing with float in warm weather at mid-water, in cool lower, and in cold at the ground.	1.2.4.5.6	1.2.3.4.5	1.2	7.8.9
Barbel	Middle of Pond in Rivers during Summer the strongest Currents under Bridges near Weirs among Piles hollow Places and under Mossy Weeds.	May untill August.	From Sun rise to 10. in the Morning, and from 4 P.M till Sun-set.	Touch ground.	2.7.9		4	
Smelt	In Docks and at the Stern of Ships in tide Rivers. to fish at Stems a Paternoster Line with 5 or 6 Hooks is to be used.	April 'till October.	All the day, best when Tide runs up.	The Baits to sink 2 or 3 Yards.	1.2.6.9			5 cut in pieces to small and unboiled.
Salmon	Violent Streams and large Rivers whilst at feed, when off their Prey the deep and broad parts and generally middle of the River near the Ground.	April 'till August.	From 6 'till 9 in the Morning, and from 5 P.M till Sun set.	Touch ground with Lobsworm, smaller worms; boks and Cod bait, at top of the water.	7	Large and the more gaudy the better.		1
Grayling	Clay bottom, clear Water; and swift Streams.	All the Year, chief from Sept. to Jan.	All day in cool cloudy weather.	Cold weather at bottom in hot weather top or mid-water.	1.2.3.4.5.6.8.9	1.2.3.4.5.6.7		
Gudgeon	Gravelly sandy Ground and gentle Streams.	May 'till October.	All day.	Nearer on the ground	2.9			
Bleak	Sandy bottom deep Rivers at the sides and tails of Streams where the Water Eddies and turns gently back, Ships Stems.	All the Year but May when they are spawning.	All day.	A little deeper than mid-water.	2.6.9	1.2.7	1	
Dace	Sandy bottom deep Rivers holes well shaded in Summer, shallow near Ferds under Banks and among Weeds	From April to February, best in Winter.	All day.	3 Inches from bottom or top of water.	1.2.3.6.9	1.2.3.4.5.6.7	5.6	
Roach	Deep gentle running Water. Holes that are well shaded having fine gravel or sandy bottom, Ships Stems, Bridges	From July 'till March, best in February.	In mild cloudy weather all day, in hot Morn and Eve, in cold the middle of the day.	1 Inch from bottom	1.2.3.4.5.6.9	1.2.4.5.7 Under Water.	1.5.6	8
Perch	In Rivers gentle Streams not over deep where there are Weeds, hollow Banks, flat gravelly bottoms. In Ponds, deep Holes near Weeds or stumps of Trees.	From April untill January.	Sun rise 'till 10, from 2 'till Sun set, if weather be close dry with rustling south wind, will bite all day.	Mid-water or 6 Inches from bottom.	1.2.6.8.9			1.6
Pope	Deep still Water.	May 'till October.	All day.	6 Inches from bottom	2.9			
Carp	Still deep muddy bottom, Pond or River.	March till August.	Early and late as possible	3 Inches from bottom	1.2.3.4.8		3.5.6	
Tench	River or Pond among Weeds, Muddy bot.m	From September 'till June.	Early and late as possible	mid water in hot weather. 2 Inches from bottom among weeds a foot deep mid water in hot weath.	1.2.4.9		2.5	
Trout	Swift clean Rivers over Pebbles. Stony bottoms.	March 'till Michaelmas.	All day.	Cold weather 6 Inches to 9 from bottom, in hot top to mid water.	1.3.5.6.7.8.9	1.2.3.4.5.6.7		1.8.9
Pike	Sandy or Clay bottoms under Bull-rushes, Weeds, Water docks or Bushes	From May 'till February.	With a gentle gale all day.	Mid water if with a float and single snap hook				1.2.3.4.6
Eel	Among Weeds, under Roots and Holes in Banks and Stones at bottom. about Bridges Weirs and Mills.	May 'till September.	All day when the water is thick by Rains.	On the ground.	4.7			1.9

Description of Bobs and Worms.

No 1. Earth bob, *found in sandy or light ground after the Plough the Rooks will direct where this Grub is to be met with by their close attendance upon the plough, is white, bigger than a Gentle with a red head. Another is found in heathy ground with a black or blue head. either of these are to be got by digging one spit deep in the abovementioned Soils, where they have long remained unploughed. Keep them in an earthen vessel well covered with a sufficient quantity of the mould they harbour in, with dryish Mots at top, and let them be in a warm place, are Excellent from beginning of November to middle of April.*

No 2. Gentles, *to be had from putrid Flesh, let them be put into Wheat bran two or three days before used.*

No 3. Flag Worms, *found amongst roots of Flags, is pale yellow, longer and thinner than a Gentle, must be kept like the Cad bait.*

No 4. Wasp Grubs or Wasp Maggots, *are to be in the Cakes of Cells as taken in the nest, before using put them into an Oven, after the bread is drawn, or they may be dried on a Tile before the fire, just to harden and make them tough.*

No 5. Cowdung bob or Clap bait, *found under a Cow drop from May till Michaelmas, is larger but like a Gentle, in its native Earth as No 1. is to be preserved.*

No 6. Cadis Worm or Cad bait, *found under loose stones in shallow rivers or brooks, are covered with Husks of Sticks, Straw, Rushes, and Stones, they are yellow bigger than a Gentle, with a black or blue head. Keep them in flannel or linen bags, and dip them bag and all into Water once a day for five or six days, they will then become tough and fitter for angling, than when first taken from the water.*

No 7. Lob or Dew Worm, *found in Gardens, is very large having a red head a streak down the back and a broad flat Tail, those with a Knot are fit only for Eels.*

No 8. Marsh Worm, *found in marshy ground are of a blueish colour, and require more scouring in Mots than most other worms, are a good bait from March to Michaelmas.*

No 9. Brandling: Red or Blood Worm, *found in rotten Dunghills and Tanners Bark that has been used. The red worm found at the root of a great Dock, and which lies wrapt up in a round clew, is a particular bait for Bream.*

The common red worm is very good for all small fish.

Flies where found.

No 1. Stone Fly, *under hollow stones at the sides of Rivers, is of a brown colour with yellow streaks on the back and belly, has large wings. In Season from April to July.*

No 2. Green Drake, *among stones by Rivers side, has a yellow body ribbed with green, is long and slender, his wings like a Butter flies, his tail turns on his back. Very good from May to Midsummer.*

No 3. Oak Fly, *upon the body of an old Oak or Ash tree with its head downwards, is of a brown colour from May to September. Excellent for Trout in a clear water, putting a Cad bait on the point of the hook, and letting it sink a few inches and gradually raising it*

No 4. Palmer Fly or Worm, *upon the leaves of plants, is commonly called a Caterpillar, when it turns to a Fly, very good for Trout.*

No 5. Ant Fly, *in Ant hills from June to September, a handfull of the Earth, with as much of the grass that grows on their hillocks put into a glass bottle with the Ant flies: will keep them alive.*

No 6. May Fly, *playing at the River side especially before Rain.*

No 7. Black Fly, *upon every Hawthorn after the buds appear.*

Mem: *Artificial Flies may be procured at the shops where fishing Tackle is sold.*

Worms of various sorts, and other baits, are also generally kept in the season, ready prepared for use.

Pastes, how to be made.

No 1. Red Paste, *the crumb of fine new white bread without being made wet, worked up in the hand and coloured with Vermilion, as near as possible to that of the Salmons Row.*

No 2. Brown Paste, *the crumb of brown bread mixed with honey, worked up in the same manner.*

No 3. *Blood of a Sheeps heart mixed with honey and flower, and worked to a proper consistency.*

No 4. *Old Cheese grated Butter, sufficient to work it, and coloured with Saffron. If in Winter use the fat of roasty bacon instead of butter.*

No 5. *Crumbs of bread worked with honey or sugar, moistened with Gum Ivy water.*

No 6. *Bread chewed and worked in the hand untill stiff.*

Fish and Insects.

No 1. Minnow.
2. Gudgeon.
3. Roach.
4. Dace.
5. Smelt.
6. Yellow Frog.
7. Snail slit.
8. Grafshopper.
9. Beetle.
10. Shrimp.

tionary history has not been very minute. Abandoning, therefore, these very early Authorities, it will suffice to remark, that the Art of Angling has been the relaxation and amusement of many very great and learned Men for Ages, and that, as a peaceful and harmless pleasure, it can boast an undoubted superiority over most others.

> "This sober Sport becomes the gentle mind,
> Peace waits the Float, and Health attends behind;
> Smiling she comes, from ev'ry fragrant grove,
> To scatter Roses on the cheeks of Love:
> O! source of bliss, in which the wise may join,
> Nor fear Rebuke where mounts the Theme divine! *"

The intention of this Work is by no means to dispute the date of its origin, but to endeavour at elucidating and arranging the modes best

* The Stanzas wrote by Mr. COTTON to invite Mr. ISAAC WALTON, when in his *Eighty-third* year, to visit him in *Derbyshire*, are not only descriptive of the Day proper to enjoy, but also of the power of this Amusement to confer Ease and Comfort beyond the more boisterous pastimes. After describing the bad Weather that part of England had experienced in some previous lines, he proceeds:

> If the all-ruling Power should please,
> That we should see another *May*,
> We'll recompense an Age of these
> Foul days, in one fine fishing day.
>
> We then shall have a day or two,
> Perhaps a Week, wherein to try
> What the best Master's hand can do
> With the most deadly killing *Fly*.
>
> A day, with not too bright a beam;
> A warm, but not a scorching Sun;
> A southern gale to curl the stream;
> And, Master, half our work is done.
>
> Then whilst behind some bush we wait,
> The scaly people to betray,
> We'll prove it just, with treacherous bait,
> To make the preying *Trout* our prey.

adapted to encourage the zeal of its votaries, and by stating the ancient and modern rules for advancing it to perfection; thereby to give the practitioner the information most calculated to promote his success. The description of the Apparatus needful for the Angler naturally first offers itself; and, although the fashion is to extol the ingenuity of former times, it may perhaps admit of much question, whether the Amateurs now living cannot be more neatly and better equipped by USTONSON, than they were at those distant periods, when every Individual must have confided in his own personal Exertions for the necessary requisites? It will however here be explained, in what manner those who are themselves anxious that their own Hands should form the various Articles, may supply themselves; and this Account will commence with an indispensable one, that of the

Rod.

THE wood for Rods should be cut about Christmas (and some insist, that if left in the open air for twelve months afterwards, it will season better, than if stowed in a dry place). *Hazel* is the wood generally procured for this purpose, and of all the sorts, that of the *Cob-nut* grows to the greatest length, and is for the most part straight and taper; the But end should rather exceed an inch in diameter: but, of whatever wood the rod is composed, the shoots for stocks, middle pieces, and tops, must be of proper size, well grown, and as free from knots as possible. The tops should be the best rush ground shoots, without knots, and proportionally

And think ourselves, in such an hour,
  Happier than those, though not so high,
Who, like *Leviathans* devour,
  Of meaner Men the smaller fry.

This, my best Friend, at my poor home
  Shall be our pastime and our theme;
But then should you not deign to come,
  You make all this a flatt'ring Dream.

taper; the excrescent twigs are to be cut off, but not close, for fear of hurting the Bark, which ought never to be touched with a knife or rasp; for although they will dress neater, it considerably weakens them: these pieces are to be kept free from wet until the beginning of the following Autumn, when such as are wanted to form a rod should be selected, and, after being warmed over a gentle fire, set as straight as possible, and laid aside for two or three days, when they must be rubbed over with a piece of flannel and linseed oil, which will polish and fetch off any superfluous bark; they are then to be bound tight to a straight pole, and so keep until the next Spring, when they will be seasoned for use; (some however prefer keeping them from eighteen months to two years, before they are made up:) they are then to be matched together in just proportion, in three, four, or more parts, according to the width of the Water, or the wish of the maker; taking care that the different joints fit so nicely, if ferruled, that the *whole* rod may move as if it were but one piece. If the parts are not ferruled, observe, that they must be cut to join each other with the utmost exactness, and neatly spliced with *glue*, boiled very gently in strong quick lime-water, keeping it stirred until it becomes smooth and all alike, and then are to be whipped over the glued part with waxed thread. When the rod is completed, it should be nicely rubbed with the following Varnish:—Half a pint of linseed oil, and a little India rubber scraped fine; put them over a slow fire, and stir them well together, until the rubber is dissolved, then boil and skim it; apply it warm, and do not use the rod until quite dry. The appearance upon the rod will be like a fine thin bark; it will preserve the rod from being worm eaten, and from other injuries, and is very durable. As moisture is at all times destructive to wood, it is essential for the Angler to guard all in his power against its influence on his rod; for, admitting that a shower of rain will not spoil it, yet if not protected by a Varnish, it may soon be deprived of its *Elasticity*, which is the chief requisite of any, and more particularly of a Fly-rod. Variety of methods are used in preparing Varnish; the one here mentioned is said to be excellent; half an ounce

of *Shell*, and the same quantity of *Seed-lac*, powdered fine in a mortar, put into separate vials, with half a pint of good spirits of wine in each, and placed in a sand heat to dissolve: during the process, shake the vials often; when each is dissolved, mix them together in a larger bottle, with half an ounce of *Gum Benjamin;* increase the heat, and the dregs will subside; then warm the wood, and with a Camel's hair brush apply that part of the varnish which is become fine; the third coat will remain on the surface, and securely protect the rod from injury; the rod composed of the Hazel will not do for Fly fishing, the least wet being apt to warp, and render it crooked.

The Salmon rod is, all but the top, usually made of Ash, as being the lightest wood. The structure of the Trout or Fly rod has been variously recommended; the most ancient is, the But to be made of yellow deal, seven feet long; next a straight Hazel, of about six feet; and then a delicate piece of fine grained *Yew*, exactly tapered, and ending in a point of whalebone, both making about two feet: to colour the stock, a feather dipped in *aqua fortis*, and rubbed into the deal, will give it a cinnamon colour; for a nut-brown colour, a quartern of spirit lacquer, half an ounce of Gamboge, the like quantities of Gum Sandrich and Dragon's blood; the last three to be powdered very fine, and as much of each of them as will lie upon a sixpence put into the spirit lacquer, which must be kept stirring, until properly mixed; the vial must be warmed as well as the wood, and the mixture gradually laid on with a Camel's hair brush; after it is dried, a second and third coat are to be applied: to make the colour redder, put double the quantity of Dragon's blood: to make the rod *mottled*, get green Copperas and dissolve in spring water; dip a linen tape in the liquid, and while wet twist it round about, and let it remain on the rod eight or ten hours in the cool; unbind the tape, which will be dry, and use the above-mentioned Varnish, which will give the desired effect. The Varnish also preserves the rings and the bindings that fix them to the rod. To fasten a fly rod of the above make properly, a piece

of Shoemakers' wax was rubbed upon each splice; a handle of a knife, or any hard thing, was rubbed over them, until they were smooth; they were then tied neatly together, and were as firm as any part of the rod.

Our fore-fathers were wont to pursue even their amusements with great formality. An Angler, a century and half back, must have his *Fishing Coat*, which, if not black, was at least of a very dark colour; a black velvet Cap, like those which Jockeys now wear, only larger; and a Rod with a stock as long as a *Halbert:* thus equipped, he stalked forth, followed by the eyes of a whole neighbourhood: but in these latter days, *bag*-rods have been invented, which the Angler may easily convey, so as not to proclaim to every one he meets where he is going. Those for *float*-fishing were first tried, and the invention was afterwards extended to rods for *fly*-fishing; the description of such a portable and useful one is here given, in case of the Angler's wishing to become the Artist. It is to consist of four joints, two feet four inches long, and made of *Hiccory*, or some very tough wood, the largest joint not to exceed the thickness of half an inch diameter; the stock must be of *Ash*, full in the grasp, of the same length with the other joints, and have a strong ferrule at the small end, made to receive the first joint, which should be well shouldered, and fitted to it most exactly; the *top* must be *Bamboo* shaved; a pocket in the lining of the coat will easily conceal and carry such a rod. Rods for *general fishing* are now made upon this principle; they are fitted up with a trolling top; others of different degrees of strength and stiffness, for Carp, Tench, Perch; and others fine and elastic, for Dace and Roach. Rings are fixed for the trolling line to pass through, and that at the end of the trolling top should have a piece of *quill* whipped on with it, for the line to run over, which prevents its being cut when the Pike seizes the bait, or in his struggles when struck. The stock is hollowed to contain the different sorts of tops; the whole goes into a bag, and are to be purchased of any length and variety of tops, at all the fishing-tackle shops in London.

The structure of a fly rod, says a very experienced fisherman, requires particular attention; the length is perhaps not so very material; one of *twelve feet*, unless the wind be extremely unfavourable, will cast a fly-line of *fourteen yards*, but if it is to carry a *Reel*-line, *fourteen* feet will be preferable: it is useless to encumber yourself with an unnecessary weight of wood, as the great advantage of a light rod is, that with either hand you can use it, and thus be enabled to cast your *fly* under bushes, hollow banks, &c. where the best Trout generally lie, without endangering the tackle. The *shorter* the joints, of course it will be the more portable, but the *fewer* there are, the better it will open a fly-line: the lower part may be made of any tough straight grained wood, but in forming the upper, too much nicety cannot be observed. In our own country grow various sorts of wood that will well answer the purpose; and as local situations produce advocates for each, they will be hereafter specifically noticed.

Elder, Holly, Yew, Mountain Ash, and Hip-briar, are all natives; the former, prepared as follows, is by some thought to excel any of the latter; a branch of the Elder tree of three years growth is to be cut about the third week in November; it is then with a saw to be separated at every joint: sometimes, when the branch is exactly straight, a length of two joints may be made, for the two shoots which spring from each joint grow alternately from the different sides; these double lengths should be taken from the biggest end of the branch, and will be near three quarters of a yard long; one of these will make the thick end of the top; the other joints are split into four, shaving off the bark and the pith, and every joint tied by itself; the thick end of every piece should be placed towards the But of the rod: after being split, the pieces should be tied together, and kept a *year* at least to season; when wanted, they should be first planed and rasped taper, and square; the edges then filed off exactly round and smooth; the splice must be rubbed very thinly with Shoemaker's wax, filing the outside of the joint so, that when wrapped close with fine white silk, the splice may not be bigger than the joint is, an inch above it. The

Hip-briar is easily found in hedges of old inclosures, which have not been plashed for many years; but it should be thoroughly seasoned before it is split, or the small pieces will be apt to warp in drying; it is cut into lengths of eight or ten inches for tops, spliced or glued together; after which they are properly tapered with planes and fine rasps, finished off with sand paper, and the joints wrapped with silk well waxed; a small piece of whalebone is added to the wood, spliced and wrapped in a similar manner: to this finish, however, some Gentlemen object, and wonder at the prevalent custom of loading rods with eight or ten inches of *whalebone* at the top, since that particular part should be light and elastic; and they contend, that the Whalebone is dull, heavy, and much too flexible: the *Scotch* fishing-rod makers use *Tortoise-shell* at the end of their tops, and it is lighter and springs better than Whalebone.

Yew, especially the white of it, makes a fine top, and the best forest Yew is to be got in Wales; but, unless very well chosen, frequently turns out brittle, from its numerous knots: *Holly* is liable to the same objection. All kinds of wood should be cut in *winter*, when the sap is descended into the root, and kept a year or two, oiling them now and then with Linseed oil, and placing them in such a position, that they acquire no bend, which should they do, it may be rectified by holding them over a gentle fire. Of foreign woods, the *Hiccory* from America will work into handsome and good tops; but the *Bamboo*, or hollow cane, from the West Indies, is to be preferred; in making a top of the latter, care should be taken to preserve the outside, that being its most elastic part: at the extremity of all tops, there should be a loop of hair or a ring for fastening the line to.

The Reed or Cane rod, on account of its lightness and elasticity, is the best for fishing at the bottom, whether with a running line or *float*, especially when angling for those fish which bite tenderly, as Roach and Dace; of these some are contrived to go into the But, and make a walking stick, others are composed of many short joints; all of which are inclosed in a bag. The Tackle shops have variety of these; but in purchasing

a Reed or Cane rod, be careful that it strikes well, and that the *bark* which grows *round the joints* is not *rasped into;* a very common fault which the rod-makers are guilty of; and the consequence of which is, that it is thereby rendered weaker at the joints than elsewhere, and there being no *bark* to repel the wet, it soon rots, and whenever a large fish is hooked, certainly breaks: another thing to be observed is, that the medium between the ferrule and the joint that goes in, is not cut *too fine;* if it is, and a good fish is struck, it is odds but a part of the rod, line, and fish, are all lost together.

The Angler should proportion the Length and Strength of his rods to the different fish; but they ought to bend regularly, taper gradually, be light in hand, and spring from the But end to the top, and recover their shape after being incurvated by the exertions of a large fish, which they will do if the materials are good: the great defect in most rods is, that the play is in the middle, owing to that part being too weak, where it bends like a waggon whip; with a rod of this kind, it is impossible to strike or command a fish of any size. For *Pike* and *Barbel*, sixteen feet is a proper length; the But ends of the rod may be made of *red deal*, the middle of *Ash*, and the tops (which may be shorter than the other joints) of *Hazel;* for Perch, Chub, Bream, Carp, Eels, Tench, the length may be shortened and size reduced; small rings neatly whipped on for the line to run through, enable you to fish under bushes, and from eminences by the water, and likewise strengthen the rod in its smaller parts. For Roach, Dace, Gudgeons, Ruff, Bleak, eight or ten feet is quite sufficient, and the tops cannot be too elastic: screws in the *bottom* of joints are not only heavy, and liable to be out of repair, but are unnecessary, as the common way of uniting one joint in another is amply secure, if the work be true; a Spike to screw into the But end will be useful when a large fish is tired; for by retreating from the water, and fixing the rod upright in the ground by the spike, a tight line will be kept, the rod will play with every lunge he makes, and he may be easily taken out with the landing net.

Rods should not be kept in too dry a room; the practice of steeping them in water before using is bad, and will soon spoil them; the rubbing the Tops with sweet Oil twice or thrice in the Season will preserve them in a serviceable state, and if the rod be hollow, tie a rag to the end of a stick, dip it in Linseed oil, and rub it well about the inside of the different joints.

Lines.

The next article that presents itself is the *Line;* in preparing its materials, much observation is requisite. The Hair that is most proper, is that taken from a young, healthy, grey, or white Stallion, and which is of a pale transparent water colour; that from the middle of the tail is the best. The hairs should be sorted singly, and the biggest, roundest, and freest from blemishes, made up into small bundles; the next sized hairs, and all that are sound and good, are to be alike sorted and parcelled out; they are then to be laid in clean spring water for *twelve* hours; after that, washed well, and dried either with bran, or by hanging them in a room where the heat of a fire or the sun comes, (they must not be placed too near a fire;) when dry, they should be again sorted, and the best done up five or six score together, with their root-ends quite equal, and tied round with thread at both ends and in the middle, and should be kept in a dry place. Hair must not touch *Oil,* which will make it hollow and soon decay; it ought to be kept in *Parchment.* Dipping it in Water every two or three months, and afterwards slowly drying it, will preserve it for Years.

In making *lines,* every hair in every link should be equally big, round, and even, that the strength may be so proportionate, that they will not break singly, but all together; by carefully choosing the hairs they will stretch and bear a much stronger force, than when a *faulty* hair is included. Never strain the hair before twisting; the best will easily be selected by the eye, and two or three inches of the bottom part of the hair

should be cut off, as it is generally defective. The links should be twisted very slowly, and not to be harsh, but so as to twine one with another, and no more, for a hard twisted line is always weak: by mixing *chesnut*, *black*, or any other coloured hair, the line may be varied at pleasure.

The most easy method of making hair into lines is, by a small *Engine*, which is sold at most of the fishing-tackle shops. It consists of a large horizontal wheel, and three very small ones, inclosed in a brass box, about a quarter of an inch thick, and two inches in diameter; the axis of each of the small wheels is continued through the under side of the box, and is formed into a hook; by means of a strong screw, it may be fixed on any post or partition, and is set in motion by a small Winch in the centre of the box; the process is soon acquired, and it is thus used:—Take as many hairs as you purpose the line shall contain, and divide them into three parts; each of these is to be tied to a piece of fine twine doubled, and fixed to the hooks which impend from the machine; then take the piece of lead which has a hook at its top, and after tying the three parcels of hair together at the loose end, hang the weight thereon: after this, cut three grooves in the sides of a Cork, at equal distances, and in each groove place a division of the hairs, that, by gently turning the engine, the links may turn with the greater evenness to the lead. As the link grows tighter, move the cork slowly upwards, and when the whole is sufficiently twisted, take out the cork and tie the link into a knot, and so proceed till the quantity of links wanted for a line are completed; observing to lessen the number of hairs in each link, in such proportion, as that the *line* may be taper. The links should then be laid for an hour in cold water: some persons, whether a hair starts or not, retwist them, before they are made into a line, and more particularly when there is an odd hair in the number twisted. Some put the hair for ten minutes into *warm* water, *before* working it into links.

To make a fly-line without the aid of the above-mentioned Engine, and where a *Reel* is not meant to be used, take three hairs, put them level

at top and knot them, cut off the other ends so far as they appear faint, leaving all of the same length; then hold them over the top between the thumb and finger of the left, and begin twisting with the right hand, stroking them frequently below the hand that holds them to keep them from entangling; then proceed to the end and knot it; when four of these are finished, make four with four hairs each, four with five hairs, and continue increasing a hair until the quantity requisite to complete the line is done; these links should be then put into *cold* water for half an hour, which will shew whether the hairs shrink in any of the links, and such as do must be retwisted; the four smallest are to be tied together in water knots*, leaving the finest (should there be any difference) lowermost: proceed thus in fastening the links together until the line is made, which should be from nine to twelve yards long: the short ends must be cut away near the knots, and whipped with well-waxed silk, and a Loop made at each extremity: one to fasten to the rod, the other to loop on the foot links, which should never consist of more than three, of either *gut* or *hair*, for fly or bottom fishing. In making strong lines for bottom or other angling, they may be began with any number of hairs, and increased every, or every other link; recollecting, that in a *four*-hair link they may be divided as you twist, keeping two on each side the hand; with *six* they must be divided in three equal parts, and in like manner for any size that the fingers can twist, and which they always do better than any other mode of twisting.

Sorrel, chesnut, or brown coloured hairs, are best for ground angling, especially in muddy water, as they nearly resemble the colour of the water; white, grey, or darkish white hair is for clear streams. Some use a pale watery *green* for weedy rivers in Summer. Black will only do for rivers immediately flowing from *mosses*. There are many receipts for dyeing hair,

* The water knot is thus done:—lay the end of one of the hairs four or five inches over that of the other, and through the loop which would be made to tie them in the common way; pass the long and short end of the hairs, which will lie to the right of the loop, *twice*, and, wetting the knot with your tongue, draw it close, and cut off the spare hair.

but where *copperas* is used, the hair is injured by it. The following will give a *green* deep enough for the Angler's purpose.

Take a pint of strong ale, half a pound of soot, a small quantity of the juice of walnut-leaves, and an equal quantity of alum powdered fine; mix them well, and boil them in a pipkin half an hour; when the mixture is cold, put in the hair, and let it remain ten or twelve hours.

Some boil a quarter of a pound of soot in a pint of strong alum-water, with a little juice of walnut-leaves, for half an hour, and steep the hair in it when nearly cold.

For a *brown*, take some powdered alum, boil it well until dissolved; then add a pound of walnut-tree bark from the branches when the sap is up, or the buds, or green nuts; boil it an hour and let it stand, after skimming it for ten minutes; then put in the *gut* or *hair* for about a minute, (stirring it round,) or until you like the colour. If it continues too long it will become quite dark, and *rot* the hair. The lighter it is tinged with this colour the better. *Salt* and *ale* will also give hair a brownish cast that is steeped in it.

For a *blueish* water colour, proceed as above: only add *logwood* instead of the walnut, and be careful not to colour it too much.

Yellow; the inner bark of a *crab-tree* boiled in water, with some *alum*, makes a fine yellow, which is excellent when the weeds rot, the line appearing of the same hue. Another may be obtained from two quarts of small ale, and three handfuls of walnut-leaves bruised therein; the hair to remain in it until tinged to your wish.

Tawny is made with lime and water mixed together, by steeping the hair in it for four or five hours, and then soaking it a whole day in a *tan*-pit.

Russet; take a pint of strong *lie*, half a pint of *soot*, a little juice of walnut-leaves, and a quart of alum water; put them together into a pan, boil them well, and when the liquor is *cold*, steep the hair until it acquires the colour you desire.

The hair to be dyed should always be the best *white:* the seasons for using dyed hair are September, and two following months for the *yellow. Russet* all the Winter, and until the end of April, as well in rivers as in lakes: for the same periods, the *brown* and *tawny* should be used in blackish, heathy, and moorish Waters.

The various shades in sorrel hairs will naturally furnish lines proper for most waters discoloured by *rain*, or running on *sand* or *gravel*, particularly when mixed with white; and for bright water, the white alone will be sufficient.

Lines of Silk or Hemp may be coloured by a strong decoction of *Oak bark*, which it is believed resists the water, and adds to their durability: any shade of an excellent *russet brown* may be obtained according to the time they remain in the decoction, which should be used cold.

Some further remarks upon *Lines* will be inserted, when the *fish* for which they are particularly used are mentioned.

Floats.

Floats are of many kinds; of Swan, Goose, Muscovy Duck, and Porcupine quills; the first is preferable when *light* baits are used in rivers or deep waters, and the others for slow streams or ponds, where the water is not very deep, and where the baits are pastes, &c. The quills of the *Bustard* some anglers use, believing that the small black spots with which they are *(erroneously)* said to be mottled, appear to the fish as so many

little flies, and attract them by this deception. For heavy fishing with worm or minnow, and in rapid eddies, the Cork float is best, and is made by taking a cork free from flaws, and with a small red-hot iron bore a hole lengthways through the centre; it is then to be cut across the grain with a sharp knife, about two-thirds of the length, and the remaining third (which is the top of the float) rounded with it, and then neatly finished with pummice stone; the whole resembling in shape a child's peg-top: for *Pike*, *Barbel*, and large *Chub*, the cork should be the size of a small Bergamot pear; for *Trout*, *Perch*, *Eels*, not bigger than a walnut when the green rind is removed; a quill is fitted to the hole, and used *formerly* to be cut off close to the cork at each end of it. Some direct cork floats to be proportioned to the number of hairs the line is made of, and no larger than a *horse-bean* for a single hair; but so diminutive a cork is of no use, and the Quill floats will answer better. Some recommend the shape of a cork like a pear, and not to exceed the size of a nutmeg, and the quill that passes through it not to be more than half an inch above and below the cork; they are now made with a cap at the top, and wire for the line to pass through at the bottom. The advantage the *cork* float has over the *bare quill* is, that it allows the line to be leaded so *heavily* that the hook sinks almost as soon as put into the water; whereas, when *lightly* leaded, it does not reach the bottom until near the end of the swim. In leading of lines great care is needful to balance the floats so *nicely* that a very small touch will sink them. Some use, for this purpose, lead shaped like a barley-corn, but shot are better; and for fine fishing have a number of *small* in preference to a few *large* shot on the line; the lowest of either ought to be nine or ten inches from the hook.

Quill floats are thus made: the barrel part is cut off from that where the feathers grow, the inside cleared from the film, and a small piece of pitch fixed close to the end; a piece of cotton is then introduced, and upon that another piece of pitch, which not only confines the cotton, but assists in making the float discernible in water. A piece of soft wood, the size of the quill, about two inches long, of which nearly one inch is to

be introduced into the quill, after being dipped into a melted Cement of bees-wax, rosin, and chalk, in equal quantities; the lower end of this plug is to be tapered, and with a fine awl a piece of brass twisted wire, with a round eye at the end, is to be passed as a screw into the plug, with a pair of pliers, turning the float round; the line passes through this eye of the wire, and the upper part of the quill is fastened to the line by a hoop made of a larger sized quill, so as to admit the thickness of the line, and which ought to fasten nearly an inch from the top of the quill. (These *caps* should be secured by fine waxed silk, varnished over, which prevents their splitting; and so also should the end of the quill round the plug; which will greatly preserve the float.) These hoops, and the tops of the floats, may be dyed red, (which will render them more conspicuous,) by putting as much powdered Brazil wood into stale chamber-lie as will make it a deep red, which may be seen by applying it upon a piece of white paper: then take some spring water, and put a handful of salt, and a small quantity of *Argol*, into it; stir them until they are dissolved, and boil them well in a saucepan; when the water is *cold* scrape the quills, and steep them a little time in the mixture; afterwards let them remain in the chamber-lie for a fortnight, and, after drying, rub them with a woollen cloth, and they will be transparent.

If two quills are wanted to be joined together, it may be done by a plug a little thicker in the middle than at the ends, which are to go into the mouths of the quills; dip the two ends into the above cement warmed, and fix the quills upon it, or by dipping the ends of both quills, *without the plug*, into the cement, and inserting one into the other while thoroughly warm, the cement when cold will strongly fix them; rub the float all over with wet coal dust and a woollen cloth, dry it with one of linen, and after that dry coal dust will polish it effectually. Quill floats should be so leaded as to just suffer their tops to appear above the surface, that the slightest nibble may be perceived; if either a cork or quill-float fall on *one side*, the lead is either on the ground or insufficient to keep them in a proper position.

In fishing with a float the line should be a *foot shorter* than the rod; if longer, it is inconvenient when a fish is wanted to be disengaged; and the rod should be fourteen or fifteen feet long, light, stiff, and so smart in the spring as to strike at the extremity of the Whalebone.

Hooks.

At this period it is of little use to mention how *Hooks* are to be made; if the Angler is informed of the sort best suited to promote his diversion it will be sufficient, for they are to be purchased for *less* than, in all probability, he could make them. The excellence of hooks depends on their being *tempered* so as not to snap, and yet not to bend with the force of the fingers: this art of tempering the Steel Prince Rupert, (to whom the world is indebted for the invention of scraping in *Mezzotinto,*) in Charles the First's reign, is said to have communicated to Mr. *Charles* Kirby, in whose family the secret has been continued until this time, as *Kirby*'s hooks are still in high estimation. Ford is also a good maker. In the choice of hooks those should be preferred that are longish in the shank, strong, and rather deep in the bed, the point fine and straight, and as true as it can be set to the level of the shank, (which, for Fly making, should be tapered off to the end, that the Fly may be the neater finished,) the point should be sharp, and the barb of a proper length: many experienced Anglers, who have impartially tried both kinds, consider these to be more sure than the *crooked* hooks; that they cause a smaller orifice, and are less liable to break their hold. At *Limerick*, in Ireland, the best of these hooks are manufactured. A hook, whose point stands *outwards*, ought never to be chosen, as it frequently scratches the fish without laying hold: if the *points* were somewhat *shorter*, and the *barbs* a trifle *wider*, the hooks of every maker would be improved. When hooks are blunt, a small *whetstone* will restore their sharpness much better than a *file*, which always leaves them rough and jagged.

When hooks are *armed*, especially to hair, it should be done with small but strong silk, well rubbed with Shoemakers wax, after having smoothed the shank with a whetstone, to hinder its fretting; from a straw's breadth below the top of the hook, wrap the silk about the bare shank until it comes to the top, which will prevent its slipping, or cutting the line from frequently using; then lay the hair or gut on the inside, and whip with the silk downwards almost to the bend of the hook: the *colour* of the *arming silk* should be as near that of the baits used as may be, and its size be regulated by the thickness of the wire, hair, or gut, to which it is joined. In whipping on a hook, it is to be held in the left hand, and the silk whipped down to within four turns of its bend; the shank is then to be taken between the fore finger and thumb of the left hand, and the end of the silk close to it, holding them both tight, and leaving the ends of the silk to hang down; the other part of the silk is then to be drawn into a large loop, and with the right hand, turning backwards, continue the whipping for four turns, and draw the end of the silk, which has hung down under the left thumb, close, and cut it off.

Tackle.

The Angler will take care, when he means to fish at bottom, to have with him different kinds of *Lines* neatly coiled up, strong *single hairs*, *Hooks* untied of divers sorts, and also tied to bottom links of coarse and fine *gimp*, of twisted and single *silk-worm gut*, of *hogs bristles*, and of white and sorrel hair; likewise to be provided with Cork and quill *floats* and spare *caps*. *Shot* split, and small pistol bullets to poise the floats; Shoemakers wax in a piece of leather; (if the *Wax* be too stiff, temper it with *Tallow;*) *Silk* of various sizes and colours;—recollecting that hooks for *worm*-fishing and *red* paste are usually tied on with *scarlet;* and those for *Gentles*, *Yellow* paste, and *Grubs*, with straw-coloured silk; —a *Plummet* to ascertain the depth of the water when a float is used; a *clearing Ring* to disentangle the hook, which is used by running it along

and over the top of the rod, and gradually down the line, (holding it by a strong twine, long enough for any such purpose,) to where the hook is fast, if at a Stump or other immoveable substance; but if it be hung to Weeds, let the ring get *below* the hook, then pull the twine, and the ring will break the weeds, and thus save both line and hook: in the former case, if it does not release the hook, it will enable the line to be broken near to it, and prevent the line from being strained in any other part. A sharp pen-*knife*, a pair of *scissars*, a small *whetstone*, about two inches long and a quarter of an inch square, are indispensable. A *landing-net*, the iron hoop made with joints, and a socket to contain a handle for it; some use a large hook that screws into a long staff, which not only secures the taking a large fish out of the water, but also is a useful implement in disengaging the line from Weeds, or boughs of trees. A *disgorger*, to put down the throat of a fish when he has swallowed the hook, until it is touched, when by pulling the line gently, at the same time that the instrument presses down the hook, it will be freed. These may be made of a piece of split Cane, five or six inches long, and a quarter of an inch wide, with a notch at each end. Baits should be carried, the *gentles*, *pastes*, and *natural flies*, in *tin* boxes; for the latter, with holes punched in the top to admit *air*. He will likewise not be without *Worms* of different sorts in *canvas* and *woollen* bags, and a larger one for *malt* or other *ground-bait:* to hold the baits it is far better to have something like a fish-woman's *apron*, with three or four partitions, than to dangle the gentle-case or worm-bags from a *button*. It may be thus made: a piece of coarse cloth, three quarters in length and breadth, doubled to within three inches at one side; which three inches must be doubled back again, and sewed all along close to the first doubling to receive a belt; the great doubling at each side is then to be sewed up, so that the *foreside* may allow room for the hand to go easily into the pockets, which will be ten inches deep, and when stitched in three places will leave four divisions, each four inches broad. The *Fish-basket*, *Pannier*, or *Creel*, as they are made very neat and light in *Wicker*-work, should be large enough to admit the fish to lie at *full length;* they are thus better preserved both in appearance and for use, than

when bent and crushed together; some persons carry their pannier at their back, others under the left arm, having the side nearest them rather hollowed: in these baskets are sometimes a partition at the top, for holding *night lines*, &c.

For the keeping and carrying of lines, links, single hairs, &c. a *Case* may be made with a piece of Parchment or *vellum*, seven inches by ten; on the longer sides set off four inches, and then fold it *crosswise*, so as to leave a flap of two inches. *Eight* or *ten* pieces of parchment, seven inches by four, are then to be put into the Vellum or parchment first mentioned, to be folded, and the ends sewed up; the flap may be cut rounding, and folded down like a pocket-book; the ends and flap being bound with *red tape*, will strengthen it. By having several of these cases they may be filled with lines, &c. proper for every kind of fishing, and in each a *disgorger* should be always put.

Some persons have two books with divisions, one holding *fine* tackle, for Trout, Perch, Roach, Dace, Bream, Gudgeons; the other containing *coarse*, for Pike, Barbel, Chub, Eels, &c. A very neat and experienced Angler has recommended the following: a piece of fine black calf leather, seventeen inches long and seven broad, to be so doubled that the two ends may be about an inch from each other; this to be sewed nicely at both sides, but the ends to be left open. Into each of the two sides six partitions of fine parchment are to be neatly stitched to the bottom of the pockets. One side of this book is meant to hold *Fly*, the other *Bait-tackle*, and to be thus furnished: in the *partition* next the outside two strong lines of twelve hairs at top, and six at bottom, with neat loops of not more than three quarters of an inch. To lengthen these lines two links of five hairs at one end, and four at the other, and about four feet in length: in the same partition two thin square parchment covers, open on one side, contain *links*, about a yard and a half long; some with *one*, others with *two*, *flies* at them, to change at pleasure with those on the line; and in two more cases a dozen or eighteen flies dressed to *silk-worm*

gut, or to three or four *hairs*. These four cases, two of which are the length of the partition, with the two *lines* and *links*, compose the *strong* fly tackle.

In the next partition the same number of lines and links, only the lines to have but three hairs at the bottom, although as big at the top; these have *links and flies* suitable to them, upon very fine *gut* and two strong hairs, and are more numerous as being in greater use. In the *third* division, two lines, ten at top, and two hairs at bottom, but no links to *lengthen* them. All the links to be *single hairs*, with two or three hooks each; about a dozen of these in one case, a case of *flies* dubbed, and another of hackles of a woodcock's wing, &c.

In the *fourth* partition, papers folded nearly its length, one containing feathers from the upper side of a woodcock's wing near the joint; the same from a Moorpout; another, cock's hackle, stripped ready for use; with *Lapwing* Plover toppings, Ostrich feathers of several colours, and a few peacock's: a third paper has feathers, for wings, from the Drake, Starling, Land-rail, and other birds.

In the *fifth*, folded papers, with all sorts of *dubbings;* in one properly *noted*, mixed ready for several flies, with a feather or two fit for wings: amongst the dubbings, *these* should always find a place, *viz.* the soft down from a young *Hedge-hog*'s belly, black *Rabbit*, the finest of *Swines* down, dyed of several colours; *Camels* and *Bears* hair.

In the *sixth*, coils of single hairs, fine Indian grass, silk-worm gut, &c. Silks ready waxed, wrapped round a card; and in an oiled case hooks of several sizes.

On the *Bait*-side of this fishing-book, nearly the same method is observed as in that of the *Fly*. Lines, made in the same manner, but shorter, with links to lengthen them when needful.

In the *first* partition, two lines for *trolling* with *Minnow*, complete; in the *second*, four lines of different length and strength, for *Brandling*, *Creeper*, *Cod-bait*, and *Grub*-fishing.

The *third* contains two parchment cases, with *links* ready to loop on to the *lines*, fitted with hooks, according to the bait meant to be used.

The *fourth;* two or three fine lines, and in cases, links with *single* hairs, to fish with *natural flies* and *insects*, when the water is very clear.

The *fifth;* two long and strong lines to fish in eddies and deep streams at night, with *Dew-worms*, *Snails*, *Moths*, *Beetles*, &c.

The *sixth* holds bait-hooks of various sizes, in an oiled parchment, pieces of wash-leather and cork, cut neatly to imitate *Cod-bait*, *Straw-bait*, &c. *Grass*, *Gut*, and unplaited hair. When the Book is closed together, it will be seven inches long, and about five in breadth, and filled as above, will be an ample Magazine.

A *Tin box* is sometimes preferred for carrying *Fly*-tackle, as the flies are not *pressed* in it, as they are in the Book.

The Weather and Times, proper and improper, for Angling.

Various are the hints and observations upon *Angling*, as it is affected by the *Weather**, and equally numerous are the directions to form a proper judgment of it; many *prognostics* will be noticed, and also a cautionary mode of defending the Artist from its effects. The late Dr. Franklin observed, that of all the amusements, which the ingenuity of Man had devised, none required the exercise of *Patience* so much as

* St. Christopher presided over the Weather, and was the Patron of Field Sports.

Angling; and he enforced his remark by reciting the following:—that setting out from Philadelphia, at six o'clock on a Summer's morning, to go about fifteen miles, he passed a brook where a Gentleman was angling; he enquired what sport, and was told none; but, added the Gentleman, I have only been here *two hours*. The Doctor continued his journey, and on his return in the Evening, found the Angler at the same spot, and repeated his enquiry; very good sport was the reply: the Query was naturally resumed, by asking how many fish he had caught? None at all, answered the Gentleman, but about the middle of the day I had a *most glorious nibble*.

To the Doctor's anecdote, that of the river *Lea* Angler may be added:—This person being daily seen at one particular spot, a brother Angler conceived it must be the resort of abundance of fish, and *there*, one morning at day-break, began his operations. The usual Attendant of the place arrived some hours after, and threw in his line; a long silence ensued, when the first Comer remarked, that he was out of luck in not having caught any fish in this favourite Hole, which, says he, I am convinced it is with you, from the constant attention I have seen you pay to it. Sir, replies the Gentleman, I confess long Custom has rendered me extremely partial to the spot; but as for the fish, I assure you, that *here* have I angled for *forty years*, and never had *a bite yet*. Without expecting the modern Angler's patience will equal that of either of the above persons, it is absolutely requisite he should be possessed of a full stock, notwithstanding he providently observes the following directions as so many points in his favour.

Never angle in glaring coloured clothes*; perhaps *green* is that which the fish discern least, as varying less from those objects, such as

* Markham, in his *Country Contentments*, has a whole chapter on the *Angler's Apparel* and *inward qualities;* among others, he was to be a general Scholar in all the liberal Sciences; as a *grammarian*, to be able to write or discourse of *his Art*, in true and fitting terms; to have *Sweetness of Speech*, to entice others to delight in so laudable an exercise; and also *Strength of*

Trees, and Herbage on the sides, to which they are familiarized. The Angler should shelter himself by standing (unless the water is muddy from rain) far from the *bank*, or behind a *bush* or *tree*, where he can just see the float, and so that his Shadow does not at any time lie upon the Water, especially where it is shallow, and the gravelly bottom can be discerned.

In a *pond*, angle near where the Cattle go to drink. In *rivers*, where such particular fish as you are in pursuit of, choose to haunt. Places where there are many weeds, or old stumps of trees, harbour fish in great numbers; *there* they lie close and warm, and usually bite freely: but there is a great nicety required to cast in the Bait, and when a fish is struck, the line is so apt to be entangled, that the least rashness loses both that and the hook.

Deep waters are best to angle in, as the fish are not then disturbed by wind and weather.

The best periods are from *April* to *October;* from *three* until *nine* in the Morning, and from *three* in the Afternoon, so long as there is *light;* the *later*, the better sport. In *winter*, the weather and times are much alike; the *warmest* is most preferable.

Before fish spawn, they generally come upon sandy Fords, to rub and loosen their bellies, at which time they bite freely; when there is a gentle *rise* of a river, and the water begins to be discoloured, *Chub*, *Perch*, and

Argument, to defend it against Envy and Slander. With proper hooks, fine tackle, and so much Science in store, the Angler, it is to be presumed, would stand a fair chance of Success: but without additional acquirements, he might as well stay at home; for Mr. MARKHAM continues respecting his *Fortitude*, "then must he be *strong* and *valiant;* neither to be amazed with Storms, nor frightened with Thunder; and if he is not *temperate*, but has a *gnawing* Stomach, that will not endure much *fasting*, but must observe Hours; it troubleth the mind and body, and loseth that delight which only maketh the Pastime pleasing."

Eels, bite well; *Pike* in Summer, when the river is clearing *after* a flood, do the same. At the opening of Sluices or Mill-dams, the *course* of the water should be pursued, the Angler will hardly fail taking fish that swim *up* the stream seeking *food*, which the water brings down with it. Whirl-pools, the falls of Mills, under Bridges, and Eddies near hollow banks, are favourite haunts; and, in the *Summer*, all fish bite keener in rapid, stony, gravelly Rivers, than in such as run gently, and have slimy, muddy bottoms.

In May, especially if the Morning proves cold, (although there be no frost,) fish seldom bite until the day becomes warmer; if cold all the day, they bite best where the Sun shines, not at all in the *shady* parts of the river.

When the day is dark or lowering, and a gentle whistling wind plays on the water, or a fine mizzling rain falls without violence; likewise when *Trout* leap out of the water, and *Pike* shoot after other fishes; and also when a sudden shower has a little muddied and raised the water, if the Angler tries on the *sides* of the Stream at the ground, with *brandling*, *gilt-tail* or *red* worm, well scowered, he will have diversion.

At the *conflux* of rivers that *ebb* and *flow*, it is best angling at the *ebb*; sometimes when the Tide is not strong they will bite at Flood, but very rarely at *high* water.

In a brisk south or west wind, no matter how high it be. After floods, when the water returns within its common bounds, it fines, and is of a *whey* colour; when a river is much swelled, and it runs violently, *then* in any still holes by its sides, or the mouth of milder currents; such as *brooks* that fall into it, and the ends of *bridges* where the water runs quiet, and is not too deep: after a flood, fish rise well, being glutted with *ground*-baits, they then covet the Fly.

The best Winds for most common fish, are those from the *south* or *west*, or *south-east*, when they blow *warm* in the Spring with a good breeze; but for *Salmon* and *Trout*, a strong wind is best; in very warm weather, a *cool* wind from any of these points, is better than too warm; in *Autumn* and *Winter*, the *warmer*, the greater success. Some affirm, that in an East or North wind the attempt to angle is absurd; the fish indeed may not take so freely for a day or two at the *commencement* of such winds, but if they continue in these Quarters, the fish *will* and *must* come out to feed, and the Angler will not be deprived of his sport, provided he selects parts where the water is *sheltered* from such winds, and even in the Streams where it is not, by keeping his back to the wind, and fishing near to the side he stands on. Of this opinion was WALTON, who (quoting SOLOMON, "that he who considers the Wind will never sow") observes, "that if it be a cloudy day, and not extremely cold, let the wind sit in what corner it will, and do its worst, I heed it not; and yet take this for a rule, that I would willingly fish standing on the lee-shore: and you are to notice, that the fish lies or swims closer to the bottom, and in deeper water, in Winter than in Summer; and also nearer the bottom in a cold day, when they get the lee-side of the water."

The days following bright *star* and *moonlight* nights are most conducive to the Angler's sport, particularly when they chance to be windy and over-cast with Clouds, or with flying Showers; for, abstaining from food all Night, the darkness of the Day makes them more eager: a bright and calm morning, that changes to cloudiness, without rain, and a good brisk wind, will bring the large fish on their feed; and also in stormy, showery weather, after each shower subsides, the Angler will not be disappointed in his Amusement; but let *Seasons* be ever so favourable, yet *neatness* in his *tackle*, a proper knowledge of the various *baits*, and the *resorts* of the different kinds of fish, will insure the best prospect of Success, and give him a decided superiority over the inattentive and unskilful.

When Rivers are low from great droughts, and in the *heat of the day*, from May until September, (unless shadowed by clouds,) the Angler will find small encouragement.

In cold weather, when what is termed *Snow-broth* is in the river, and if there is an hoar Frost, either in *Spring*, or more advanced part of the season, fish will not bite, except in the Evening, should it prove warm and pleasant.

Until the recovering their Strength after *Spawning*, (and that is generally in a fortnight or three weeks,) no sort of fish will take a bait; after that time, they will bite eagerly at their usual places.

In Summer, when Clouds arise that bring *storms*, fish will be driven from their food, although they had bit well before. Thunder and Lightning are unfriendly to the Angler, and few will remain at the water side, when apprised of the result of such unfavourable weather.

It is improper to angle when a River is high, and discoloured by long continued Rains; the fish are then dispersed in every part of the stream, and have left their usual haunts.

When *nights* are dark, or cloudy with wind, little sport is to be expected the next Day; the large fish, particularly *Trout*, range and feed through the *whole* of such Nights; consequently, their hunger is satisfied, and, for hours after, they remain quiet in their holds.

In places where Sheep are frequently washed, Fish are glutted with what they find there; and although it draws them together as to a baiting-place, except after the *first* time, they will not bite.

The following may be termed GENERAL Observations for the Angler's

guidance:—To induce fish to come to any particular spot, *boiled wheat*, grains of malt, *graves* (from the Tallow-chandlers) cut small, should be thrown in plentifully two or three times. A composition of ground *malt*, *blood*, and *clay*, is the best for Salmon and Trout; to which some add *Ivy Gum*.

It is a very excellent method in Angling, (whether with ground line at bottom, or with a float,) for all sorts of fish that take bait of which an abundance can easily be procured, and which are meant to be fished with, to throw some of it the *night before* near the places either in River, Pond, &c. that are to be fished the *next morning*; and in choosing the places where the ground is to be baited, select those on a clear gravelly bottom, in a suitable depth of water, where it is free from Weeds or other obstructions, according to the season of the year, the shyness of the fish, and as near their holds as may be; if possible, not above two or three *yards* from the bank-side the Angler stands on, and where he can play and land the fish most conveniently; in baiting, scatter the materials about as in sowing Corn. If the *ground-bait* can only be used just before the Angler begins to fish, the quantity may be curtailed from that which would be necessary to be used a Night previously. Should *Worms* be intended to be fished with, cut them, for baiting the ground, in pieces; if *Paste*, make it into pellets; if *Gentles*, throw in a handful; always remembering to suit the ground-bait with that upon the *Hook*; it will cause the fish to bite at *that* with less Caution, and also keep them to the Place.

In float angling, where the fish have not been collected by *ground-baiting*, the Line should be two or three feet *longer* than the Rod in *river* fishing, and as much *shorter* for *standing* waters; in the former, cast the bait *underhand* as high as possible up the stream; let it be carried down as far as the rod and line will permit without the Angler's following it, and then let him, as he removes, cast it upwards again: by this means he will not alarm the fish, which his moving *backwards* and *forwards* certainly would do.

The Angler, in trying a River he is unacquainted with, should seek out the *Eddies*, which are generally at the corner of a stream; and *there* the large *fish* lie, expecting their food, which the Current brings down, and which the eddy, by its circular motion, gives them time to seize; the *larger* will not suffer the *smaller* fish to keep these stations; the latter are therefore to be found in *rapid*, but more abundantly in placid parts of the river: he need not be reminded of informing himself which sorts of fish it produces, and to be suitably prepared, so as not to be abridged of his sport for want of a supply of the requisites to prosecute it, through his own negligence: and if it be a river he means to frequent in future, he will clear those places which are over-run with *wood* or *weeds*, and make those remarks as to its being muddy, stony, or sandy, and of its swift or languid motion, which will enable him to suit his Tackle to the best advantage.

If the Angler, especially when fishing with the *natural* fly, opens the first fish he catches, and sees what it has in the Stomach, which lies from its gills to its small guts (and which he can easily do, with a sharp pen-knife, without bruising,) he will perceive the food it has last swallowed, and can use *fly* or other *bait* accordingly; the same process will inform him as to the *ground*-bait which the fish has last fed upon.

In fishing either at *top*, *mid*-water, or at *ground*, strike *gently* and *upright*; and if a good fish is struck, the rod should be kept *bent*, which will prevent his running to the end of the line, by which he may break his hold; the Strength of the line or rod should never be relied on, but the landing net *always* used: in fly-fishing, the line may be sometimes touched to draw a fish nearer; but this must be done with caution, and on *no account* is a large fish to be attempted to be raised out of the water by it; if it is practicable after striking and turning a large fish, where the ground has been baited, the Angler should try to lead him to some convenient landing-place away from the *baited spot*, so that it may be disturbed as little as possible.

When angling in a *boat* in the *Thames*, or any river that *ebbs* and *flows*, the boat must be set steady by an anchor or poles; begin at flood, and continue fishing until the water has half ebbed. As the Tide flows, fish *before*, and when the water falls, *follow* it. Plenty of ground-bait is necessary for this sort of angling; little balls of which may be squeezed round the shot above the hook, which will sink it exactly on the spot; and the least jerk of the rod will cause it to fall off, (if not too stiffly made,) and leave the bait and float in their proper position.

When fish bite *remarkably* well, observe the Moon's age; whether the Night preceding was *windy*, *dark*, *star*, or *moonlight*; what kind of day as to the temperature of Air and Water in which they were so eager; the month, day, hour, and what *baits* were best taken: similar observations upon days when fish *refuse* biting, may enable the Angler to draw conclusions, which will, in all probability, save him from many hours of wearisome Expectation.

In angling at any spot after having good sport, should the fish *suddenly* leave off biting there is some fish of *Prey* come to it. Use strong tackle, and put any small fish alive (a *Minnow*, if it is to be got) upon the hook, by sticking it through his *upper lip* or *back fin*; if either Pike or Perch be there, the bait will be taken. A more expeditious way than changing the tackle is, to have a *trimmer* or two, which may always be applied advantageously, and will soon clear the place from these voracious Intruders. The same plan should be pursued after baiting a spot; if the Angler has no diversion, (supposing no person has made a previous trial, and there is no impediment in the season or water,) he may depend upon the *Pike* or *Perch* having possessed themselves of the place, and he must catch them, before the other fish will approach it.

All baits, both *natural* and *artificial*, should first fall *gently* into the water, before any part of the Line touches it; nor should more of the line

than can be avoided ever lie upon the Surface, as it occasions a *circling* in the water, which much frightens the Fish.

Small fish bite more rashly than large ones of the same Species; but both young and old, if ever they have been *pricked* with a hook, approach a bait afterwards with much Caution; and in angling for Perch, Carp, Tench, Bream, Chub, or Dace, should one escape after being hooked, the Angler had better shift his station for two or three hours, until the alarm has subsided, which such a circumstance never fails to create.

In putting any live bait on the hook, care should be taken to hurt it as little as may be; *dead* natural baits hold no Comparison with *live* ones as to their Effect.

When any fish is *hog-backed*, with a *small head*, *this* is a sure sign of that fish being in Season, of whatever sort it is.

All fish in Summer, except *Tench* and *Eels*, lie for the most part in the shallows and streams; after *August*, the great fish begin to retire towards the *Deeps;* and so soon as *Michaelmas* is turned, all return there for their *Winter* residence.

Should the Angler wet the joints of his rod in sultry weather, with the intention of making them fit tighter, (but for which there is no necessity if they are truly made,) and they should so closely adhere as not to be easily moved, *force* must not be employed to separate them, which will in all likelihood strain the rod; but the *ferrule* of that joint which is fast, should be turned round over the flame of a Candle, and it will soon be loosened.

The Angler ought to consider that fish, in most Waters, bite earlier in a mild, forward, than in a cold, backward *Spring;* later in Autumn, as the weather is hotter or colder, and both *Spring* and *Fall*, sooner in a warm

than in a cold day, and in the *Sun*-shine better than in the *Shade:* from *Michaelmas* until *April*, in the deeps at bottom, the air clear, and no wind stirring, fish bite freest in the *warmest* part of the day; after *April*, the colder the day is, fish the closer to the *bottom;* the hotter, the nearer to the *top;* supposing the ground not to have been baited; but never angle following the *wind up the stream.*

The Angler who uses *fine* tackle or single-hairs, in clean, clear, and large waters, and properly conceals himself, will take five times more fish than he who fishes *coarse*, or in sight, especially when the former has a *Reel* on his rod, with a running line, and if he wades in *shallows* and *sharps*, in fishing for Trouts. The *footlink* the Angler should be careful to suit to the water; the rest of the line is immaterial. A *reddish sorrel* hair, when the water is somewhat red on the decline of a flood; a *light chesnut*, when the water is of a *whey* colour; a lead-coloured hair is preferable, when the water is of an *iron* hue, which it commonly is, in many rivers, when full without overflowing; an *amber* foot-link, free from chalky white, or knitty specks, is best, when the water is low and clear as Crystal.

The Angler should always have the *wind* at his *back*, and the *sun* or *moon before* him, as much as possible, in cold windy weather especially, he should be on the *weather* shore, where the fish then resort for warmth, and the calmness of the water. The *East* wind, for Angling, has been universally execrated, but probably this may not hold good in Rivers, running from *East* to *West.*

Walton, the great Father of the Angling Art, does not seem to have reposed such implicit reliance on the Vicissitudes of the weather, as many have; however, as their influence is held by some Anglers in high estimation, some of the many *Prognostics* respecting the weather, derived from Vapours, Clouds, Planets, Wind, and the Animal Creation, will be here noticed.

Clouds.—When there are two different currents of clouds, especially if the lowest flies fast before the wind, and these appear in hot weather in the *Summer*, they portend the gathering of a Thunder storm.

When thin whitish clouds fly swiftly in the air under those that are thicker, and when small scattered ones appear in clear weather, *Rain.*

When a general cloudiness covers the Sky above, with small black fragments of clouds like *Smoke*, driving underneath, *Rain* is not far off, and will probably be lasting.

Rain—if a black cloud is seen in the *West* about Sun-setting, and when, at *any time*, such clouds arise suddenly in that quarter.

When the Clouds are formed like *fleeces*, dense towards the centre, and very white at the extremities, with a bright and blue sky about them, they are of a frosty coldness, and will soon fall, either in *Snow*, *Hail*, or hasty showers of *Rain.*

Against *heavy* Rain, every cloud rises bigger than the former, and all of them appear in an increasing state: this is perhaps most remarkable, on the approach of a *thunder-storm;* after the Vapours have been copiously elevated, suspended in the Sky by the heat, and are highly charged with the electrical fluid, small pieces of flying clouds augment and assemble together, until, in a short time, they cover the Sky: as this collecting of the clouds *out of the air*, is a certain forerunner of *rain*, so when they decay and resolve themselves *into air*, it is a sure symptom of *fair* weather.

When Clouds are streaming within the canopy, and small ones enlarge themselves; when they are large, and shaped like rocks or towers; when waterish clouds are on the tops of mountains, and small, rugged, livid ones near the *Sun*, especially at its setting, they all prognosticate *rain:* Clouds

with white summits and livid bases foretel Thunder; and two such clouds rising on either hand, sudden Tempests.

If Clouds are seen to breed high in the air, in thin white trains like locks of *wool*, they denote that the Vapour, as collected, is irregularly spread by contrary winds above: and the consequence will soon be a wind below, and probably *rain* with it.

Small and white clouds, high and light, and when Mountains are free from clouds, are both Symptoms of fine weather.

Wind.—Whirlwind, settled fair. Continuing in the *North-East* three days without rain, *fair* for eight or nine days; going backward, rain; when it veers hastily about to several points of the Compass, *Rain* quickly follows. Some consider when the wind is in this unsettled state, if it follows the course of the Sun, (viz. East to West,) it brings fine weather; if the contrary, foul. When the wind makes a whistling or howling noise, it is as sure a prognostic of *rain* as the wind can afford. A brisk south wind, dry. Wind may be expected from that quarter, or the opposite, if the clouds as they come forward seem to diverge from a point in the Horizon. Wind from North-West to North-East, *fair;* from South-East to South-West, *rainy*. A week's fair weather, with a Southerly wind, *drought;* an Easterly wind the fore part of summer, dry *summer;* Westerly the latter part of summer, dry *autumn*.

Dew.—A heavy dew, *fair*. If it vanishes suddenly or early, *rain*. When the dew lies plentifully upon the grass after a fine day, another fine one may be expected to succeed it; but if after such a day no dew is upon the ground, and no wind stirring, it is a sign that the *vapours* ascend, where they will accumulate, and must terminate in *rain*.

Vapours.—A *misty* morning, and the *mist* falls, a *hot day;* the mist *rises*, *rain*. If general *before* sun-rise, near the full of the Moon, fine weather.

Where there are high hills, and the *mist* which hangs over the lower lands in a morning draws towards the *hills*, and rolls up their sides until it covers their tops, there will be *no rain*.

To judge rightly of the appearance of a *Fog*, it is necessary to be acquainted with the nature of the country, as in some places, if the *mist* hangs upon the hills and drags along the woods, instead of overspreading the level grounds in a morning, it will turn to *rain*. The *contrary*, when it comes down from the hills, and settles in the Valleys.

There is commonly either a strong Dew or a mist over the ground, between a red eve and a grey morn; but if a red morning succeeds, there is no dew.

If a *white* mist in an evening or night is spread over a Meadow through which a River passes, it will be drawn up by the next morning's Sun, and the day afterwards will be bright.

When a Rainbow appears in the morning, *rain*; in the evening, *fine*. The frustum of a rainbow, *rain*; predominantly red, *wind*; green or blue, *rain*; appearing in boisterous weather in the North, *fine*.

Lightning *without* Thunder, after a clear day, is a sign of the continuation of *fair* weather.

Sky.—When those vapours which the heat of the day exhales from the Earth are precipitated by the cold night air, then the Sky is clear in the morning; but if they still remain in the air, *rain* may be expected.

A dark, thick Sky, lasting for some time, without either sun or rain, changes to a fair clear sky, before it turns to *rain*.

When a lowering redness spreads far upwards from the Horizon, either in the morning or evening, it is succeeded either by *rain* or *wind*, frequently

by both; and when a fiery redness with rugged clouds extends towards the Zenith in an Evening, a high wind from the West or South-West, attended with *rain*, follows; when the Sky is tinged with a sea-green colour near the Horizon, when it ought to be blue, *rain* will continue and increase; when of a dead blue, it is abundantly loaded with vapours, and the weather will be showery.

When the canopy is high, *fair;* low, *rainy;* orange-coloured in the morning, *rain;* deep blue ground, *fair;* pale blue, *rainy.*

One observation is adopted into most languages, that, "the Evening *red*, the Morning *grey*, are sure Signs of a *fair* day;" and it is founded upon this circumstance, that if the abundance of vapours denoted by the *red* Evening sky descends in *dew*, or is otherwise so equally dispersed in the Air, that the Morning shall appear *grey*, a fine day may be expected from that equal state of the Atmosphere.

If in a Morning some parts of the sky appear *green*, between the clouds, whilst the sky is *blue* above, stormy weather is quickly approaching.

Sun.—*Rising* orangy, *rain;* rising red and fiery, *wind* and *rain;* cloudy, and the clouds decrease, *certain fair weather;* rising dim, *drizzly.* If the Sun's rays breaking through the clouds are visible in the air, it is a proof that the air is sensibly filled with vapours, which reflect the rays to the sight, and these vapours will soon produce *rain.* When there is a haziness aloft in the air, so that the Sun's light fades by degrees, and his Orb looks *whitish* and ill defined, it is one of the most *certain* signs of *rain.*

Sun *setting* foul, *rain;* red, *wind* or *rain;* blue, *rain;* dusky, streaked with red, *storm;* purple, *fine;* bright, *fine:* when the Sun appears *white* at setting, or goes down into a dusky bank of clouds, it portends the approach and continuance of bad weather.

Moon and Stars.—When the moon and stars grow dim in the night, with a haziness in the air, and a ring or circle appears round the Moon, *rain* is at hand.

If the Moon looks *red*, it is a sign of *wind*; if pale and dim, of *rain*; if *white*, and of her natural colour, with the sky clear, of *fair weather*.

Should the Moon be rainy throughout her course, it will clear up at the ensuing change, and *rain* will probably fall in a few days after, and continue: if, on the contrary, the Moon has been *fair*, and at the change it rains, fine weather will, in all likelihood, be restored about the fourth or fifth day of the Moon, and be of some duration. When the Moon is bright, with sharp tips, *fair*; new Moon not appearing until the fourth day, *rainy* month; the *lower* horn of the new Moon *sullied*, foul weather before the *full*; the *middle*, storms about the *full*; the *upper* horn, foul about the *Wane*. *Saturday's* Moon, *rainy month*.

> But four nights old, (for that's the surest sign,)
> With sharpened horns, if glorious then she shine,
> Next day, not only that, but all the Moon,
> 'Till her revolving race be wholly run,
> Are void of Tempests.
>
> Dryden. Virg. Georg. i. 432.

Atmosphere.—*Cold* after rain, *rain*; *cold* in Summer, *rain*; warm in Winter, *rain*; sultry in Summer, *thunder*; heavy, *fair*; light, *rain*; moist, *rain*; dry, *fair*.

Rain.—*Sudden*, seldom lasts long; coming on gradually, and when the air grows thick by degrees, and the *sun*, *moon* or *stars*, shine more and more dim, it is likely to continue six hours. Beginning with a high *southerly* wind, and the wind subsides, *rain* for twelve hours or more, and sometimes continues until a strong *north* wind clears the air; beginning

before sun-rise, will end before *noon;* a *shower* before sun-rise, a *fine* day usually succeeds; beginning an hour or two *after* sun-rise, a *rainy* day; setting in wet between eleven and twelve o'clock, a *rainy* afternoon; clearing up about that time, the afternoon *fine;* cold wind *after* rain, more *rain;* a squall of *rain* or *hail*, settled *fair;* a *rainy* Friday, the same weather on *Sunday;* and a wet *Sabbath*, a *dagly* Week.

Sounds, such as bells, noise of water, beasts, birds, heard distinctly from a great distance, portend *rain.* If the Earth, or any *fenny* places, yield any extraordinary Scents, or any disagreeable smells arise from drains, *rain.* A *white* frost, *rain* within three days; the more than usual sinking of *rivers*, presages *rain.* The speedy *drying* of the *surface* of the earth denotes a *northerly* wind and *fair* weather*, and its becoming *moist*, *southerly* wind, and *rain;* for the *air* sucks up all the moisture on the surface, even though the Sky be overcast, and that is a sure sign of fine weather: but if the Earth continue damp, and water stand in shallow places, no trust should *be put* in the *clearest* Sky, for in this case it is deceitful.

Animals.—If Cattle or Sheep feed greedily and faster than ordinary when it rains, it is a sign of the *rain*'s continuance; and when *Sheep* skip and play wantonly, Rain is at no great distance. In the mountainous part of Derbyshire, called the *Peak*, the inhabitants observe, that if the *Sheep* wind up the *hills* in the morning to their pasture, and feed near the *tops*, the weather, although cloudy and drizzling, will clear away by degrees, and terminate in a fine day; but if they feed in the bottoms, the Rain will continue and increase. *Geese* and *Ducks* more noisy, and washing and

* It has, however, been observed, that the *Earth*, after very long and abundant Rain, is sometimes seen to be almost dry, and the Roads free from Dirt. This is a sign that the *Rain* has not altogether finished, and denotes a continual Efflux of Electric Matter, which being renewed, carries with it, in the form of Vapour, all the Moisture that falls on the Earth; and there is sometimes a great deal of Dirt after a moderate rain: this is a sign of *fine weather*, because it indicates that Evaporation has ceased.

diving more than usual, *rain; Cock* crowing in the middle of the day, and *Peacock* squalling much, *rain; Kites* hovering high in the air, *fine weather; Owls* screaming frequently in the evening when foul, *fair* and *frosty; Larks* rising high* and singing long, *fine; Redbreasts* singing loud in the open air, *fine;* faintly under cover, *rain;* when the *Moor game* and other birds quit the mountains, and betake themselves to the lower lands, *rain; Crows* are more earnest after their prey before *rain.* PLINY remarks, that "it is a sign of *rain* when the land fowl, especially *Crows*, are clamorous near waters, and wash themselves." HORACE likewise describes this bird as prophetic of impending Showers. When they and *Ravens* stand gaping towards the Sun, it foretels extreme Heat. *Swallows* skimming the surface of water, *rain;* so long as they keep aloft after their prey the Sky is serene; but when they descend and flit along the surface of the earth or water, *rain* is not far off, and the remark will for the most part be correct. A drought of three months duration broke up at the Summer Solstice, in 1775. The day previous to the rains falling the Swallows flew very near the Ground, which they had never done during the whole period of the

* BLOOMFIELD has, with several strokes of minute Originality, thus described this Soaring of the *Lark*, in his FARMER'S BOY.

* * * * * * * *

When Music waking speaks the Sky-lark nigh:
Just starting from the Corn she cheerly sings,
And trusts, with conscious pride, her downy wings;
Still louder breathes, and in the face of day
Mounts up, and calls on Giles to mark her way.
Close to his Eyes his hat he instant bends,
And forms a friendly Telescope, that lends
Just aid enough to dull the glaring light,
And place the wand'ring Bird before his sight:
Yet oft beneath a cloud she sweeps along,
Lost for a while, yet pours her varied song;
He views the spot, and as the cloud moves by,
Again she stretches up the clear blue sky:
Her form, her motion, undistinguish'd quite,
Save when she wheels direct from Shade to Light,
The flutt'ring Songstress a mere Speck became.

dry weather. *Sparrows* chirping much in a fine morning, *rain;* and the *Chaffinch* being loud in his call or note, is a pretty certain signal that wet is fast approaching.

Dogs are said by some to be particularly sleepy, and to eat *grass*, before *rain;* but Grass is a natural vomit, which Nature prompts them to take at all times when their stomachs require such an Evacuation; of course it is no proof that the approach of rain alone drives them to seek this remedy: the *dryness* of the dog's *nose* is stated to be a much surer presage of wet weather. Moles throwing up more Earth than usual, and its being small and dry, and their appearance sometimes above ground, *rain; Worms* creeping in numbers out of the ground, *rain;* and from the same principle that they, as well as Moles, are sensible of the access of something new in the Atmosphere, and to the surface of the Earth. *Frogs* appearing of a golden hue, *fine;* dusky colour, *rainy;* and *Toads* in an Evening crawl over the road or beaten path, where they seldom are seen but when restless, from the expectation of approaching *rain.* Fishes are supposed to be affected, since it is allowed that they cease to bite freely when *rain* is depending. All sorts of *insects* are more stirring than ordinary against *rain.* *Bees* are in fullest employ, but if likely to rain, confine their industry to where they can reach their Hives before the storm arises; when they fly far abroad, and stay out late, *fine;* when the common *flesh flies* are more bold and greedy, hovering about the mouths and eyes of persons and cattle, and are peculiarly troublesome, *rain;* when small flies flock together in great numbers about the beams of the Sun a little before it sets, *fine.* *Ants* bustle more than usual, move their eggs to dry places, and then retire to their burrows before *rain* falls. *Gnats* playing in the open air in the Evening, *heat;* when they form a Vortex, in the shape of a Column, it announces *fine Weather;* when they collect and dance in the shade, *showers;* and when they sting much, cold and *rain.* *Fleas* biting greedily, *rain; Spiders* crawling abroad, *rain;* their *webs* on the ground, or floating in the air, *fine; Bats* flying more numerously, and early in the Evening, *fine; Glow-worms* appearing in unusual numbers, *fine.*

Most Vegetables expand their *flowers* and *down* in *fair* weather, and close them again before *rain;* this is visible in the down of the *Dandelion*, and eminently so in the flowers of *Burnet;* the opening and shutting of which is the Countryman's *weather-glass* for the following day; if the flowers are close shut, *rain;* spread abroad, *fair.*

The stalk of *trefoil* grows more upright and swells against *rain;* similar, although perhaps not so sensibly, is the effect on other plants: among the Country people the *opening* of a small red flower, called *winco-pipe*, which grows in the stubble fields, is a sure indication of a *fine* day. That Vegetables should be affected by the same causes that affect the *weather* is very conceivable, considering them as so many *Hygrometers* and *Thermometers*, consisting of an infinity of *air vessels* (and which are visible in the leaf on the Vine, Scabious, &c.) by which they have an immediate communication with the Air, and partake of its *moisture* and *heat;* hence it is that all Wood, even the hardest and most solid, from the vapours easily insinuating themselves into the Pores, swells in *moist* weather, especially that which is lightest and driest; and from this property a very extraordinary use of Wood is derived, that of breaking Rocks and Millstones. The method at the Quarries is, after having cut a rock into a *Cylinder*, they divide that into several lesser Cylinders, by making holes at the proper distances round the great one; these holes are filled with so many pieces of *sallow* wood dried in an Oven, which in damp weather, becoming impregnated with the humid corpuscles of the Air, swell, and, like *wedges*, break the rocks into several stones.

Chronic pains being more violent than usual, *rain* in summer, *frost* in winter: a disagreeable Languor is generally felt before *Thunder.*

A *serene* Autumn denotes a *windy* Winter; a windy Winter, a *rainy* Spring; a *rainy* Spring, a *fine* Summer; a *fine* Summer, a *windy* Autumn; but it is very rarely that the Seasons succeed each other in the same tenor for two years together; it has been remarked, that if at the beginning of the Winter the *south* wind blow, and then the north, it portends cold; but

should the *north* wind *first* blow, the Winter will be mild. A hot and dry September, a cold Spring; Summer moist and cool, a *hard* Winter: if Walls that used to be damp are peculiarly dry at the commencement of Winter, a *hard* Winter may be predicted, for it shews a *dry* air, which in Winter is always joined with *frost*. The early arrival of Woodcocks, Fieldfares, and other birds of Passage, as they prove the cool temperature of the weather from whence they come, are also said to predict a *cold* Winter in this Country. The Cuckoo*, from its coming betimes in the

* The following is not only remarkable as an early Specimen of our Poetry, but also for being the *first* English Song that is found with *Notes annexed*. The Music is supposed to be of the fifteenth Century, and is of that sort which is called "Canon in the Unison."

Summer is i cumen,
Lhude sing Cuccu!
Groweth fed and blometh med,
And springeth the Wode nu.
Sing Cuccu! Cuccu!

Cowe bleteth after lamb,
Lou'th after calvè cu,
Bulluc sterteth, Bucke verteth,
Murie sing Cuccu!
Ne Swyk thou never nu.

IMITATED.

See the Summer's Sweets appear!
Cuckoo! Summer's Harbinger,
Haste and swell thy tuneful throat;
Let the Rose's op'ning bloom,
Let the Meadow's soft perfume,
Tempt thy sweet, thy cheerful note.

Lambkins round their dam that play,
Feel the Sun's enliv'ning ray;
See the verdant branches spring!
Heifers gambol o'er the Mead,
Deer within their Covert feed.
Come, sweet Cuckoo! pr'ythee sing.

Hist! Hist! she sings!—Sweet Cuckoo, swell thy throat!
And through the Summer heats prolong the cheerful Note.

J. P. A.

Spring, denotes that a *hot* Summer will follow. Acorns and Haws in plenty, a *long severe winter;* Nuts plentiful, and the *broom* and *almond tree* full of *blossoms*, foretel an abundant Harvest.

> Mark well the flow'ring almonds in the wood,
> If od'rous blooms the bearing branches load;
> The glebe will answer to the sylvan reign,
> Great heats will follow, and large crops of grain.
> DRYDEN'S VIRGIL.

In extracting these remarks, it must be obvious to every one who has made observations upon the Weather, that every Season has its peculiar *Characteristic*, and is either *wet*, *dry*, or *changeable;* and one of the most minute and intelligent Observers in this Country has declared, that he is clearly of opinion that the same Augury which in a *fair season* foretels *fair*, will, in a *rainy* one, presage *wet* weather: therefore the Characteristic of the *season* ought to be pointed out before the Quality of the *weather* can be prognosticated.

After this long statement of the Weather, as it may be advantageously applied to the diversion of Angling, it will not be very improper to suggest in what manner the Angler may counteract its Effects upon his own Person; and it is material to caution him against getting wet in his Feet; to prevent which the *Soles* of his Shoes should be thick, the leather well seasoned, and now and then rubbed over with *Mutton* suet, which will not only keep out the water, but render it soft and pliable. Mr. BARKER'S receipt for anointing Boots or Shoes was the mixing a *pint* of linseed oil with *half* a pound of mutton suet, *six* or *eight ounces* of bees-wax, and a *halfpenny* worth of rosin; the whole to be boiled together in a pipkin; when cooled until *milk-warm*, it was to be laid on *new* boots, with a small hair-brush; but this mixture is more effectual if it be applied to the *leather before* the Boots are made, and be once lightly brushed over afterwards. Upon Shoes or Boots that have been *used* it must be laid on when the leather is *dry*.

The Angler's imagination is generally so busied with the hopes of Success, that when the distance is considerable his Eagerness influences his pace in walking, and he cannot, in warm weather, well avoid being heated before he arrives at the spot: the *air* near rivers and pools being cooler than in other places, occasioned by the motion of the water, *flannel next the body* is recommended to be worn, which will guard against the dangerous consequences of *suddenly* checked perspiration. Sitting upon the ground, although it appear dry, should be carefully shunned; for the heat of the human Body will cause a moisture, which soon cools, and may be sensibly felt. If the Angler, in fishing for Barbel, Roach, and Dace, where he is confined to one spot, must sit down, a piece of coarse woollen cloth, doubled two or three times, may be carried in the *pannier*, and used for this purpose.

In common Angling, never go into the water without Boots that are thoroughly water-proof; for although in Trout or Gudgeon fishing they are by that means more numerously caught, (particularly the latter, by going into the Stream and stirring up the *sand* and *gravel* with the feet,) the practice is pernicious to the Constitution, from the exercise being too trivial to preserve the proper circulation. The *Compiler* has been for many hours together in extreme cold weather in the water, without feeling any ill effects, but then it was *net*-fishing, when the Exercise kept the whole body in exertion and warmth. Nor should the Angler ever drink *cold water* whilst he is warm; *Thirst* is very erroneously supposed to be abated, by swallowing *small* liquors in large quantities: without the desire to commend the frequent use of Spirits, yet a little *Brandy** will more safely and effectually allay his drought, than resorting to Beverages more grateful to the Palate at the moment of taking them.

* The following Reply may, perhaps, be allowable in defence of the Liquor here recommended, in the above situation. A Clergyman seeing his Son about to drink a glass of Brandy, hastily conjured him not to swallow ardent Spirits, as they were the worst Enemies he could have. "I know that, Father," replied the Young Man, "but you know we are commanded to *love our* Enemies, so I obey the Precept."

Baits.

We will next consider the *Baits*, which it is necessary the Angler should know *where* to procure, and *how* to keep alive; of course they are numerous, and are concisely mentioned in the engraved *Table for Baits*, but will be here enlarged upon.

Those that are *natural*, and such as fish are accustomed to feed upon, are certainly to be preferred; and of these Worms are the most so, *under* water. The various sorts should be well *scoured* before using; to effect which purpose, and also to preserve them *healthy*, the following methods may be adopted: and it should be noted, that the *Lob*, *Marsh*, and *Red-worm*, will bear *more* scouring than any others, and are better for *long* keeping.

Get a parcel of *Cow* or *Horse*-hair, and cut it five or six inches long into a *pan*, throw the Worms upon it, and in a couple of hours they will have cleared themselves from the chief of their dirt; take them from amongst the hair, observing that none of it sticks to them, and select out the dead or wounded worms: clean the pan from the hair and filth, and put the worms into it, covering them with *garden mould* about an inch thick: they will keep a very long time in this manner, moistening the mould once a day with *new* milk, and changing it every Month, to prevent the growth of young worms, which would occasion the death and decay of the old.

Worms can be well scoured in *Moss*, (the best sort is that which grows on *heaths*, being *soft* and *white*, and when gathered will be clear and free from earth at the roots,) that has been well washed and cleaned from dirt, and wrung very dry: both moss and worms should be put into an *earthen* pot, stopped close enough to hinder the latter from crawling out; the pot should stand *cool* in Summer, and out of the reach of *frost* in Winter: the

more Moss made use of, and the oftener it is changed, or at least taken from them and well washed from their dirt, and wrung dry before again put to them, the longer will the worms live, as they cannot bear being exposed to the *air*.

Another way of *scouring* worms, but requiring more attendance, is with a piece of very *coarse* cloth or *hop*-sack: wash it clean and let it dry, then wet it in the liquor wherein *fresh* fat beef has been boiled, (for *salt* will kill the worms,) and wring it nearly dry; put the worms in this cloth, and lay them in an earthen pot from morning until night, then take them from the cloth, wash it from the dirt they have left, and again wet it in some of the liquor; by doing this *daily* worms may be kept in health, and perfectly fit for use, for nearly a month.

Amongst the old recipes for *scouring* worms, the putting them into a powder got from a dead Man's *Skull*, by beating it to atoms, was deemed *super*-excellent.

When worms are wanted for immediate use, and no provision has been made, the way to scour them quickly is, if *Lob*-worms, to put them *all night in water; Brandlings* must not remain above one *hour* in it, and both sorts must be then put with *fennel* into the Angler's worm-bag.

The Lob-Worm, (in some places called the *Dew*, the *Garden*-worm, or the *Twatchel,)* is of two sorts, the old, *knotted*, the young, without knots, and by some persons, for distinction sake, are called *Maiden-lobs*, and by others *Red*-worms; the latter kind, with a red head, a streak down the back, and a broad tail, (from which, in some countries, they are called *squirrel* tails,) is the best. Lob-worms are dug up in *fallow* fields, old gardens, and by the sides of *ditches* and *drains*; but they are most plentifully found and caught in the night after heavy showers, by the help of a candle and lantern, on *grass walks* and sheep pastures, where the herbage is short; he who seeks them must move cautiously, without noise, or they

will quickly retreat into the Earth; draw them gently out of their holes without nipping, those that sever in taking must be thrown away, as they will soon become *putrid*, and infect the others; when so many are collected as are wanted, having plenty of good *moss* freed from dirt, dip it into clean water and wring it nearly dry, put it into an earthen pot, proportioned to the quantity of worms, laying it regular, and forcing it down with the hands, *strew* the worms on the surface, after dipping them in clear cold water, to rid them of the soil that may adhere to them, such as are not injured will soon bury themselves in the moss, and those that do not must the next morning be picked off as useless; they must be inspected every *three* or *four* days, the dead ones removed, and have fresh moss, or that wherein they have been kept well washed and picked, and the water squeezed out, at least *once* a week; they must be so placed Summer and Winter, as to be safe from the extremity of the weather at both Seasons. In a week's time they will be fit for use, and upon the Angler coming home from fishing, he will return from his worm-bag into the pot those which he has not used. In observing the above carefully, they may be kept a *month* in Summer, particularly by now and then giving them, drop by drop upon the moss, a small quantity of *new* milk and the yolk of an egg well beaten together, and warmed so as to thicken it: but when a stock of lob-worms is meant to be retained for a considerable length of time, a large vessel must be filled half or three quarters full of good mould, in the middle of which is to be placed some moss or *old* coarse linen cloths, hopsack, or rags wetted; in hot, dry weather clean water must be sprinkled upon the earth with a watering pot, so as to keep them *moist* but not *wet:* they may thus be preserved as long as is requisite; and a week before angling what are wanted may be drawn from the *store*, and put into moss to scour themselves.

Lob-worms, that by crawling about the grass lands have lost their holes, when they meet a drop of Cow or Horse-dung, will creep under and there remain, (with their heads only, about an inch out of the ground,) so long as it contains moisture sufficient to protect them from the intense

heat; this situation changes their Colour, particularly about the *head*, to a *dark purple*, and which appearance has induced Anglers to deem them a distinct Species, to which they have given the name of the *Peacock* worm.

In great droughts, when these worms do not approach the surface, or come from their holes, they may be sometimes tempted to do so, by pouring plenty of water on the ground where they used to be most seen. The juice of walnut leaves, mixed with water and a little salt, poured into their holes, as also the juice of green hemp, will, it is said, force them out; but they are so nauseous to the worms that most of them die.

A *Three-prong dung*-fork thrust into the ground, and continually moving it, will force all the worms within a certain distance to come instantly out of their holes, supposing, from the shaking of the Earth, it is the *Mole*'s heaving to come at them.

Mr. White, in speaking of *Earth-worms*, remarks, " that they make their casts most about *March* or *April* in mild weather; they do not lie torpid in Winter, but come forth when there is no *frost;* in *rainy* nights they travel about, as appears from their sinuous tracts on the soft muddy soil, perhaps in search of food. When Earth-worms appear at night on the turf, although they considerably extend their bodies, they do not quite leave their holes, but keep the ends of their tails fixed therein, so that on the least alarm they can precipitately retire under the earth. Whatever food falls within their reach when thus extended, such as blades of grass, straws, fallen leaves, (the ends of which are often drawn into their holes,) they seem to be content with; even in copulation their hinder parts never quit their holes, so that, except they lie within reach of each other's bodies, no two worms can have any commerce of that kind, but as every individual is an *Hermaphrodite*, the difficulty in meeting with a mate of a different sex is removed; they are much addicted to Venery, and very prolific.

" *Lands*, continues Mr. W. that are subject to frequent inundations are always poor, and probably from the *worms* being drowned. The most insignificant Insects and Reptiles have more influence in the Œconomy of Nature, than the incurious are aware of, and are mighty in their effect, as well from their minuteness, which renders them less an object of attention, as from their numbers and fecundity. *Earth-worms*, though in appearance a small and despicable Link, yet, if lost, would make a lamentable chasm in the Chain of Nature; for to say nothing of half the Birds, and some Quadrupeds, which are almost entirely supported by them, *Worms* seem to be great promoters of *Vegetation*, by perforating and loosening the Soil, and rendering it pervious to *rains* and the *fibres of plants*, by drawing straws and stalks of leaves and twigs into it; and most of all, by throwing up such infinite numbers of earthy lumps, called *Worm-casts*, which being their excrement, is a fine manure for grain and grass. Worms affect slopes to avoid being flooded, and probably provide new soil for hills and slopes, when the rain washes the earth away. *Gardeners* and *Farmers* express their detestation of Worms; the former, because they render their *walks* unsightly, and make them much work; the latter, because they think Worms eat their *green* corn; but these Men would find that the earth *without* worms, would soon become cold, hard-bound, void of fermentation, and consequently *sterile;* besides, in *favour* of Worms it should be added, that *green corn*, *plants*, and *flowers*, are not so much injured by them, as by many species of *Beetles* and *Long-legs* in their *Grub* state, and by unnoticed myriads of small Slugs, which silently and imperceptibly spread devastation, both in the Garden and in the Field."

The Brandling-worm is streaked from head to tail in alternate red and yellow circles, is dark at the head, becoming gradually paler towards the tail. *Brandlings* are found in old dunghills, which consist of hogs and horses dung, and rotten earth; also in old *thatch* and dung, in *grass* mown from garden walks after it has lain some time; but those which are

found in *Tanners bark* after being used and laid by until quite rotten, are the best, and may generally be used without *any scouring:* when Brandlings are kept in moss, like the Lob-worm, they should be fed by dropping a little *cream*, about a spoonful a day, upon the moss; it will prevent their *swelling* at the *knot* near their middle, which when it takes place, usually kills them. With some Anglers it is a rule not to use these worms and the Gilt-tail, until they have been in moss *two* days, nor after they have continued in it more than *ten.*

Dunghill RED-worms are small and knotted, of a bright red, and are to be found in almost every heap of horse dung that has much straw rotted in it. *Cow-dung* Red-worms are found in the fields, and in nearly dry flakes of dung; their heads are shining dark *brown*, with flat tails; are good baits, and may occasionally be used when taken, but are best scoured and preserved like other worms.

GILT-TAILS are paler and larger than the last mentioned worms, are knotted like them, and of a pale yellow, especially towards the tail. Mr. GAY, in his *Rural Sports*, expresses his approbation of this sort of worm, in the following lines.

> You must not ev'ry Worm promiscuous use,
> Judgment will tell the proper baits to choose;
> The Worm that draws a long immod'rate size,
> The Trout abhors, and the rank morsel flies;
> And if too small, the naked fraud's in sight,
> And fear forbids, while hunger does invite.
> Those baits will best reward the fisher's pains,
> Whose polish'd tails a shining yellow stains:
> Cleanse them from filth, to give a tempting gloss,
> Cherish the sullied reptile race with moss;
> Amid the verdant bed they twine, they toil,
> And from their bodies wipe their native soil.

The RED-worm, found in all loamy soils, may be collected by fol-

lowing a plough, turning up garden soil, and under boards, bricks, slates, tiles, stones, &c. that have lain undisturbed for any time; these four worms may be preserved together in one pot, and when the *Brandlings* or others are meant to be used, let the Angler, the Evening before, pick them out by themselves, and put them into a bag, with moss moistened with sweet thinnish Cream, and they will appear more bright and tempting to the fish.

White or Marl-worms are found chiefly in Marl or Clay land by following the plough, and also in *turnip* fields, where the soil is of a stiffish quality; the head is very small, and of a pale red, they are larger than the *Brandling*, and naturally *tough*, are a good bait, especially in *muddy* water, may be preserved in some of their own Earth, keeping it properly damp, with some moss at top, and when scoured are of a pale white.

The Marsh-worms are middle-sized and knotted, of a blueish cast and tender; are to be found in the rich banks of rivers, and in marshy ground, wherein they are usually got by treading the ground, when it is moist, much backwards and forwards, or in circles, with both feet close together: they require more scouring in *moss* than most other worms, at least *fifteen* days, but are very lively good baits.

The Tag-tail is a worm of a pale flesh colour, with a yellow *tag*, almost half an inch long on his tail; it is found in *marled* lands or meadows after a shower, or in a morning, in calm and not cold weather, in *March* or *April*. In *discoloured* water by rain, it is considered a fatal bait for Trout, they will not endure *long* scouring.

Gentles may be procured almost at any time at the *Tallow-chandlers*, and should be kept in *oatmeal and bran*, as Bran by itself is too *dry*. Those who live in or near London may buy them in *proper* condition for the day on which they wish to use them, but for the accommodation of

those who reside in the Country remote from such convenience, the best modes of breeding them will be here mentioned, in order to prevent disappointments.

Coarse fish, such as *Chub* and *Roach*, may be laid in an earthen pot in the *shade*, and will soon be fly-blown; when the *Gentles* are of the proper size, (but not *before,)* put some Oatmeal and Bran to them, and in *two* days they will be well scoured and fit to fish with; in about *four* more they become hard, assume a *pale red* colour, and soon after change to *flies;* the *red* ones should not be thrown away, as frequently *Roach* and *Dace* take these with a *white* one, in preference to all other baits. Some have recommended a piece of *Liver* suspended by a stick over a barrel of *Clay*, into which the *Gentles* fall and cleanse themselves; but *Clay* will *not scour* them; and besides, they fall from the Liver before they have attained their full size: the afore-mentioned is a less disgusting plan; for a short time after oatmeal and bran are put to the *Gentles*, the fish in which they are bred will be found perfect *Skeletons*, and may be thrown away: however, if they are to be bred from Liver, it should be scarified deeply in many parts, and then hung up and nearly *covered* over, as in that way the Flies will blow it better than when wholly exposed; in two or three days the *Gentles* will be seen alive; the Liver is then to be put into an earthen pan, and there remain until the first brood are of full growth; a sufficient quantity of *fine sand* and *bran* (letting the Liver remain) is then to be put into the pan, and in a few days they will come from the flesh, and *scour* themselves in it; the Liver should then be hung across the pan, and the *latter* brood will soon drop out and be fit for use; and by thus breeding them in *October*, and keeping them a little *warmer* than those bred in the Summer, until they arrive at their *full growth*, and afterwards putting them in the same pan into a *dampish Vault*, they may be preserved for Winter fishing. Those bred in *Summer*, but for the *bran* and *sand*, would soon sink into a *dormant* state, the skins take on a blackish red, full of white matter, and shortly after become *flies;* those produced in *Autumn*, from whatever substance, will continue in this state all the

Winter, provided they can shelter themselves under the surface of the earth in fields, gardens, &c. and in the warm weather of the ensuing *Spring*, they change into *flies;* thus preserving their kind from year to year.

Gentles are so universal and so alluring a bait, that the Angler should never be unprovided with them. Trouts have been taken with them in clear water, when they have refused all kind of *Worms* and *artificial* flies.

Cadis, or Cad-bait.

Walton remarks, that there are divers kinds of *Cadis*, or *Case-worms*, which are peculiar to different Counties, and found in small brooks that have access to bigger rivers; he describes one under the name of the *Piper Cadis*, whose husk or case is a piece of reed, an inch or rather more in length, and the size of a silver twopence; these worms kept in a bag with sand at its bottom, and wetted once a day, will in three or four days turn yellow, and are then a choice bait for the Chub or any large fish; and it has been described as follows, by a person of many years experience. "The *Piper Cadis* is said to be the largest of the tribe, and not deriving its name from any sound, but the figure; it is common in Northern and Welsh streams, but never found but where the bottoms are *lime stone* or *large pebbles;* it is about an inch long, the case is straight, and rough, from being covered with sand or gravel, and is apparently a small stick, of which the *Pith* was decayed before the insect, in its state immediately succeeding its exclusion from the Egg, lodged itself: advanced to an *Aurelia*, which is generally in *April* or beginning of *May*, it leaves its case and last covering, a sort of skin resembling a fish's bladder, (which is the method of the whole Genus,) and immediately, with its many legs, paddles upon the top of the water; it seldom flies, although it has four wings, which in their infant state are *shorter*, but soon extend longer than the body. This is usually called the Stone-fly; and in *Wales* the Water-cricket, from its similitude to that Insect."

The several kinds of *Cadews*, in their *Nympha* or maggot state, *thus* house themselves; one sort in *Straws*, called from thence *Straw-worms;* others in two or more parallel *sticks*, creeping at the bottom of brooks; a third, in a small bundle of pieces of rushes, duck-weed, &c. glued together, wherewith they float on the surface, and can row themselves about the water with the help of their feet; both these are called *Cad-bait.* It is a curious Faculty that these creatures possess, of gathering such bodies as are fittest for their purpose, and then so gluing them together, some to be *heavier* than water, that the Animal may remain at bottom where its food is, and others to be so buoyant as to float, and there collect its sustenance; these *houses* are coarse and shew no outward art, but are within well tunnelled and have a tough hard paste, into which the hinder part of the Maggot is so fixed, that its cell can be drawn after it without danger of leaving it behind, and it can also thrust out its body to reach the needful supplies, or withdraw into its covering for protection and safety.

Walton mentions a less Cadis called a *Cock-spur*, from its similitude to that bird's weapon, and whose case is nicely made of small husks, gravel, and slime; it is much smaller than the *piper cadis*, and it has been insisted that it produces the May-fly or *yellow* Cadew: that which Walton calls the *Straw-worm* or *Ruff-coat*, (but wherein he errs in making these *terms synonimous,)* is the most common, and is found in many of the rivers in Surrey, and indeed in most others; a representation of this Insect, both in its case and freed from it, is given; it produces many and various *flies*, which about London are called the *Withy*-fly, ash-coloured *duns*, of several shapes and dimensions, as also light and dark *browns*, all of them in *northern* streams affording great diversion: the Ruff-coat, which does not in the least resemble the former, but seems to answer the description which Walton has given of the *Cock-spur*, is a Cadis inclosed in a husk about an inch long, surrounded by bits of stone, &c. almost equal in their size, and curiously compacted together like *mosaic;* from one of these insects found in the river *Wandle* in *Surrey*, and put into a small box with sand, and wetted frequently for two days, at the expiration of that time a

large fly was produced of nearly the shape of, but less than a common white butterfly, with two pair of cloak wings, and of a light *cinnamon* colour; this fly is called in the North the *large light brown*, and in *Ireland* the *flame* coloured brown, and in some other places, from its smell, the large *fætid* light brown; the figure of the *husk*, and also of the *fly* in two positions, is represented. Numerous are the classes of these wonderful Creatures; the figures of *four* of them are likewise accurately delineated: there are different sorts, according to the Counties they are bred in, and it is curious to observe the very different flies that they produce, and which are many of them the best that frequent the Rivers. These Insects inhabit pits, ponds, slow running rivers, or ditches, in cases of different forms, and composed of various materials; some of them inclosed in a very rough shell, found among weeds in standing waters, are generally tinged green; others are bigger than a *gentle*, and of a yellowish hue, with a black head: they are an excellent bait, and are found in most plenty in gravelly and stony Rivulets, and by the sides of streams in large rivers, among *stones*. To collect them, turn up the stones, and the *best* will adhere to them: when the quantity wanted is obtained, put them into a linen bag for *five* or *six* days, dip them, together with the bag, into water *once* a day, and hang them up; they will then turn *yellow*, become *tough*, and fitter for angling than when first got from the *brook:* if meant to be kept long, they must be put into a thick *woollen* bag, with some of the moist gravel or sand from the same *rivulet* from whence they are taken; they must be wetted *twice* a day, but oftener in very hot weather; when you carry them abroad, fill the bag with water, and holding the mouth of it close, let the water run from them; thus they have been kept *three weeks*. Another way of preserving them, is, by placing them in an earthen pot full of River water with some of the gravel they were bred in at the bottom; but the preceding method is preferable: some use *bait pans* of different sizes for Insects, the tops punched full of holes, not so large as to admit of their escaping when placed in the river, which not only keeps them cool, but supplies them with Aliment in the fresh water; some keep them in *moss* in a woollen bag on a damp floor, taking care that the bag retains a proper

moisture. Another mode of preserving Cadis, and also *Grasshoppers, Caterpillars, Oak-worms,* or *natural* flies, is to take the *green* withy bark from a bough six or seven inches round, and about a foot in length, turn both ends into the form of a hoop, and fasten them with a large needle and thread; stop up the bottom with a *cork*, and bore the bark full of holes with a red-hot *wire;* tie over it a *cole-wort* leaf, and lay it in the grass every night: in this manner *Cadis* may be preserved until they turn to *flies*. When *Grasshoppers* are to be preserved in the case, some *grass* must be put into it.

In angling with *Cadis*, the line, when all out, should be as long as the rod; for three lengths next the hook, of *single* hairs; with the smallest float, and the least weight of lead, that the swiftness of the stream will allow to sink, and that may be aided by avoiding the Violence of the current, and angling in the returns of a stream, or in the Eddies betwixt two; which are also the most likely places wherein to kill fish, either at the top or bottom. The *Cadis* may be at times, with very good effect, joined to a *worm*, and sometimes to an *artificial fly*, to cover the point of the hook, and also two or three together may be put upon the hook; but is always to be angled with at *bottom*, especially when by itself, with the *finest tackle*, and at all seasons is a most holding bait for *Trout* and *Grayling*.

The Dock or Flag-worm is of the colour of a *gentle* when scoured, but is longer and slenderer in its make, with rows of feet down its belly, and a red head. They are found by pulling up the *flags* growing round an old pond or pit, shaking the roots in the water, and when free from the dirt, amongst the fibres that spread from the roots, will be seen little *husks*, of a reddish or yellowish colour; these must be opened very cautiously with a pin, and the worm either used immediately, or dropt into some bran to carry them, where they may be preserved in the same manner as the *Cad-bait:* they sometimes insinuate themselves into the body of the round stalk of the flag.

The *long* Dock-*worms* are of a fine pale red, without knots; are chiefly found in moist places near dock-roots, and are best taken by shaking the earth with a *dung-fork*. They are excellent baits, especially for *Carp* and *Tench*. In the hollow parts near the roots of the largest sort of *Sedges*, may be found a large black-headed *Grub*, about an inch long, and which is not to be found in *any other* place; it is a famous bait for *Pond*-fishing, though extremely *tender;* but by putting them into *boiling milk* for about *two minutes*, the Morning you mean to use them, they will be rendered *tougher*.

The *short White worms*, or Bobs, are of two sorts; the *one* found in mellow, heathy, sandy soils, and is easily gathered by following the plough in Autumn, when such ground is first broke up from grazing; also by digging one spit deep in the above described lands, sufficient may be got. Those of this class are called the *Earth-bob*, *White-grub*, or *White-bait*, and are as big again as a Gentle; have a pale red head, are very soft all over, and yellowish at the tail; their bodies, when taken, in some degree resemble the colour of the earth where found in, but when scoured, are of a pale *white*. They are an excellent *winter* bait, and to preserve them, they should be put into a large earthen pot, with some of their own Earth, with dryish moss at the top, and set in a *warm* place. Those of the other sort, or *Cow-dung* Bob, (sometimes called the *Clap-bait*,) are the produce of the *Beetle*, and are found in the state of *worms* or *grubs*, under Cow or Horse-dung in the fields, when the drops are about half dry; they are of a yellowish white, with red heads, and are best preserved in some of the Earth from *under the dung* where they are taken, and a little fine moss, observing to keep them cool and moist: to render both these baits tough, boil them in milk, not longer than a couple of minutes, and that the Morning you use them, for, *after boiling*, they will be useless in *two* days; in like manner the brood of *Wasps*, Hornets, Humble-bees, may be rendered tougher, and look more *plump*, and white on the hook. Some contend, that putting the two sorts of *bobs* into a little Earth and Honey,

the day before angling with them, renders them particularly palatable to *Carp* and *Bream*.

The *Ash-grub*, or Bark-Worm, is plump, milk white, and bent round from head to tail, with a red head, resembling a young humble-bee, and is exceedingly tender; it is found under the bark of Oak, Ash, Birch, or Alder, especially if they lie a Year after they are felled; it is also met with in the body of a *rotten Alder* when broken in pieces; but care must be observed in breaking the Tree, that the worm is not crushed: it is sometimes found under the bark of an old decayed stump of a tree. It is best kept in *bran*, and will by that means be made *tougher;* but at the best they are so tender that great Caution must be observed in their use; the hook, which must be armed with a *bristle*, to prevent its slipping down, should be introduced under its head, and guided down the middle of the belly, without suffering it to break the skin in its passage, (for if it does water and milk will issue from the wound, until nothing but the skin remains, when the bent of the hook will appear *black* through it,) until the point of the hook comes so low that the head of the grub may rest on the *bristle* that projects to hold it; it will thus be defended from slipping off by its own exertions, nor will the force of the stream, or quick pulling it out of the water, strip it off.

Water-Cricket, or CREEPER. It is an Error to suppose this the same as the *Cad-bait*, for though generally found by the water-side, the latter is always in some kind of *husk*, the *Creeper never*, nor has ever *wings*, and cannot therefore be the *Stone-fly:* it may be kept in the same way as the *Cadis*. An experienced Angler has remarked, that in opening *Trouts*, to see what they had fed upon, he has seen these *Creepers* more frequently in their stomachs than any other Insect, and that supposing them to be inmates of the water where the Trouts were taken, he has, by turning up the stones, procured and found them the most killing bait he had ever tried: he also observes, that under the stones where the *Creepers* were found there were great flies, some with short, thick, some with very long,

double wings; and those he likewise used with equal success: they are not, in his opinion, to be met with in every river, or even in *parts* of it where they are bred; neither, where found in the greatest plenty, do they continue longer than *five weeks:* about the middle of *May* they take wing, and for a fortnight or three weeks, while their wings are growing, they may be taken, and by nipping off their long wings may be fished with as *the creeper.* It is best to get when going to use them immediately, although they may be kept *two or three* days; in a shallow stream, near the water's edge, they are to be found, but in catching them the person must be nimble, as they conceal themselves very quickly in the sand or gravel, or under stones; they may be kept in a large horn, like that for powder, with gravel at the bottom, and some holes at the sides to admit air; the mouth of the horn should be wide enough to receive a *quart* bottle cork, and should be placed in water with the Creepers, when not using them. When the *creepers* are plentiful in the streams *Trouts* begin to get good, and are observed to be soonest *red* and in their perfection when they have the greatest abundance of this particular food: the *creeper* continues at most *five weeks*, yet during that time, and a *fortnight* after, while the *wings* are growing, there is no bait whatsoever with which the Angler may do more execution, or take larger *Trout.* In using this bait the *line* should be as long as the *rod*, with a fine Indian grass, a clear gut, or a small hog's bristle next the hook, which must be *long shanked*, and may be thus wrapped on: when the silk has been eight or nine times round the hook, where it begins to bend, a bit of fine *bristle*, cut a little sloping (like the splice of a rod) at the end, should be put to the back of the hook, and continue wrapping both that and the silk six times more round the hook; then cut off the Bristle slopewise, a straw breadth from the hook, and wrap on until within a very little of the shank end, where a bit of dark *red dubbing* should be tied, to keep the *creeper* from slipping upon the line; the hook should be put in at its *mouth*, and out at the *tail*, and made to lie straight on the hook's shank, without slipping down into the *bend* of the hook, by making the point of the *bristle* strike through its back: fish the stream as most convenient, so as not to be seen, although

up the water is best on many accounts. There must be a pellet of No. 4 shot on the line, seven or eight inches from the hook, but the *creeper* should not sink lower than *mid*-water; the rod *top* should be kept directly above the hook, as it comes down the stream, by which means there will seldom be above *half a yard of line* in the water, and then whenever it stops, strike gently, it is certainly a fish, and by drawing him *down* the stream those above are not disturbed. This is a most killing way, from *day-light* until *nine* o'clock, and in the *evening* until dark.

Palmer-worms, or *wool-beds*, are little *grubs* or *caterpillars*, of various colours; and some *rough* and *woolly*, breeding all the Summer on *trees*, *bushes*, *plants*, and *herbs*, and which are called Palmer-worms; they are found by beating and shaking the branches of *Oaks*, *Crab-trees*, *Hawthorns*, and others, that grow over highways, or bare places, where they can most readily be found after falling from the Trees: when a sufficient quantity is picked up, to support them for use put each sort into different boxes, with small holes in the *top* and *sides* to admit air, and do not stint them for room; a little of the *bark*, and a proper quantity of the *leaves* of the Trees from which they were taken, must be placed in the boxes; they must be fed five or six times a week; and every time fresh food is given let all the withered and old be taken away: the boxes may be kept in a garden, or any where amongst grass: they will prove good, but *tender* baits. There are likewise two sorts of *cabbage-grubs*, one found on the outside leaf, and the other in the hearts of Cabbages, which are almost equal to the *cad-baits*; these are to be fed and preserved with the same kind of leaves they are found upon. These Cabbage-grubs are to be used with a line the length of the *rod*; the bottom of it fine, that the bait may sink the quicker; the hook of a tolerable size, as it is a large tough bait, and is to be fished with, about nine inches or a foot from the bottom, in still waters, curls, or streams, in the same manner as the Cad-bait.

Grasshoppers, from *June* until *September*, are to be met with in every pasture field or meadow, especially in a hot, dry summer, but most

plentifully in a kind of old, short, *mossy* grass; the middle-sized and the *greenest* are the best, and may be carried in a box, with a notch cut in the edge, wide at top and narrow at bottom, which, by lifting up the box lid gently, just leaves space enough for the *Grasshoppers* to creep out, which they will do separately: some take off the *legs* in baiting with them, but they answer better *whole*, if properly placed to stand on the back of the hook, and which should be entered under the *head*, and lodged in the *body*. This is a fine and tender bait, and is eagerly taken by many kinds of fish in clear streams about *mid-water*, with a hook No. 6, with fine gut and one small shot; with grass they may be preserved, as directed in the *Cadis*.

The young brood of *Wasps*, *Bees*, and *Humble-Bees*, may be discovered by the going in and out of the old ones, and by dipping linen rags in melted *brimstone*, and thrusting them late at Night into the hole or place where the nest is, and setting them on fire, or by a gunpowder squib put lighted into the holes, and stopping them close for an hour, the old *Wasps* or *Bees* will be smothered, and the *Combs* containing the young, covered with films, taken without danger of being stung: from the Comb no more should be removed than are at any time wanted for present use, as it preserves them long alive: those meant to be angled with should be dried in their Combs on a *fire shovel* or *tile* before the fire, or in an *oven after baking*, laid between two pieces of thin board, the top so supported as not to crush them; but a *cheese-toaster*, with its reflector up, will do them best. Some boil them, for immediate use, three or four minutes in Milk, which will make them stick well on the hook; but if kept above three or four days after *boiling* they will turn *black*. The Multiplication of the *Bee* is wonderful; a single Female will produce thirty or forty thousand; but out of this number there are very few *Females*, from fifteen hundred to two thousand are *Males*, the rest are of neither Sex, and totally incapable of procreating.

Beetles are of two sorts, one of a reddish *copper* colour, the other

black; they have two pair of wings each, the upper of a hard *husky* nature, the under soft and transparent, of a blueish hue, and when extended much *longer* than the *hard* ones: the *former* sort may be seen flying in hot Summer evenings, in *June* and *July*, or taken in the day-time on the *Oak*, *Maple*, or *Ozier;* they must be put into boxes with *air*-holes, and will live two or three days on the leaves of the trees they were found upon. The *latter* are found in the Earth under fresh horse-dung, (where they creep to deposit their eggs,) by digging with a trowel, and the holes they make in the ground will direct the search: they may be kept in an earthen pot, with some of the Earth. *Beetles* vary in size; those found under *Horse* or *Cow*-dung, three or four days after it is dropped, are the largest; but those found in old *stone fences* and old *Potatoe* grounds are to be preferred, although not so big. Both are excellent baits for large *Trouts* and other fishes, but the *copper* coloured is by far the best: in baiting the hook clip off the hard wings, and hang the Beetle with its *feet* towards the water: when there are *streams*, before you approach them *too near*, begin to fish just over the *bank*, and advance gradually until you can fish the stream; then begin at the *top*, and fish it regularly down, throwing gently *across* it, (taking care not to whip off or damage the bait,) and letting the bait go quietly down the stream, sometimes just *under* the surface, at others about *mid-water*, particularly in deep streams: in small rivers, which during summer are in general *weedy*, fish in those places where the Current is *strongest*, and where there is an opening to get the line properly between the Weeds; also try over hollow banks, under and about *trees* and *bushes*, observing to lengthen or shorten the *line* as occasion requires, and in *no* Water pass without trial any likely haunt of fish; these remarks will suit *all natural* fly-fishing.

Ant-flies may be procured from the hills where they breed; the *black* are the best, and are to be found from *June* until *September:* gather them alive with both their wings, and put them in a bottle, wherein should be some of the *moist earth*, and the *roots* of the *grass* from the hillocks where they were taken: the flies must be handled gently, lest

their *wings* be injured, and with a clod of earth stop the bottle; those that are uninjured will live a month; if meant to be kept longer, into a *barrel* capable of holding three or four *gallons*, throw a quantity of the grass and roots, with as large a number of flies as is thought proper, cover it, and they will live *four Months;* these in any stream or clear water are a fatal bait for *Roach* and *Dace*, fishing about *four inches* from the *bottom.*

Wheat or Malt, after being washed clean, boiled slowly until soft, and then the husks taken off with a pen-knife, and cut at one end for the *white* to appear, and at the other for a small hook to enter, is a choice bait at all seasons, casting at times a little of it into the water where the *float* swims. Some to a quart of *unground* Malt put *two quarts* of water, and place it in a situation over the fire where it will just simmer; in about four hours the water is generally absorbed by the *Malt*, when the *Skin* separates, and then it is fit for use; it must not be long prepared before it is used, as in a few hours it will turn *sour.*

Salmon's *Roe.* The best time to get it is just before the fish spawn; and to preserve it is by a gentle boiling, and sprinkling it sparingly with *salt*, and then into a glazed earthen pot put a layer of *wool* at the bottom, and then a layer of *Roe*, and so alternately until the pot is filled. Barker, who was the first that discovered this bait, recommends it to his Patron in the following curious terms.

"Noble Lord,

"I have found an *experience* of late which you may angle with, and take great store of this kind of fish. First, it is *the best bait for a Trout that I have seen in all my time;* and will take great store, and not fail if they be there. Secondly, it is a special bait for Dace or Dare, good for Chub or Bottlin, or Grayling. The bait is the Roe of a Salmon or Trout: if it be a large Trout that the spawns be any thing great, you must angle for the Trout with this bait as you angle with the brandling, taking a pair

of Scissars and cut so much as a large Hazel-nut, and bait your hook, *so fall to your sport; there is no doubt of pleasure.* If I had known it but twenty years ago I would have gained a hundred pounds only with that bait. I am bound in duty to divulge it to your Honour, and not to carry it to my grave with me. I do desire that *men of quality should have it, that delight in that pleasure.* The greedy Angler will murmur at me, but for that I care not.

" For the angling for the Scale-fish, they must angle either with cork or quill, plumbing their ground, and with feeding with the same bait, taking them asunder, that they may spread abroad, that the fish may feed and come to your place; *there is no doubt of pleasure*, angling with fine tackles or single hair lines, at least five or six length long, a small hook, with two or three spawns. The bait will hold one week; if you keep it on any longer, you must hang it up to dry a little; *when you go to your pleasure again*, put the bait in a little water, it will come in kind again."

Pastes are noticed in the *Table for Baits;* some other modes of forming them will be here introduced, as almost every Angler has his peculiar sort, and receipts to make *Paste* are as numerous as medicines for the Tooth-ach. In using them for *Chub*, *Carp*, or *Bream* in September, and all the winter months, the bait should be as big as a *hazel-nut;* for *Roach* and *Dace* the size of a *Pea* is sufficient; but let all pastes be made with clean hands, and have a little *cotton-wool* well worked up with them, which will make them hang better on the hook; select a quiet place, use a *quill* float, a *small* hook, and strike at the *first* biting of the fish.

Red *Paste* may be made with a large spoonful of fine *wheat* flour, moistened with the white of an egg, and worked with the hands until tough, a small quantity of *honey*, or *loaf sugar* finely powdered, must be added, together with some cotton wool spread equally over the paste when pressed flat in the hand; it must be well kneaded to mix the cotton thoroughly:

colour it with a little *Vermilion:* a small piece of *fresh* butter will prevent it from becoming hard, and it will keep good a Week. WHITE *Paste* may be composed of the same ingredients, omitting the Vermilion; and *Yellow*, by mixing some *Turmeric* with it.

SALMON *Paste.* Take One pound of Salmon spawn, in September or October; boil it fifteen minutes, then beat it in a mortar, until sufficiently mixed, with an *ounce* of *Salt*, and a *quarter* of an ounce of *Saltpetre;* carefully pick out the *membrane* in which the spawn is contained, as it is disengaged from it: when beat to a proper consistence, put it into gallipots, and cover it over with *bladders* tied down close, and it will keep good for many *months.*

SHRIMP *Paste* is made precisely in the same manner as the preceding, taking care to separate the solid part from the shell, before it is put into the mortar; some mix with it a little *Honey:* in using this, the point of the hook should be but lightly covered. Various pastes composed of curious materials are recommended; WALTON mentions one for *Carp* made with the flesh of a *rabbit* or *cat*, with bean flour, sugar or honey, well pounded together; and if to be kept all the year for any other fish, *virgin wax* and *clarified* honey are to be worked in with the former before the fire, and then made into balls to be laid by for use. The oils used for alluring fish to take the bait more readily are at this period but little confided in; however, as some persons credit the Efficacy attributed to part of them, they will find a place: the Compiler, however, having never brought them to the test of Experiment, cannot warrant their practical good effect.

WALTON relates a circumstance of his fishing with OLIVER HENLEY, who usually took three or four worms from his bag, and put them into a small box, where he let them continue half an hour or more previous to his baiting his hook with them. To the question, *why he did this?* his answer was, " he only picked out the best to be in readiness against his

hook's wanting to be new baited:" but, continues WALTON, he has been observed, both by myself and others, to catch more fish, *especially Salmons*, than I or any other person that ever fished with him could do; and it was lately told me by one of his most intimate Friends, that the box in which the worms were put was anointed with a drop or two of the *Oil of Ivy berries*, and that by the worms remaining inclosed, they had incorporated a kind of smell, that to the fish was irresistibly attractive. WALTON acknowledges, that in his younger days he tried several Oils and Devices to induce the fish to bite, but without finding any Advantage; and yet he adds, that he has seen Men fishing with the same kind of worms and tackle, that have taken *five*, and sometimes *ten* fish to his *one*. Without presuming to assert that the authority of WALTON leans to either side of the question, or to ridicule what some Anglers have possibly a reliance upon, a variety of *ancient* recipes, for the Allurement of fish (perhaps first imparted as *invaluable* secrets,) will be recited, to be adopted or rejected, as may suit the different tempers of modern Artists. Some of these *excellent receipts*, it must however be remarked, are whimsical enough; such, for instance, as a *Paste* made of "*Mulberry* juice, *Hedge-hog's fat*, Oil of *water lilies*, and a few drops of oil of *Penny-royal*." Some invention was at least employed to select these Ingredients; many of the following are equally *uncouth:* but the Sceptic may either indignantly turn over the page, or indulge in the Mirth which to an Unbeliever its perusal may excite. The Admirers of these potent Spells however insist, that *Baits* to catch Fish must have *four* Properties: they must *Smell* well, and that makes Fish come from remote places; for this, Annise-seed, Juice of Panan, Cummin, which is best of all, is to be employed. Secondly, they must *Taste* well, that thereby they may be deceived; for which use Blood, especially, *Hog's* blood and Wheat bread. Thirdly, the Baits must fume to the Head, to make them *drunk;* as Aqua-vitæ, Lees of Wine. Lastly, they must render them *senseless:* such as *Marigold* flowers, for these will make great Fish astonished in one Hour's time; so will *Lime*, *Nux-vomica*, but nothing better than *Coculus Indicus*.

"Fish may be collected into any part of a river or piece of water,

" by throwing in Goat's, Sheep's, and Bullock's blood, which is found " curdled among the entrails of the fresh killed animals, pounded well " together with thyme, marjoram, origanum, flour, garlic, wine lees, and " suet, and the whole made into pills.

" For a *standing* water, heart-wort and slack lime made into a paste, " will *fix the fish* so as to be taken at pleasure.

" Fresh horse-dung put into a net, and thrown into the water, will " entice the fish about it.

" Quicksilver let down to the bottom of the water, in a *thick* glass " phial, on a moon-light night, will evince its power, to a *quick-sighted* " observer, of drawing the fish together.

" Barley boiled until it bursts, then reboiled with liquorice, a little " Mummy and Honey beat in a mortar until stiff as a paste, and thrown " into the water, will induce the fish to come where it is cast.

" Goat's blood, Barley meal, and the lungs of a Goat boiled and " pounded fine, and mixed with lees of sweet wine; the whole made into " pills, and thrown into ponds or pits, will soon render the fish Intoxi- " cated, which the person probably was who bestowed his labour to form " the Composition.

" Extract the juice of Dragon-wort, rub the hands with it, and hold " them in the water about *five* or *six* in the *morning*; and it is the per- " former's own fault, if he has not *fish for dinner*.

" Houseleek juice, with Nettles and Cinquefoil chopped small, dis- " tributed in quantities in the water, and the hands previously rubbed with " it, induce the fish to come to the person, that he may take *his choice*.

" Coculus Indicus, or fishers berries, pounded in a mortar with water

" into a paste, made up into pills, and thrown into any undisturbed part " of a pond or river, will so intoxicate every fish that swallows any of " them, that they will float on the surface, and may be taken out by the " hand or landing-net. To the *Coculus Indicus*, some add Cummin, old " Cheese, Wine lees, and Wheat flour. It is to be observed, for the " benefit of those who do not wish to be *poisoned*, that these berries are of " a deleterious nature; and it depends upon the *size* of the fishes, and of " the *quantity* of the paste they pick up, whether it *kills* or only *intoxicates* " them. It is said that those which have eaten *sparingly*, by being imme- " diately put into fresh water, will recover, and (if meant for the table,) " may, when well gutted and cleaned, be eaten with Safety; but it is sub- " mitted, that even an Alderman would pause, before he indulged his " appetite with *fish*, that might call for the aid of powerful Antidotes, before " even the Cloth was removed. If the dish, when dressed, could be made " to fall to the lot of *the Poacher only*, who employs this *dangerous* mode of " obtaining fish, the Practice, from motives of personal safety, would soon " cease*.

" *Heron*'s fat, mummy, galbanum, two grains; musk, one; mixt in an " earthen porringer over a gentle fire, with two ounces of aqua vitæ, and " stirred until thick, then kept in a leaden vessel, will preclude all use of a " bait; for, by rubbing the *hook*, *ends of the line*, or *cork*, the fish may be " taken out with the hand, or the practitioner may fasten them on the hook " himself, if he prefers the pleasure of landing them scientifically.

" *Heron*'s flesh, with some musk, amber and civet, put into a bottle, " close covered with wax; the bottle to be placed in a kettle full of " water, and boil it until the *said* flesh is converted into Oil; and this " rubbed on the line insures the coming of the fish to be taken.

* In 1788 an Accident of this kind, which terminated fatally, happened in *Lancashire*. Two young Men having caught a large quantity of *Trout*, by mixing *Lime* with the water in a small brook, ate heartily of the Trout at dinner the next *day*: they were seized at Midnight with violent pains in the Intestines; and though Medical Assistance was immediately procured, they Expired before Noon in the greatest agonies.

" Heron's bowels cut in pieces, and put into a phial, and buried in " horse-dung, will turn to Oil in fifteen days; an ounce of asafœtida " is then to be mixed, when it will be the consistence of honey: " anoint *line*, *rod*, or *bait*, (it does not much signify which,) and it will " do wonders.

" Oil of Ivy berries has been already spoke of, and what it can do " in scenting Worms for taking Salmon. Any one may procure Gum " Ivy, which is said to be still more powerful, by driving some great nails " into large Ivy stalks at Michaelmas; and having wriggled the nails " until loosened, they are to remain, and the Gum will flow from the " wounded parts, which the Operator may collect monthly, or oftener, if " convenient.

" Gum Ivy, two ounces dissolved in a gill of spring water, mixt " together with the like quantity of oil of sweet almonds; the Worms, " well scoured, intended for the day's use, are to be put into linen *thrums* " (or the ends of the warp, when the piece is finished,) well washed in " spring water and squeezed; the *thrums* are then to be wetted in this " composition, and with the Worms put into a linen bag, from whence they " are to be used.

" Asafœtida, three drachms; Spikenard of Spain, one; put into a pint " of spring water; place it in the ground in the shade fourteen days; drain " the solution through a linen cloth, and add to the liquor one drachm of " Spermaceti, and keep it close; put the Worms (well scoured) meant to " be used upon a pewter plate, and pour some of this water over them, and " then return them into the moss.

" Camphor in the moss, where the Worms are for the day's fishing.

" For a Trout in muddy water, and for Gudgeons in clear, anoint " eight inches of the line next the hook with the following:—Asafœtida,

" three drachms; Camphor and Venice turpentine, of each one; pounded " together in a mortar, with some drops of the chemical oil of lavender or " spike.

" *Sea-gulls fat* and *Eringo juice*, mixed together, are asserted to have " great attraction as an *unguent;* and oil of amber, rosemary, and myrrh, " equal portions of each, mixed with the Worms or in Paste, are said to " make the bait so tempting, that no fish in his Senses can resist it: Worms " also, killed by putting them into a phial of oil of Camomile, prove an " equally irresistible morsel.

" To be certain of a Net's doing execution, beat Nettles with joubarbe, " and a small quantity of Cinquefoil grass; to them add Wheat boiled in " Marjoram and Thyme water; pound the whole together, and drop it into " the Net.

" Marjoram, marigolds, wheat flour, and rancid butter, pounded " together, will allure fish of all kinds to the Net. A natural Query arises " as to the *kind* of Nets, and in *what manner* these baits are to be retained " in them?

" Scented Ground Bait. Unpickled Samphire bruised, made up in " balls with walnut-oil, is pronounced excellent for *Carp*, *Bream*, or *Tench;* " also bean flour, with a little honey, wetted with rectified spirits of wine " and oil of turpentine, made up in small pellets, and thrown in over night, " will keep the fish at the place, where they may be found with all desirable " keenness, ready for biting, the next morning.

" Juice of Camomile, half a spoonful; Chemical oil of Spike, one " drachm: Oil of Canary by infusion, one drachm and a half; Goose- " grease, two drachms: these are to be dissolved over the fire, and stand " until cold, then are to be put into a bottle unstopped for three or

" four days, then to be corked close, and the bait to be anointed " with it; when to this is added three drachms of the spirit of Vitriol, " it is called (but perhaps not so universally found to be) the *infallible* " *bait.*

" A part of the *same* fish designed to be angled for, bruised to pieces " with fennel and honey, put into clear water, and boiled to an oily con- " sistence as *thick as mustard:* and the oily *liquor* strained through a linen " cloth, into which not only the Worm on the hook, but ten inches of the " line, are to be frequently dipped, has great effect, but is very erroneously " (it is conceived) stated to be Mr. WALTON's prime receipt.

" The *Nostrum* that will however answer most profitably to him that " tries it, is taking a fat *Goose or Duck*, and Stuffing him with Sage, Mar- " joram, and fresh Lavender shred small; together with Castor, Gum " Ammoniac, Nutmeg, Mace, and Cloves beat well together in a mortar; " the Bird is to be roasted and eaten; the *dripping only*, when mixed with " the Oil of a *Dead Man*'s *Skull*, and Oil of *earth-worms*, (which must be " the *quintessence* of the last ingredient,) is to be used as an Ointment; it " is presumed the roasted Animal will receive more bites, than the *drip-* " *ping* will be able to acquire with all its additional allurements. But the " grand secret is yet to be unfolded, upon which too high a value cannot " be attached: *Cat*'s, *Heron*'s, and *Man*'s *fat*, *Mummy*, and the best " Asafœtida, of each two drachms; Cummin seed finely powdered, two " scruples; Camphor, Galbanum, and Venice turpentine, of each one " drachm, and Civet two grains; make them up *sec. art.* into a thinnish " Ointment, with the chemical oils of Lavender, Anniseed, and Camomile; " keep it in a narrow-mouthed, well-glazed gallipot, covered with bladder " and leather, and it may be preserved two years. When wanted, put " some of it into a taper *pewter* box, and anoint the *line* with it about " nine or ten inches from the hook; when it is washed off, repeat the " unction, and if the fish is so infatuated as to swallow the line *first*, and

" the hook and bait afterwards, there certainly will be ample proof of its " Efficacy*."

The only aid the Compiler has ever experienced from any application *whatever* to the Bait, has been by dipping the Worm in *Tar* when fishing for Tench; and he has reason to believe, that *Tench* will take more readily a Worm so prepared.

The various kinds of *float*-fishing, angling at *bottom* with the *running*-line, &c. will be touched upon when the detail of the different fish (that are the principal objects of the separate methods) is brought forward. The names of the fish taken by the *Angle* in the Waters of the United Kingdom

* The Idea of *Charming* Fish is not peculiar to European practitioners: it is resorted to in various parts of the World. We are told that the *Indians* at *Hudson*'s *Bay*, when they bait their Hooks in Angling, first sew a composition of four, five, or six articles round it by way of Charm. The materials are bits of Beavers tails and Fat; Otters vent and teeth; Musk-rats guts and tails; Loons vents; Squirrels testicles; the cruddled Milk taken out of the stomach of sucking Fawns and Calves; Human hair, and numberless other articles equally absurd. Every master of a family has a small bundle of such trash, which they always carry about with them both in Summer and Winter; and without some of these Articles to put under their Bait, few of them could be prevailed upon to put a Hook into the water, being fully persuaded that they may as well sit in their Tent as Angle without such Assistance. They have also a notion that Fish of the same Species inhabiting different parts of the Country are fond of different things, so that almost every Lake and River requires an alteration of the *Charm*. The same Rule is observed on broiling the first fruits of a *New Hook* that is used for a *New Net;* and an *Old Hook* that has already been successful in catching large fish is esteemed more valuable than a handful of *New Ones* which have never been tried.

This Superstitious Method of alluring the Fish is not confined to the Hook only, but a *New Net* must have the Bills and Feet of the laughing Goose, Wavey, Gulls, Loons, and Blackheads, fastened to its head and foot-rope; and at the four corners, the Toes and Jaws of the Otter and Jackash; and unless some or all of these be fastened to the Net, they will not attempt to put it into the Water, firmly believing it would not catch a *single* fish. The *first* fish of whatever species caught in a *New* Net are not to be sodden in water, but *broiled* whole, and the *Flesh* carefully taken from the *Bones* without dislocating *one joint;* after which the Bones are laid on the fire at full length, and burnt. A strict observance of these Rules is supposed indispensable for the future Success of the *New Net*, and a neglect of them would render it not worth a Farthing.

are the following, and are classed under two distinct heads. First, those that do not visit the *Salt* water.

Trout,
Grayling,
Pike, Jack, or Luce,
Perch,
Ruff, or Pope,
Gudgeon,
Carp,
Tench,
Rud, or Finscale,
Bream,
Chub, Chevin, Nob, or Botling,
Bleak, Bley, or Whiting,
Roach,
Dace, or Dare,
Minnow,
Loach,
Bull Head, or Miller's Thumb,
Stickleback, Banstickle, or Sharpling.

Secondly, the Fish of Passage.

Salmon,
Salmon-Fry,
Salmon-Trout,
Bull-Trout,
Bulger-Trout,
White-Trout, Sewen, or Whitling,
Gravling, Last-Spring, Shedder, Gravel-Last-Spring, or Sampson,
Mullet,
Smelt,
Barbel,
Flounder,
Eel.

Of these, Trout, Salmon, Pike, Perch, and Eels, have large Mouths, and the Teeth therein placed; but most of the other sorts have their Teeth in their Throat.

In proceeding to describe the above fishes individually, and the modes best adapted for their Capture, no particular Precedence according to their *goodness* will be observed; and the account will commence with the BREAM, which to an English appetite is, perhaps, one of the worst.

The **Bream** is a well-known fish, and yields good diversion to the Angler; is found in slow running, deep rivers, but is chiefly met with in extensive *Ponds*, where, although it grows tardily, it will attain the weight of three or four pounds, (they have been known to weigh eight,) and if the water and air suit him, will get very fat: they are great breeders, for it is observed, the Milter has two milts, and the Spawner two large bags of spawn, from which are deposited upwards of 130,000 *ova*. Very few wish to stock their waters with them, as they increase so rapidly, as to consume all the sweet feed, and starve other fish, and are only fit to be put into Ponds as food for Pike, Perch, &c.

The Bream is broad, with a small head, smooth at the top, big eyes, a small leather mouth, no teeth, but a lozenge-like bone to help its *grinding;* the palate is soft and fleshy, resembling that of the *Carp;* it is covered with curious net-work scales, on which it sometimes has abundance of minute *whitish* tubercles; has a hog back, of a colour between blue and black; the sides of the largest are yellowish, and the belly inclining to red; is extremely deep, and thin in proportion to its length; the tail is very large, and something in the form of a crescent. The flesh is soft and clammy, yet by some reckoned of easy digestion, and of better nourishment than that of the *Carp;* the choice parts are the *belly* and *head:* what renders it unpleasant for the table is the multitude of bones, and the best way of preparing, is by pickling it like Salmon. The *French*, however, esteem this fish highly, and proverbially say, "he that hath *Breams* in his pond is able to bid his friend *welcome*."

Bream spawn about the latter end of June: some prefer them in May, others in September, having then had their Summer feed; but the general opinion is, that they are most in Season when big with roe. It is affirmed, that the Bream and the Roach will breed together; but this is a mistake, for the Roach spawns the beginning of May. Bream swim together in shoals, and may be caught in a gentle stream, the water being rather thick, and a good gale of wind. In ponds, the higher the wind, and when the

waves are rough, the better. Of Rivers, the *Mole* in Surrey, about Dorking Bridges and upwards, is noted for large Bream; as also, the *Medway* in Kent; and they prefer the widest and deepest parts.

The baits used are the *Red* paste; also paste made of brown Bread and Honey, Gentles, Wasp-grubs, Flag-worms; and they are great lovers of Red-worms, especially such as are found at the *root* of a great *Dock*, and lie wrapt up in a round clew; the common Red-worms should be used two small ones at a time. Green flies under water, the Grasshopper with the legs cut off in June and July; but the best bait for the full-grown Bream is a large Red-worm without a *Knot*, which is to be found in Garden walks or chalky commons after rain: put the worms with moss well washed and picked, and the water squeezed from it, into an earthen pot set dry; change the Moss every four days for three weeks, they will then be clear, lively, and at the best.

The greatest Sport the Compiler ever had in Bream-fishing was at New-Hall Pond, in Essex, in the beginning of the month of June, when the Bream were *roding;* the Day was cloudy, and the Wind quite brisk through the whole of it: there were *seven* rods used by the party, and very frequently there were bites at them all at the same instant. When a fish was hooked, and played on the top or near the surface of the water, numbers were seen to follow him; and so soon as the hooks were fresh baited, were alike greedily taken. Some few *Perch* and *Tench* were caught, but principally Bream, which averaged at least two pounds a fish; and of these, from six in the morning till dark in the evening, some hundred weight were taken; the bait used was the large *Red*-worm, and the spot had been baited the morning and night *previous* to the day of fishing; the ground-bait used was *boiled wheat*, and some tallow *graves*, mixed together.

The following Directions have been generally given for taking the Bream, and as being also equally certain of tempting that shy fish the Carp.

The bait to be a large *Red*-worm, the rods long; the lines silk, or silk and hair, and the floats, goose or swan quills: a piece of Lead of the form of an upright Brass weight, with a hole at the top, is to be fastened to the low end of the lines; then fasten the hook link also to the lead, allowing ten inches or a foot between lead and hook, which should be No. 4: the lead must be sufficiently heavy to sink the float quite *level* with the surface, and not for the float to bear up the lead, which must lie on the ground; by which means the Worm will crawl up and down, so far as the lead will allow, which to the fish is a great Enticement. The line for two yards at bottom should be of strong round *gut*, and the link next the hook as small as you dare use, for fear of *Pike* or *Perch* (who will assuredly visit the hooks, and till they are taken neither Carp nor Bream will come near to bite;) this fineness will admit the Worm to draw the hook to and fro with less difficulty.

For the ground-bait, get a peck, or peck and half, according to the greatness of stream and depth of water, of sweet gross ground *Malt*, or unground *Wheat*, which is thought preferable; boil it very little, and strain it through a bag; when cold, *at night*, cast in two parts of it, squeezed hard between the hands, so that it may rest in the precise spot where you mean to angle; and if this is repeated for two or three times, it will more certainly attract the fish. Recollect in a *stream* to throw it at least *a yard above* the place where you mean your hook to be, or the Stream will carry it too far down; some sew Worms for the fish to feed on, upon a Turf of short grass, nearly to cover the turf, which is then fastened to a round board, with a hole through that and the turf, where a cord runs, and is tied to a pole to let down to the bottom. Bream generally choose the broadest and deepest part of a river, and in hot weather are easily seen swimming in Shoals: there, or thereabouts, with a *clear* bottom, take the *exact depth*, making some mark that shall explain if any *rise* or *fall* has taken place in consequence of Water-mills, &c.

The ground thus baited, the worms and tackling prepared, by three

or four in the Morning, with great caution approach the place, so as not to be seen by the fish; some of which are frequently at the top of the water, while the rest are feeding beneath. Having baited the hook that the worm can move at bottom, cast it, and by drawing it gently to you, let the *lead* rest about the middle of the *ground-bait;* a second rod should be a yard or two above, and a third a yard or two below it; retire from the water so far as just to perceive the *top* of the *floats;* when there is a bite, the top of the float will sink *suddenly*;* remain quiet until the line goes clear away, then creep to the water-side, and give as much line as possible; if it be a good Carp or Bream, it will go to the farther side of the River, strike gently, and hold the rod at a proper bend, that it may tire him; for if both pull together, either line, hook, or hold, will break, and the fish will be lost. The *Bream* is strong, and runs hard when first struck; but after two or three turns, he will fall on his side, which enables you easily to land him: the *Carp* is far stronger and more mettlesome than the Bream: it is adviseable to use a *Reel* upon the rods for *Carp, Barbel,* or *Bream:* the *length* of *line* kills the fish with ease, and increases the Angler's amusement.

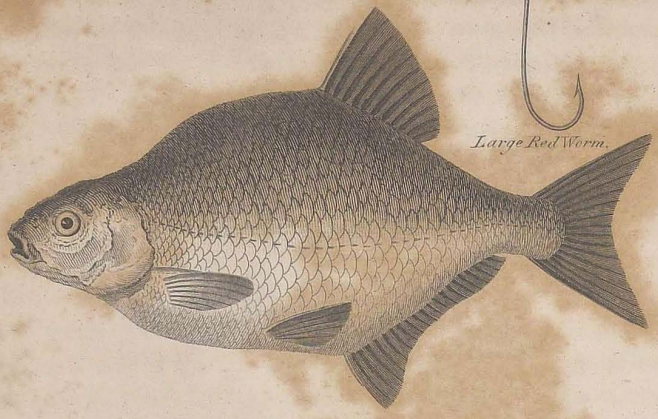
This sport may be continued from *four* till *eight* in the *morning,* and from *four* in the *afternoon* until the same hour in the *evening.* The following morning for the same hours, your diversion will be perhaps the best; if it is gloomy and windy, they will bite all day long, especially if the water is a little thick after *rains:* during the time of fishing, and at that of quitting the water, throw in more of the *Ground*-bait. After two or three days, the

* ———————— See! down sinks
My Cork, that faithful Monitor; his weight
My taper Angle bends; surpriz'd, amaz'd,
He glitters in the Sun, and struggling, pants
For Liberty, 'till in the purer Air
He breathes no more. Such are our pleasing cares,
And sweet Amusements; such each busy drudge
Envious must wish, and all the Wise enjoy.

SOMERVILLE.

BREAM.

N°4.



Large Red Worm.

Black Beatle Fly.



N°5.



Slug & Grasshopper.

N°4.



Marsh Worm.



CHUB.

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Place should be baited and left quiet; the fish will otherwise get too cunning to touch the *hook*-bait.

Keep in mind, that if *Perch* or *Pike* are in the river or pond, they will repair to the Ground-bait, (not to *eat* it, but to feed on the young fry that gather round it;) they are for the most part large, and must be first taken. The way to take the Pike is with a Roach, Bleak, or Gudgeon; for this purpose, use a Cork baited with one of these alive, with a small Red-worm at the point of the hook; set the bait two feet deep from the Cork among the Rods, and if a Pike be there, he will be sure to snap at it.

Another mode of catching the Bream is, after plumbing the depth, put one or more shot a foot below *the float* to balance it, which is a way to take the *shyest* fish; the bait a large *Red-worm*, which must be laid in, and let sink very gradually to the Ground-bait. When the fish bites, strike gently that very instant.

A third is, the *Running-line*, with a bullet and hole through it, and a small shot to hinder the bullet falling on the hook; let this run on the bottom with the Current into *holes*, and equally as for the *Bream*, it will be found to answer for all other fish that bite at the *bottom*.

Chub.

Salvianus, who would substitute the word *Squalus* instead of *Scarus*, from a supposed error in a certain passage in *Columella* and *Varro*, imagines this fish to have been the *Squalus* of the Ancients, but the Chub is not a fish very likely to be taken for a *Shark*. *Columella* says no more, than that the old Romans paid much attention to their *Stews*, and kept even the *Sea* fish in *fresh* water, (an art perhaps now lost,) paying as much respect to the *Mullet* and *Scarus* as those of his days did to the *Muræna* and *Bass*.

The *Scarus*, according to PLINY, was in high estimation, and was first transplanted by OPTATUS, the lieutenant-general of the fleet of TIBERIUS CLAUDIUS, into the Italian Seas, where it was cherished with the utmost care; he describes it as feeding upon grass or weeds, and chewing the Cud.

That the *Scarus* was not our *Chub* is evident, not only because the *Chub* entirely inhabits *fresh* waters, but likewise it seems improbable, that the *Romans* would give themselves any trouble about the *worst* of River fish, when they neglected the most delicious kinds; all their attention was directed towards those of the *Sea*; and the difficulty of procuring them (as is ever the case with *effete* Luxury) seems to have been the Criterion of their Value.

This fish takes its name from the Head, not only in our own but other languages; we call it *Chub*, according to *Skinner*, from the old English *Cop*, a head; the French, *Testard*; the Italians, *Capitone*; in different parts of England this fish is called *Chevin*, *Nob*, or *Botling*; he much resembles the *Carp*, but is of a longer form, the body is oblong, rather round, and of a pretty equal thickness in the greater part of the slope: the scales are large; the irides silvery; the cheeks of the same colour; the head and back of a deep dusky green: the sides silvery, but in the *Summer*, yellow; the belly white: the pectoral fins of a pale yellow; the ventral and anal fins, red: the tail forked, of a brownish hue, but tinged with blue at the end; is altogether a handsome fish; will sometimes weigh upwards of *five* pounds, but SALVIANUS speaks of them as increasing to *eight* or *nine*. The flesh of the *Chub* is not in much esteem, being coarse, and when out of Season full of small hairy bones; the head and throat are the best parts, taking care to have the latter well washed and cleansed from the grass and weeds usually in it. The Roe is exceedingly good, and this fish stewed as Carp, will, it is said, deceive a Connoisseur.

The haunts of the *Chub* are in rivers whose bottoms are of sand or

clay, or which are bounded by clayey banks (with the exception of their being found in the *Esk*, a river noted for the *chrystaline* clearness of its waters, flowing over a rocky bottom,) in deep holes, under hollow banks, in Summer particularly, where shaded by trees, weeds, &c. they frequently float on the surface, and are sometimes in streams and deep waters where the Currents are strong; in Ponds fed by a rivulet, they grow to a large size. They spawn in April, and are most in perfection in *December* and *January*, having then very few of the hairy bones aforementioned.

The *Chub* does not afford the Angler so much diversion as the Trout, from being so dull a fish on the hook, and when once struck becoming soon tired; but he bites so eagerly that when he takes the bait, his Jaws are heard to chop like those of the Dog, and having a very wide leather-mouth, and his teeth in his throat, there is little danger of his breaking his hold; to fish for him, the Angler should have a stout long rod, a strong line (if he uses a *reel* he will be enabled the better to fish under bushes,) with a yard or more of the best silk-worm gut at bottom, a hook proportioned to the bait used, a Swan quill float, and the line so shotted, eight or ten inches from the hook, as to sink the float to a quarter of an inch above the surface; the same *ground-bait* is to be used as for the *Carp*, and the hook baited with a sufficient quantity of *Salmon*'s *Roe* (boiled a little) to fill the *bend* properly; this rightly managed is a tempting bait. The large ones are to be caught by *dibbing*, very early in a morning, with the brown beetle, or *cockchafer:* by day-break the Angler should be at the river, and after baiting his hook, let him move it two or three times near the Surface, as in the act of *flying;* then let it softly drop on the water, shaking the rod gently, which will cause the appearance of its struggling to escape; this attracts the *Chub*, who are so fond of this bait that they will rise two or three at a time to seize it; the *landing-net* in this fishing should never be forgotten, as the places most likely for success in taking *Chub* are those where the Angler cannot get to the water side to land them with his hands.

Another way of *dibbing* is in a hot Summer's day with a Grasshopper.

In any hole where they haunt many of them will be seen basking themselves near the surface; the Rod must be both long and of considerable strength; the line strong, and in length about a yard; bait the hook with a *Grasshopper;* and the Angler must conceal himself behind some bush or tree, and remain as motionless as possible, (for the *Chub* is so fearful that the smallest shadow of a Bird flying over, or of the Rod, makes him sink to the bottom, but he will soon rise again:) having selected the largest *Chub*, let him move the Rod with great slowness and caution, and drop the bait gently upon the water, three or four inches before it, and he will infallibly take it: there is no danger of securing the *Chub*, if allowed play enough before it is attempted to be taken out, being one of the *leather*-mouthed fishes, wherein a hook seldom loses its hold. In the *Thames* above Richmond, the best way of using the *grasshopper* for *Chub* is to pinch off the first joints of the legs, and to fish with it as with an artificial Fly. In *September*, when the *weed* is rotten, the biggest Dace are likewise so caught. The *Chub* bites also at *cadis*, *beetles*, *blue-bottles*, and almost any natural or artificial fly that is in season, and often rise at the *Red-spinner*, when the Angler is trying for other fish: *black* and *dun* flies made gaudy, and ribbed with gold or silver twist, will succeed in *streams*. They are *bobbed* for over bushes, and under hollow banks, where the water can hardly be seen; but they are felt very forcibly when they take. In some Counties is used the following peculiar way of *dibbing* for them, where the still deep holes are in the middle of the river, and too distant from the shore for a *Rod* to reach: a Line sufficient, if *all* unravelled, to extend *twice* across the water, but when first began with no longer than from bank to bank, is stretched from two persons on one side to one on the other; at the Centre of this line, suspended from it, is a short twine, about a yard long, with a hook baited with a *cockchafer* or *grasshopper:* thus prepared, they drop the bait before any *Chub* they prefer; when they have hooked, the person carrying the line in reserve runs it out, whilst the fish is drawn over to the other side; the hook is then fresh baited, the *extra* line coiled up again to its proper length, and the same method pursued. Many pounds weight are thus taken in an hour.

The *Chub* will take *gentles*, *wasp*'s *maggots*, (which must be baked in an Oven before used,) *Paste* of fine new white bread, (without being made *wet*,) worked up in the hand and tinged with *Vermilion* as near as possible to the colour of *Salmon*'s *Roe:* from the hook this paste will not easily wash off, and is a most killing bait; but the best baits for *bottom* or *float*-fishing for this fish are *old Cheshire* Cheese, (such as without crumbling will mould in the hand,) and the *Pith* from the back bone of an *Ox*, with the *outward* so carefully taken off as not to bruise the *inward* skin. At every Season of the year the former of these is good; but the *latter end* of *Summer*, and *all* the *Winter*, are the preferable times for both. In baiting with the *Cheese* put a round lump, the size of a Cherry, on a large look, so as to cover the bend and some way up the shank: fish six inches from the bottom, or in cold raw weather the bait may lie on the ground; but if the hole has not been *ground-baited* the depth is immaterial: when there is a bite the float will very swiftly be drawn under water; strike immediately, and give him play, holding a tolerably tight line, to keep the fish clear from *weeds* and *stumps*, which at sight of the Angler he will endeavour to get at for shelter, and if not properly managed he will break the tackle. In the spring of the year the *Chub* will take a *marsh*, or small *red*-worm; in May, June, and July, *flies*, beetles, snails, (the black ones, with the belly slit to shew the *white;)* in August, pastes: the large Chub will also take Minnows, small Dace, and Gudgeons, angled with in the same manner as for Perch; and the latter bait used likewise as in *trolling* for Pike, the hook not so heavy leaded upon the shank; they *gorge* immediately upon taking the bait: their biting times are chiefly from *before sun-rise* until nine in the Morning, and from four until *after sun-set* in the *Summer*, (some will by chance take at any time of the day when mild and cloudy;) and in the Winter the middle of the day is best; remembering that in *hot* weather they are to be fished for at or near the *top*, and not deeper than *mid-water;* and in *cold* close to, or upon, the *bottom;* and that the *main-point* in taking this fish is, the Angler's keeping himself out of *Sight*.

Gwiniad.

ALTHOUGH a fish not immediately within the list of those that are Objects of the Angler's attention, yet it is noticed as being a native of peculiar parts of this country. It is found, according to PENNANT, in one of the Lakes of Ireland, *Lough Neagh*, where it is called the *Pollen;* in *Loch Mabon*, in Scotland, where it is termed the *Vangis;* and the Scotch have a tradition that it was there first introduced by their beauteous Queen, the unhappy MARY STUART; and as in her time the *Scotch* court was much frenchified, it seems likely that the name was derived from the *French Vendoise*, a Dace, to which a slight observer might compare it from the *whiteness of the scales:* the *British* name, *Gwiniad*, or Whiting, was bestowed upon it for the same reason.

It is a native of the Lakes in Cumberland; and in Wales in that of Pemble-Meer, or *Llyntegid*, near *Bala*, in *Merionethshire*. In the lakes of the *Alpine* parts of Europe, in those of *Switzerland*, (in that of Geneva it is named *Ferra,*) *Savoy*, and *Italy*, of Norway, *Sweden*, and Lapland, (where SCHÆFFER asserts they are caught of the weight of *ten* or *twelve* pounds,) this fish is an inhabitant. It is, continues Mr. PENNANT, gregarious, and approaches the shores during Spring and Summer in such vast shoals as to prove, in many places, to the Poor of *inland* Counties, as great a relief as the return of the *Herring* is to those who dwell upon the Coasts; and he recites an instance of an *Ulles-Water* fisherman who took between seven and eight thousand at one draught: it is there called *Schelly*, a name which the inhabitants of *Cumberland* give also to the *Chub*, from its being a scaly fish.

It has long since been observed in CAMDEN, that the *Gwiniad* never wanders into the *Dee*, nor does the Salmon ever venture into the *Bala* lake; and, generally speaking, this is the case; but, by accident, the first

CHARR.



GWINIAD.

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has been known to stray as far as *Landrillo*, six miles down the *River*, and a Salmon has now and then been found trespassing in the *Lake*.

The late *Honourable* DAINES BARRINGTON remarks upon this fish, "that it is universally supposed (and even by LHWYD, in his additions to CAMDEN'S *Britannia*) *Salmon* are never caught in the Lake of *Bala*, although they are frequently taken in the river *Dee*, just below where it issues *from* the lake, whilst the contrary is observed with regard to the *Gwiniad*, which is conceived to be a fish *peculiar* to the lake; but, says Mr. B. I happened to see a *Salmon* of about fifteen pounds caught *in* the lake, at least two hundred yards *above* the bridge through which the *Dee* issues; and, although I never saw the *Gwiniad* taken in that *river*, yet was I most authentically informed that several were caught, within three years, as low down as *Landrillo*, nearly *six* measured miles from the lake of Bala; and with respect to the *Gwiniads* being only in *this* lake, I can myself flatly contradict this notion, as the first parcel of fish which I happened to see in the Market of *Penrith*, in Cumberland, were of this sort, and were brought from *Ulles-Water*, about four or five miles from thence.

"One very striking mark in this fish, which cannot but be attended to by those even who are not Naturalists, is, that they have the *ventral* fins of a very deep *blue*, and the Belly at most seasons is marked with blue spots; which," concludes Mr. B. "is what I do not recollect in any other fish of this Island."

According to Mr. PENNANT, the *Gwiniad* is an insipid fish, and must be soon eaten, as it will not keep; and those that choose to preserve salt them: (SCHÆFFER represents them as being of an eminently fine luscious taste, and known in Lapland and Sweden by the name of *Sijk:*) the largest Mr. P. ever heard of weighed between *three* and *four* pounds; that from which he took his description was *eleven* inches long, and its greatest depth *three*. The head is small, smooth, and of a dusky hue; the eyes very large, and the pupil of a deep blue; the nose blunt at the end; the

jaws of equal length; the mouth small and toothless; the covers of the gills silvery, powdered with black; the back is rather arched, and, as far as the lateral line, glossed with a deep blue and purple colour, but towards the line assumes a silvery cast, tinged with gold, beneath which those colours entirely prevail; the belly is a little prominent, and quite flat on the bottom: the first *dorsal* fin is placed almost in the middle; the second is thin, transparent, and not distant from the tail; the *ventral* fins in some are of a very fine *blue*, in others as if powdered with blue specks; the ends of the other lower fins are tinged with the same colour; the tail is very much forked; the scales are large, and adhere close to the body. Their spawning season in *Llynteged* is in *December*. They are taken in Nets, but never by any Bait, keeping on the bottom of the lake, and feeding on small shells, and the leaves of *Water Gladiol*, a plant peculiar to these mountain lakes.

Charr.

The account of this fish is introduced for the same reasons that obtained in the preceding. There are but few lakes in our Island that produce the *Charr*, and even those in no great Abundance: it is found in vast plenty in the cold lakes on the Summits of the *Lapland Alps*, and is almost the only fish met with in any quantity in these Regions, where it would be wonderful how they subsisted, had not Providence supplied them with innumerable *larvæ* of the *Gnat* kind; these are food to the fish, who, in their turn, are a ready repast to the migrating *Laplanders* in their Summer voyages to the distant lakes, who dress and eat them, without the addition of any other Sauce than exercise and temperance. The Charr affects clear and pure waters, and is very rarely known to wander into running Streams, except into such whose *bottom* is similar to the neighbouring lake. It is found in *Winander Mere*, in *Westmoreland; Ulles-Water* in *Cumberland;* in *Llynn Quellyn*, near the foot of *Snowdon;* in certain lakes in Merionethshire; and, before the discovery of the Copper

Mines, in those of *Llanberris;* but in the last the fish have been entirely destroyed by the mineral Streams. In *Scotland* it is found in *Loch Tay*, *Loch Inch*, and other neighbouring lakes; and is said to go into the *Spey* to spawn. In *Ireland* the *Charr* is abundant in *Lough Esk*.

Mr. PENNANT describes the largest and most beautiful to have been sent him from *Winander Mere*, consisting of five Specimens; two under the name of *Case Charr*, (male and female;) a third was termed a *Gelt Charr*, that is, a Charr which had not *spawned* the preceding Season, and on which account it is reckoned to be in the greatest perfection: the two others were inscribed the *red charr*, the *silver* or *gilt charr*, which last are in Westmoreland distinguished by the epithet *Red*, from the flesh assuming a higher colour when dressed: it is esteemed so very delicious amongst the *Italians* that they consider it as excelling every other sort of fish, and so wholesome that sick persons are allowed to eat it. On the closest examination, continues Mr. P., no specific difference in these Specimens could be discovered; of course they must be described as the same fish, subject only to a slight variation in their form, hereafter to be noted; but there is in another respect an essential Difference in their Œconomy, which is in all beings invariable. The *Case Charr* spawns about Michaelmas, and chiefly in the river *Brathy*, which uniting with another called the *Rowthay*, about a quarter of a mile above the lake, they both fall in it together. The *Brathy* has a *black rocky bottom;* that of the *Rowthay* is a *bright Sand;* and into this the *Charr* are never observed to enter. Some of them spawn in the lake, but always in such parts of it which are *stony*, and resemble the channel of the *Brathy;* they are supposed to be in the highest excellence about *May*, and continue in perfection all the summer, yet are rarely caught *after April*. When they are *spawning in the river* they will take a *bait**, but at no other time, being commonly taken, as well as the other species, in what they call *breast nets*, which are about

* Colonel THORNTON, in his Tour, mentions taking one in a Lake near Dalnacardoch, and that it was what no fisher he could hear of had done before.

twenty-four fathoms long, and about five where broadest. The Season in which the other species, or *Gilt Charr*, spawn is from the beginning of *January* to the end of *March*. They are never known to ascend the Rivers, but always spawn in those parts of the lake which are *springy*, where the bottom is smooth and *sandy*, and the water warmest. The fishermen judge of this warmth by noticing that the water seldom freezes in the spots where they spawn, except in intense Frosts, and then the Ice is thinner than in other parts of the lake. They are taken in greatest plenty from the last week of *September* to the end of *November;* at other times they are hardly to be met with: this species is in much greater Estimation for the table than the other, and is very delicate when *potted*. Numbers thus prepared are sent to London, but are not all *genuine;* for there is a sort of Trout caught in the *Petterell*, (a small rapid river that runs near *Carlisle*, in the county of Cumberland,) which is similar to the *Charr* in size, as fine in colour, and when *potted* not to be distinguished from it; these *Trout* take the *May-fly* of both sorts, and all the other flies in Season, and certainly assume the name, and rival the flavour, of the *Charr* amongst the Epicures of the Metropolis. The *Charr*, when fresh, has all the sweetness of the Trout, with something of the taste of the *Red-Mullet*.

It must be observed that this detail of the Spawning season of the *Westmoreland* Charrs, agrees nearly with that of the same fish in *Wales*, the last appearing about a Month later, keep moving from side to side of the Pool, and then retire into deep water, where they are but rarely taken. Some have doubted whether the *Welsh* and *English* fish are of the same kind; Mr. Ray thinks there is no ground for doubt, the Welsh name *Torgoch* signifies a red belly, which distinguishes the *Red Charr* properly enough. In *Wales* it is a prime dish at fashionable Tables.

Mr. P. proceeds to describe the varieties by the names ascribed to them in the North. The length of the *Red Charr*, to the division in its tail, was *twelve* inches; its biggest circumference almost *seven;* each of

the *five* fish had *double* nostrils, and small teeth in the *jaws*, *roof* of the mouth, and on the *tongue*. The head, back, dorsal fin, and tail of each, were of a dusky blue; the sides rather paler, marked with numbers of bright red spots; the bellies of the *Red Charr* were of a full rich red; from this particular the Welsh call these fish *Torgoch*, or Red-belly; the bellies of the *Case Charr* were paler; the first rays of the *anal* and *ventral* fins of each, were of a pure white, the rest of each fin on the lower part of the body, tinged with red. The lateral line straight, nearly dividing the fish into two equal parts. The jaws of the *Case Charr* are perfectly even; on the contrary, those of the *Red Charr* were unequal, the upper being broadest, and the teeth hung over the lower, perceivable by passing the finger over them.

The *Gelt* or *barren Charr*, was rather more slender than the others, as being without spawn. The back of a glossy dusky blue; the sides silvery, mixed with blue, spotted with pale red: the sides of the belly were of a pale red, the bottom white. The tails of each sort, *bifurcated*. The *Charrs*, concludes Mr. P. brought from the *Snowdon* lakes, were rather smaller than those of *Westmoreland;* their colours fainter. The supposed males very much resembled the *Gelt Charr*, but that is not a certain criterion of Sex, as the Fishermen do not make that distinction.

The Rev. Mr. Farington has given the following account of the *Welsh* Charr; "that the Redness in the Female was paler or deeper, and resembles the fins of the Roach. The Male is not adorned with that beautiful line, yet he is finely shaded and marbled upon the back and sides with black streaks, upon a kind of pellucid light sky colour ground. The make is that of a Trout, but much more elegant and delicate, insomuch, that the Vulgar affirm a *Charr* to be nothing else than a Trout in high Season. Certainly they are similar, (though in one respect the *Charr* seems nearly allied to the *Eel* and the *Tench*, in being very *slimy*, and the cure and potting of *Charrs* depend upon cleansing and draining them of this mucilaginous quality;) whether you boil, stew, or fry them, they taste

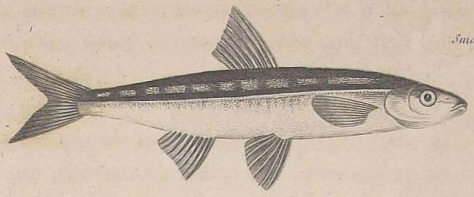
like *Trout*, although much more insipid; they appear with us, says Mr. F. at one Season, about the Winter Solstice; their stay is short, as if an act of necessity, and that they were in haste to go to more remote and private habitations.

"The lakes or large pools at the foot of *Snowdon* affording Being and Subsistence to this finny race, are called *Llanberris;* the upper and lower pool communicate with each other: the middle of *December*, the *Charrs* appear in both, never wandering far from the verge of these lakes, or the mouths of the rivers issuing from them, but traverse the shores of either side indifferently, or perchance as the wind sets, in great bodies, so that it is common to take in *one* Net twenty or thirty dozen in this place, and not above ten or twelve fish in all at any other. Thus in Winter frosts, they sport and play near the margin of the flood, and probably deposit their spawn and continue their kind; but in the Summer heats they keep to the deep and centre of the water, abounding in mud and large stones, as the shallower parts do with gravel, Providence withholding from Mankind this Fish, when it is not fit for meat, for after Christmas they are seen no more until the following year. The *Charr*, continues Mr. F. appear in a pool in my parish, called *Quellyn*, immediately after Christmas, and some, though very few, are taken in the *Trout*-net even at Midsummer, or rather at the two Trout seasons in Summer. It is remarked that these fish have a larger growth one year than another, and lastly I may add, that the whole number of *Charrs annually* taken in the *two* pools of *Llanberris* does not amount to *one hundred dozen.*"

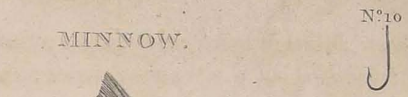
Minnow.

This beautiful fish abounds in many of our small gravelly streams, where they keep in shoals; it is sometimes called the *Pink*, and when in right season and not sick, which only happens just after spawning, is dappled,

MINNOW.



N°10



Small Red Worm.

N°10



Small Red Worm.

LOCHE.



N°4

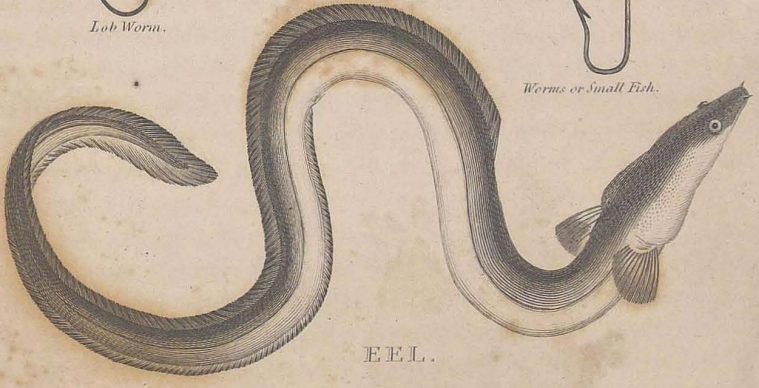


Lob Worm.

Night Lines



Worms or Small Fish.



EEL.

R. Reeve sc.

its sides inclining to a greenish watery sky colour, its belly white, and its back almost black, but these colours are *not* universal; the body is slender and smooth, the scales being extremely small; it seldom exceeds *three* inches in length; the lateral line is of a golden colour, the back flat and of a deep olive; the sides and belly vary greatly in different fish, as a few are of a rich crimson, others are blueish, and others white. The tail is forked, and marked near the base with a dusky spot. The *Minnow* appears first in *March*, continues until *Michaelmas*, and then betakes himself to the *mud*, *weed roots*, or *wood* in rivers, to secure himself from floods and fishes of prey. They are usually full of spawn all the Summer, (for they breed often,) and quickly arrive at their growth and perfection. Although so diminutive in size, the *Minnow* may be compared for the excellency of its taste to many of the most famed fish: they are in some places made into *Minnow Tansies;* after being gutted and well washed in salt and water, their heads and tails cut off, they are then to be put with yolks of eggs well beat with cowslip and primrose flowers, and a little tansy shred very small, and fried in good butter; the sauce to them is butter, vinegar or verjuice, and sugar. To the young Sportsman, who has not possessed himself of the *Patience* requisite to form the *Angler*, the *Minnow* yields plenty of amusement. They will, in *hot* weather, bite eagerly all day, and are frequently drawn out of the water from their adhering to the end of the worm, without being *touched* by the hook; the best way to catch them, is to have *three* or *four* very small hooks, baited with the least *red*-worm, or a piece of one, and a *crow* quill float; fish deeper than *mid-water*, or near the ground in shallow places, in eddies, and at the sides of small streams.

Minnows are very excellent baits for many fish, as will hereafter be specified, and when wanted in haste for that purpose, a small meshed *Casting-net* will save much time and trouble, as enough for a Day's diversion may be caught at a throw or two in shallow streams. Some who have not the conveniency of a *net*, *fox* them with very small pills of the *Coculus Indicus*, and have found one advantage by thus taking them, that

the *Minnow* is *brighter*, and will endure to lie *longer* in the water than those taken in any other manner. They must be kept in *bran*, (as should likewise small *Roach*, *Dace*, or *Gudgeons*, or they will soon become putrid, and so tender that it will be difficult to bait with them,) which dries up the moisture; and although stiff at first, and consequently will not *spin* so well, from the *bran* sticking fast to them, yet after a short time it will wash off, and they will be sufficiently pliable. The reason that the success in fishing with *Minnow* or other small fish, depends on their *quick turning round*, probably arises from their similar turning in a *natural* state; in observing upon the shallows in Summer, the innumerable shoals of very small fish, several of them are momentarily perceived to be seized with a kind of *vertigo*, whether from some injury or wanton sport this proceeds is unknown, but they are doubtless at that time less able to elude pursuit, and become a more easy prey to their vigilant devourers.

From its diminutive size and very delicate flavour, the *Minnow* reminds us of the astonishing demand in the month of *July* for small fishes in the Thames, near Blackwall and Greenwich, called *White-bait;* some years back, the taking of them was prohibited, under the supposition that they were young *Smelts*, but notwithstanding they resemble that fish in form, yet they want a *fin*, which the *Smelt* is *never* without. Some attribute them to the *Shad*, others to the *Sprat* and the *Bleak;* to the two former, it is apparent they do not belong, from the number of *branchiostegous* rays, which in those are *eight*, in the *Whitebait* only *three*. It is universally agreed that they are the young of some fish: they are not seen but at this time of the year, and are never found to have any *Roe*, a circumstance that proves their not being come to maturity. The quantity is amazing, and the fish producing them in such numbers must be in plenty, although it is not yet *known* what the fish is, as they correspond with no other Species whatever. They cannot be the *Bleak*, (although the *Whitebait* bears a greater similarity to this fish, than to any other here mentioned,) as in other rivers where the *Bleak* breeds in great abundance, they are unknown; most probably it is, that they are the young of some

fish not yet arrived at their *perfect* form, and therefore impossible to be classed with certainty: it is evident however that it is of the *Carp* or *Cyprinus* genus. It has only one *dorsal* fin, which is placed nearer to the head than the tail, and in respect to the form of the body, is compressed like that of the *Bleak;* its usual length is two inches; the under jaw is the longest; the irides silvery, the pupil black; the side line is straighter, the tail forked, its lips black; the head, sides, and belly, are *silvery*, the back tinged with *green.*

Loach.

This little fish is found in swift brooks among the gravel, or where there is a soil of mud and gravel together, with weeds, and in several of our rivers by the sides of sharp streams; it seldom rises to the top of the water, keeping at the bottom on the gravel, upon which it feeds, and is on that account in some places called the *Groundling:* it is frequent in the Stream near *Amesbury*, in *Wiltshire*, where out of frolic the Sportsmen swallow it down alive in a glass of *white wine.*

It is a slimy fish without scales, perceptible to the naked Eye, and of rather a long make; the mouth is small, placed beneath, and has no teeth; it is bearded like the Gudgeon and the Barbel, having on the upper mandible *six* small beards, one at each corner of the *mouth*, and four at the end of the *nose;* the body is smooth and slippery, and almost of the same thickness; the colour of the head, back, and sides, is in some white, in others of a dirty yellow, very elegantly marked with large spots, consisting of numberless minute black specks: the pectoral, dorsal, and caudal fins are also spotted; the belly and ventral fins of a pure white; the tail, where it joins to the tail fin, remarkably broad without any taperness; the tail fin is broad and rather rounded. One of the largest ever heard of by Mr. Pennant, was four inches and three quarters in length, but they seldom exceed three inches. The flesh of the *Loach* is singularly nutritious, and from

that circumstance, and its being equally grateful to the palate, it is recommended to the sick. The females during Summer are generally full of spawn. These fish are to be taken with a very small *Red*-worm, the bait touching the ground. The Loach is used as a bait for other fish, and for *Eels* perhaps it is the best.

Bull-Head, or Millers Thumb.

This is an unpleasant object, having a head not much unlike that of a *Toad*, and very disproportioned to its body: it is a species common in all our clear brooks, lying almost always at the bottom, either on the gravel or under a stone; it deposits its spawn in *April*, in a hole it forms in the gravel, and quits it with great reluctance; it has a large mouth; the teeth, which are like a fine *file*, are very minute, and placed in the roof of the mouth as well as in the jaws, and with these it nibbles its food, which is *water* insects. The *Bull-head* seldom exceeds the length of three inches and a half; the head is large, broad, flat, and thin at its circumference, being well adapted for insinuating itself under stones; on the middle part of the covers of the *gills*, is a small crooked *spine* turning inwards; the eyes are very small, the irides yellow; the body grows slender towards the tail, and is very smooth; the colour is as disagreeable as its form, being dusky, mixed with a dirty yellow; the belly whitish. They are found all the Summer in holes among mud and gravel, and among weeds and flat stones in clear water, where they may be seen sunning themselves in a hot day; put the hook with a small *Red*-worm before them and they will instantly take it. Notwithstanding the disgust which the form of the *Bull-head* creates, the largest when the heads are cut off are very delicious eating. They are also good baits for other fish; some Anglers think them, when their *Gill-fins* are cut away, preferable to the *Minnow*.

Stickleback,

Banstickle, or *Sharpling*, is the smallest fish in this Country, and is called by these several names in different parts of it; they are not worth the Angler's notice, except as baits with the *prickles* cut off, (which kills the fish,) for which purpose they are equal to the *Minnow*, or superior in *Pond* fishing for *Perch;* they may be taken with the least sized hook, and a bit of small red worm, and are found in little inlets of streams, and also in stagnated waters. WALTON considers the Stickleback preferable to the *Minnow*, as being capable of whirling round *quicker*, which is the perfection of this sort of fishing; to acquire this Velocity, the hook was to be put in at the mouth and out at the tail, and having first tied him with white thread a little above the tail, and placed him in such a manner on the hook as he is likely to turn quick, his mouth was then sewed up to the line; should he not whirl so speedy as is wished, the tail should be more or less turned towards the *inner* part, or side of the hook, or put somewhat more crooked or straight on the hook, until it turns both true and fast, and in a swift Stream any great Trout will be tempted; the *Loach* will have the same effect, provided it be small.

The Stickleback is seldom two inches long; the eyes are large, the belly prominent, the body near the tail square, the sides are covered with large bony plates, placed tranversely; on the back are three sharp *spines*, which can be raised or depressed at pleasure; the *ventral* fins consist each of one *spine* or rather plate of unequal lengths; beneath both is a flat bony plate, reaching almost to the *vent*, under which is a short spine, and then succeeds the *anal* fin; the colour of the back and sides is an *olive* green, the belly white, but in some, the lower jaws and belly are of a bright crimson. They spawn in April and June on the aquatic plants.

These fish are common in many of our Rivers, but no where in greater

quantities than in the *Fens* of Lincolnshire, &c. and some of the Rivers that communicate with them: it will excite our wonder to be told, that so small a fish as the *Stickleback*, which it might be thought could easily find support in any water, is obliged to *colonize*, and leave its native Fens, in search of new Habitations, yet once in every *seven* or *eight* years, in the *Welland*, at or near *Spalding*, there are amazing shoals, that come up that River in form of a vast Column; they are supposed to be the multitudes that have been collected in deep holes in some of the *Fens*, by the floods of several years, until overcharged with numbers, they are periodically compelled to migrate; the quantity is so immense, that they are used to manure the Land, and trials have been made to obtain *oil* from them. An idea may be formed of this enormous Column, by this known fact, that a Man employed by the Farmer to take them, for manuring his land, has earned for a considerable time *four shillings* a *day*, by selling them at a *halfpenny per bushel;* the Compiler has witnessed a similar process in the river *Cam*, where the *Sticklebacks* were caught (with nets like large *landing* nets fixed on short handles) by *myriads*, and applied to the same purpose of Agriculture. There is one singularity in the spawn of the *Stickleback*, that the *Ova* are bigger than those of the *Cod-fish.*

Ruff,

or *Pope*, is found in several of our Streams; the river *Yare* in *Norfolk* affords perhaps the greatest plenty: it is a gregarious fish, assembling in large shoals, and keeping in the deepest part of the water; it somewhat resembles a *Perch*, though the form is more slender, and the length rarely exceeds six inches, the teeth are very small and disposed in rows, it is marked on the jaws with a double course of half circles; the upper part of the *eye* is of a *dark brown*, the lower part somewhat *yellow*, and the globe of it *black;* the first rays of the *dorsal* fin (which is spotted with black) are like those of the *Perch*, strong, sharp, and spiny, the others soft; the body is covered with rough compact scales, the back and sides are of

a dirty *green*, the last as well as the belly inclining to *yellow*, but both spotted with and the tail marked with transverse bars of *black;* their principal spawning time is the beginning of *April*, but some are said to spawn again in *October*, and, in the Elements of Natural History, are said to deposit 75,000 *Ova*. To the young Angler, the *Ruff* yields good sport: they associate in great numbers, their haunts are in recluse places, where the water is deep, and runs quietly with a loamy or muddy bottom, and also in still water; the tackle should be fine, the hook No. 7 and a quill float, the bait (a small well-scoured *red worm)* must just run on the ground, and either throw in some *clay* balls with *worms*, as directed in Perch fishing, or if the water be clear, use common mud balls to colour it; three Rods may be easily managed, the baits touching the bottom; when there is a bite, strike directly, for they gorge so hastily, that the *disgorger* or a knife must frequently be used, to get out the hook; by thus angling for them, six or eight *dozen* are often caught at a standing. Either in the Spring or Summer, with a brisk, warm wind, they will bite all day; and will sometimes in *cold* weather take the bait very freely. The *Ruff*, for the delicacy and richness of its flavour, as well as for its being considered very nourishing, is more admired than the *Perch*. They are to be dressed in the same manner.

Rud,

or *Finscale*, is not a common fish; it is found in the *Cherwell*, near *Oxford*, and in *Northamptonshire*, in *Lincolnshire*, in some of the lakes in *Yorkshire*, and in the *Trent*, where it is believed to breed in the *Fleets*, which are large pieces of standing water, supposed to have been the ancient Course of that river, from whence they escape in high floods into the *Trent;* they affect ponds and still waters, where they breed and grow uncommonly quick, and will exceed *two* pounds weight. They are doubtless a distinct Species, notwithstanding Mr. WALTON mentions them as being produced by the junction of the *Bream* and *Roach*.

The body of the *Rud* is broader than the *Carp*, more like that of the *Bream*, but much thicker; the head is small, the palate and teeth like the Carp; on the covers of the gills are spots of a blood colour; the irides are yellow, varying in some almost to redness; the nostrils large, and by some said to be *double* on each side; the back is arched, sloping off suddenly at the two extremities; the scales are very large, like the Carp; the side line is slightly incurvated: the back is of an *olive*, the sides and belly are of a gold colour, with certain red marks; the *ventral*, *anal* fins, and the tail, (which is forked,) are generally of a deep *red*, and the *dorsal* fin is darker than the rest; the usual length of this fish is from *ten* to *sixteen* inches. It lives on *insects* and grass*, and is preyed on by the voracious fish, and the *Anseres*. In *Rivers*, the Rud's haunts are in deepish gentle *streams* and deep *still* water, where the bottom is a kind of slimy mud sand, or fine gravel, and also among *weeds;* in Pools, chiefly in *holes* among the Weeds. They are always in Season, except at the time of spawning, which is in *April*, when the Male fish have small *white* spots about their heads, and the Scales of both Sexes feel more rough; they swim in shoals, casting their spawn upon and among the aquatic plants, to the number, according to the Elements of Natural History, of 91,000 *ova*. Their flesh is exceedingly wholesome, and holds a distinguished rank for its fine flavour; but they are very scarce.

Mr. PENNANT believes the *Shallow* of the *Cam*, which grows to the length of *thirteen* inches, and spawns in *April*, to be no other fish than the *Rud*.

The Angler will find the *Rud* worth his attention; the tackle must be

* In 1796 at *Kimpton-Hoo*, near *Welwyn* in *Hertfordshire*, a *Rud* was caught with a *Minnow*. From the situation of the *teeth* of the Rud being in the *throat*, which does not bespeak him a fish of Prey, this is perhaps a fact as extraordinary as the catching a *Fordwich* Trout by Sir GEORGE HASTINGS. No fish of *that* sort had ever before been taken by the Angle; and this one he supposes to have seized the Bait from mere wantonness.

strong, but *fine*, with a *quill* float, and a hook proportioned to the bait; the same ground-bait is to be used as for *Carp* and *Chub*, fishing about the same depths as for the latter, except on the ground, for they feed naturally near the surface; they will in this way take *red-worms*, *gentles*, *wasp-maggots*, *cadis*, and *red* paste. Some use a ground-bait of *boiled malt*, and prefer a small *red*-worm to any other bait. In fishing among Weeds, have neither float nor shot, and let the *worm*, or other bait, sink a little *under* water: at *top* they are taken either with natural or artificial *flies*, by *whipping* with a long, and *dibbing* or *bobbing* with a short line. In warm, bright weather, the *Rud* will bite *early* and *late*; when coolish, the *fore* and *afternoons*; and in Winter, the *middle* of the day; when hooked, this fish struggles hard, and requires time in *landing*, and is so tenacious of life, as to retain it after being taken out of the water a considerable time.

Bleak,

Bley, or *Whiting*, a fish that is ever in motion, by some termed the *fresh-water* Sprat; and although the Italian *salt* and *skill* are wanting, to give the true *Gorgona* flavour, yet by some *Artists* the *Bleak*, as well as the *Sea* Sprat, is substituted for the *Anchovy*. The smallness prevents the Angler from making this fish a particular Object of his attempts, yet the taste is agreeable, and the flesh nourishing. The Bleak is seldom more than *six* inches long; the head is small, and the skull transparent; the eyes are large, with a blood-coloured spot on the lower side, the irides of a pale yellow; the under jaw the longest; the gills silvery; the body is slender, greatly compressed *side-ways*, not unlike that of the *Sprat*; the back is *green*; the sides and belly *silvery*; the *fins* pellucid; the lateral line rather crooked; the scales are large, and fall off very easily; the tail is much forked.

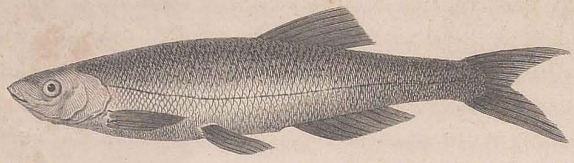
Some call the *Bleak* the *Water Swallow*, on account of its nimbleness in catching flies; they are very restless, their haunts being *sometimes* in deep, still water, at the sides and tails of *streams*, where the water shelves off, and makes a gentle eddy; at *others* in the Streams, which may be

observed by their swimming near the surface, and their very active manner of taking and diverting themselves with small *flies* and *insects*. In angling for the *Bleak* the tackle must be very *fine*, with *four* or *five* small hooks, so placed above each other as not to entangle, and swimming, by the assistance of a small *quill* float, rather *deeper* than midwater, and baited variously, as with a *gentle*, *blood-worm*, *cadis*, the *house-fly*, (or any fly they are observed at the moment to feed upon,) and a very small bit of *red* paste, throwing in now and then some *malt grains*, or chewed *bread*, to keep them together, (always remembering wherever *ground-bait* is used, *it should be inferior* to the hook-baits:) thus *two or three* at a time may be taken, for they are so eager as to leap out of the water at the bait. Should the day be *cold* and *cloudy*, a single *gentle* or *cadis* upon the hook is then best, sunk about two feet under water.

Another way of taking Bleak is by *whipping* from a *boat*, or the Bank side in fresh streams, with a rod *six* feet, and a line twice as long, using an artificial *black gnat*, a fly of a very sad, brown, colour, or the small *Dace* flies; they not only yield much sport, but are very instructive to the *young Fly-fisher*.

Walton, when mentioning the *whipping* for Bleaks, introduces an account he received from Sir Henry Wotton, that *Swallows* and *Martins* were caught in a similar manner in *Italy*, (and he says also in England.) The Bird-angler standing on the top of a Steeple, and with a rod and line twice the above length, by this mode secures numbers of these birds, but especially the latter. The *Bleak* are extremely common in many of our Rivers, and assemble in shoals: in the opinion of some they are always in Season except when spawning, which is said to be in *May*, from which they recover in about three weeks, and are in highest perfection in *Autumn*. It is however presumed that this assertion of their being always fit to be eaten with the *above* restriction, is wrong, for these fish in certain Seasons seem to be in great Agonies, they tumble about on or near the Surface, and are incapable of swimming far from the place, yet sometimes recover and

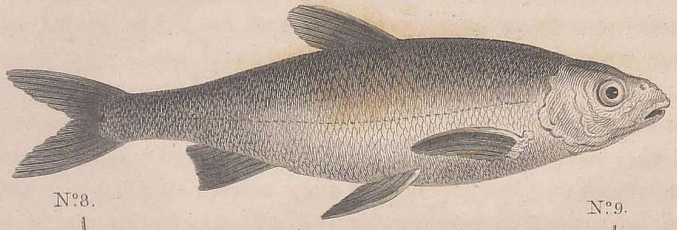
BLEAK.



N.º10.



Gentle.



N.º8.



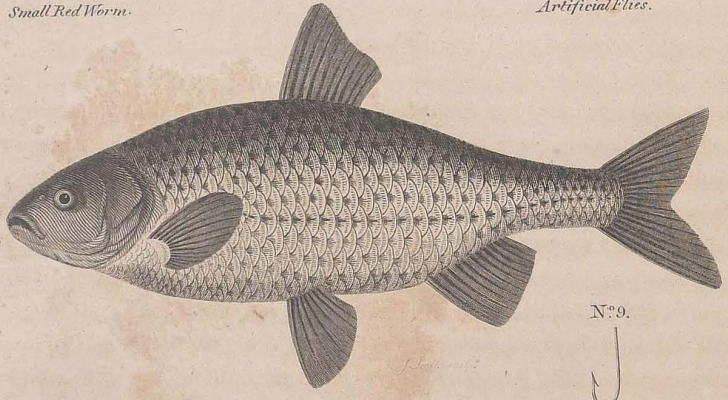
Small Red Worm.

DACE.

N.º9.



Artificial Flies.



N.º9.



Paste or Gentle.

ROACH.

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disappear. Thus agitated, the *Thames* Fishermen call them *Mad Bleaks;* and Mr. PENNANT remarks, they are troubled with a species of *Hair* worm, which ARISTOTLE says the *Ballerus* and *Tillo* are infested with, which so torments them, that they rise to the Surface and then die. The Compiler, in July 1801, took up many *Bleaks* affected in this manner at PERRY'S Dock, at Blackwall; when pursued they could not elude the pursuit by sinking *below* the surface, and when examined were puffed up with a substance which so swelled them, that they appeared big with spawn: upon making an incision, a *tape-worm* was drawn out, from many *sixteen inches* long, and from some still more extensive; they could not speedily void a *worm* of this magnitude, and numbers were found dead thus bloated with it, and surely could not at *this period* be deemed fit for Food.

Artificial *pearls* were made with the Scales of this fish, and likewise of the *Dace*. They were beat into a fine powder, then diluted with water, and introduced into a thin glass bubble, which was afterwards filled with *wax*. The *French* were the first inventors of this art: Doctor LISTER in his Journey to *Paris*, says, that when he was in that City, an artist used in *one* winter *thirty hampers* full of Bleak in this manufacture.

Dace,

or *Dare*, is gregarious, is a great breeder, very lively, and during Summer is fond of frolicking near the surface. Its head is small, the irides of a pale yellow, the body long and slender; its scales are smaller than those of the *Roach*, and it is upon the whole a handsomer fish: the back is varied with dusky, and a cast of *yellowish green;* the sides and belly *silvery*, the *ventral*, *anal*, and *caudal* fins are sometimes of a pale red hue; the tail is very much forked. The Dace is seldom above *ten inches* long; although in a list of fish sold in the *London* markets, with the *greatest weight* of each, communicated to Mr. PENNANT, there is an account of one that weighed *a pound and half*, and, according to LINNÆUS, it grows to a foot and a half in length.

The haunts of *Dace* are deep water near piles of bridges, where the stream is gentle, over gravelly, sandy, and clayey bottoms; deep holes that are shaded, *water lily* leaves, and under the *foam* caused by an eddy; in the warm months they are to be found in shoals on the *shallows* near to streams: the *Dace* spawn in *March*, are in season about three weeks after, they improve and are good about *Michaelmas*, but are best in *February*, and are said in that month, when just taken, *scotched* and *broiled*, to be more palatable than a *fresh Herring*.

This is a fish affording great sport to the Angler, indeed more pleasure than profit, for the flesh is insipid, and full of bones. The baits for Dace are the red-worm, brandling, gilt-tail, cow dung and earth bob, and indeed any worm bred on trees or bushes, that is not too big for his mouth, and almost every kind of fly and caterpillar. Flesh flies upon the *surface* with the hook put into the back between the wings, the line from the middle downwards of *single hairs*, and a trifle longer than the rod, which ought to be *eighteen* feet at least, and as light as possible; the flies can be kept in a phial; fix three very small hooks upon single hair *links*, not above *four* inches long to the line, and in a Summer's evening, at the smoothest part of the end of a *mill stream*, from *seven* or *eight*, and so long as light continues, the Dace will yield diversion. In the same manner, they will rise in the morning at the *ant-fly*, if used at the foot of a *current* or *mill* stream, or on a *scour* before the *Sun* comes on the water.

After rains, when the river is nearly level with its banks, use the *caterpillar*-fly or a small *red* Palmer and a *yellow gentle*, (the yellower the better;) run the hook through its skin, and draw it up to the tail of the fly, then whip on the surface, the Dace will rise freely.

Another way to take this fish from the middle of *April*, until the beginning of *October*, is by artificial fly-fishing with a long line, the fly generally either *black*, *brown* or *red*, made very small, on a hook No. 8 or 9. The three may be on the line together, about a yard asunder, letting the

black one be the lower fly, and that *alone* have a *gentle* at the *end* of it, and the other two to be the *drop* flies; by this mode many dozens may be taken in the course of a morning or afternoon; when they are on the *fords*, and the weather is favourable, particularly in Rivers where the *Tide* flows a moderate height, (as for instance in the *Thames*, between *Kew* and *Richmond* bridges,) for every Tide is a kind of fresh water to the fish, and, as it clears off, they will take astonishingly. Their chief biting times are, in *hot* weather, early or late; in *cold*, the middle, and in mild cloudy weather, the *whole* of the day; but after a *hot*, *bright* Sun, they will take the above flies in the *clearest* water, from a little before sun-set, until dark. Above *Richmond* when the *weeds* begin to rot, a *grasshopper* with the first joint of his legs pinched off, and the hook put in at the head and brought out at the tail, and used as an *artificial-fly*, does great execution in a warm day upon the *shallows;* this fishing can only be done in a *boat*, which is to drive down with the current, (having a heavy *stone* by way of *anchor* fastened to a rope, five or six yards long, at the head of the *punt* or *wherry;*) when come to a likely spot, drop the stone, and standing in the *stern*, throw right *down* the stream, and then to the *right* and *left;* after trying about a quarter of an hour in a place, weigh anchor, and proceed in the same manner at the next probable haunt; use a common *fly-line* about *ten yards* long, and a strong *single hair* next the hook. It may be said there is less certainty of catching *Dace* in this way, than with a *float* and *ground-bait;* but to those who are situated near the banks of the Thames, between Windsor and Isleworth, so as to take advantage of a *still*, warm, *gloomy* day, it will afford much more amusement than the ordinary method.

In angling for Dace with *maggots* the *tackle* cannot be too *fine*, the float small, the hook No. 9, the shot a foot from it; by baiting the place with a few *maggots* before fishing the diversion will be increased. If using *gentles* in an eddy between two *mill-streams*, and the water is only two or three feet deep, there will be greater chance of success than when it is deeper; use *here* a cork float, bait with *three large gentles*, and strike at the first nibble; if there are large Dace in the *mill* pool they will resort to this eddy.

In *bottom* fishing for *Dace* let the *ground-bait* be *bread*, soaked an hour in water; put an equal quantity of *bran*, knead it to a tough consistence, and make it into balls, with a small pebble in the middle to sink them; throw these balls a little *up* the stream from the spot where it is proposed to angle, that the Current may not drive them beyond the reach of the line. Fish for *Dace* within *three inches* of the ground, especially where the *ant fly* is the bait *under* water. The Compiler has caught *Dace* of upwards of a pound weight, upon *night* lines, baited with a *Minnow* for *Eels*.

In the *Mersey*, near Warrington, a fish called the *Graining* is taken, which much resembles the Dace, but is slenderer, and the back straighter; the usual length does not exceed *eight* inches. The colour of the back is silvery with a *blueish* cast, the *Eyes*, *ventral*, and *anal* fins, are paler than those of the *Dace*, but the *pectoral* fin is *redder*, and they are much better eating.

Roach

is a handsome fish either in, or fresh out of the water; it inhabits many of our deep, still rivers, affecting, like the others of this genus, *quiet* waters. It is gregarious, keeping in large shoals. It has a small head, a leather mouth, which is round, and also small, with the teeth in the throat; large eyes, the *circle* of which resembles *gold* colour, and the *iris red;* the *Roach* is deep but *thin*, and the back elevated; the scales are large, and easily fall off; the fins are in general *red*, particularly whilst in perfection, as they may also be known to be by the *smoothness* of the scales, which, when out of season, feel like the rough side of an *oyster*-shell; the side line bends much on the middle towards the belly, and the tail is a little forked. It is so *silly* a fish that it has acquired the name of the *water Sheep*, in contra distinction to the *Carp*, who for his Subtlety is termed the *water Fox*. The proverb of "*Sound as a Roach*" appears to be not peculiar to this Country; the *French* have the same idea, who compare

people of strong Health to their *Gardon*, our *Roach*, and yet this fish is not more distinguished for its *vivacity* than many others.

This fish is in little esteem, from the quantity of *bones;* the flesh is, however, exceedingly wholesome, and the *Roe*, which is *green* and boils *red*, peculiarly good. Soup made of this fish is excellent. There is a kind of *Roach* in some *ponds* and *standing* waters that is very flat, having *whitish eyes* and *fins*, and the tail *much* forked; it is supposed to be bred from the *Bream* and *Roach;* they never grow large, and are good for nothing. *Roach* differ much in goodness, according to the rivers they are taken from, but none of the species are good in *Ponds;* in many Streams they are taken of *two pounds* weight, but the preferable size for eating are those of about *half* a pound, and probably were they not so common and numerous would not be so much despised as they now are.

Walton speaks of the largest Roach in the Kingdom being in the *Thames*, where many have been caught of the weight of *two pounds and a half;* and in the list alluded to in the preceding fish mention is made of one which weighed *five pounds*. In referring to this catalogue of remarkable fish, we are reminded of some curious *rude* portraits in the Kitchen of Tyringham House, near Newport Pagnel, of the following fish, which were at different periods taken in the Ouse.

A *Carp*, in 1648, two feet nine inches long.
A *Pike*, in 1658, three feet seven ditto.
A *Bream*, ——— two feet three and a half ditto.
A *Salmon*, ——— three feet ten ditto.
A *Perch*, ——— two feet.
A *Shad*, in 1683, one foot eleven inches*.

* On the 5th of June, 1804, I saw a *Shad* that had been taken that morning just above London Bridge: the extreme length was *One foot eleven inches*, was *Eighteen* inches from Eye to Fork, and weighed five pounds.

Pennant,

These are the Records of *Rural* life; important, perhaps, only to those who are happily disengaged from the *Cares* attendant upon *business*, *politics*, and *dissipation*.

The *Roach* delights in *gravelly*, *sandy*, or a kind of *slimy marl* bottoms, under a deep, gentle, running stream: in the *Summer* they often frequent *shallows* near the tails of *fords*, lie under *banks* among *weeds*, (especially when the water is thick,) under the *shade* of boughs, and at or opposite the mouth of a rivulet or brook, that empties itself into a larger river, the best *Roach* are generally to be met with; as *winter* approaches their haunt is changed to clear, deep, and still waters.

The *Roach* spawns the latter end of *May*, (according to the Elements of Natural History, it produces upwards of 54,000 *ova*, feeds on aquatic plants and *vermes*, and is preyed upon by the larger *fishes* and water *fowl:*) for *three* weeks after spawning they are unwholesome; they recover themselves in *July*, and get good about *Michaelmas*, but are in their prime in *February* or *March*.

Many ways are recommended to catch this fish by angling. When

PENNANT, in his LONDON, says the *Shad* arrives in the Thames the latter end of May, or early in June, and is a very coarse fish; it sometimes grows to the Weight of Eight pounds, but the usual size is from four to five. This is the fish which DU HAMEL describes as the true *Alose* of the French; but the *Thames* Fishermen have another they call *Allis*, much less than the former, with a row of spots from the gills along the sides, just beneath the back, more or less in number: This the French call *Le Feinte**. "I suspect," says Mr. P. "that the name *Allis* is misapplied to this Species, and that it ought to be applied to the greater common *Shad*, being an evident corruption from the *French* name *Alose:* is the same with that of the *Severn*, but is rarely taken here; but neither of them is admitted to good Tables."

The Shad of the 5th of June was considered by the Fishermen to be an *overgrown* fish of its Species, yet Mr. PENNANT describes them as sometimes attaining to nearly double the weight of this.—He thus mentions the *Shad* of the *Severn*. In *Great Britain* the *Severn* affords this Fish

* Bloch 11 Tab. 30, gives the figure of the *Feinte*; but is of opinion that the Spots vanish with Age. "For my part," says Mr. P. "I have not had opportunities of frequent Examination of these fishes, but I incline to think they are different, as the *Feintes* appear in Spawn at the length of *Sixteen* inches, which is their largest size."

in deep waters, near piles of bridges, flood-gates, &c. in *hot* weather, a *May* or *Ant-fly* is to be sunk by a little lead, within a few inches of the

in higher perfection than any other River. It first appears there in May, but in very warm seasons in April; for its arrival, sooner or later, depends much on the temper of the Air. It continues in the River about *two Months*, and then is succeeded by a *Variety*, which we shall have occasion to speak of hereafter.

The *Severn Shad* is esteemed a very delicate Fish about the time of its first appearance, especially in that part of the river that flows by *Gloucester*, where they are taken in nets, and usually sell dearer than *Salmon:* some are sent to *London*, where the Fishmongers distinguish them from those of the *Thames* by the *French* name of *Alose*. Whether *Shads* spawn in the *Severn* and the *Wye* is not determined, for their *Fry* has not yet been ascertained. The old Fish come from the Sea into the River in full Roe. During the Months of *July* and *August*, multitudes of *Bleak* frequent the River near *Gloucester;* some of them big as a small *Herring*, and these the Fishermen erroneously suspect to be the *Fry* of the *Shad*. Numbers of these are taken near Gloucester in those Months only, but none of the *emaciated Shad* are ever caught in their Return.

The *Shad* of the *Thames* does not frequent that River till the latter end of *May* or beginning of *June*, and is deemed a very insipid coarse fish. The *Severn Shad* is sometimes, though rarely, caught in the *Thames*, and called *Allis* (no doubt *Alose* the *French* name) by the Fishermen in that River. About the same time, and rather earlier, the *Variety*, called near *Gloucester* the *Twaite*, makes its appearance, and is taken in great numbers in the *Severn*, and is held in as great disrepute as the *Shad* of the *Thames*.

The differences between each *Variety* are as follows.

The true *Shad* weighs sometimes *Eight pounds*, but their general size is from *four* to *five*.

The *Twaite* on the contrary weighs from *half a pound* to *two pounds*, which it never exceeds.

The *Twaite* differs from a small *Shad* only in having *one* or more round *black spots* on the sides; if only *one*, it is always near the *Gills*, but commonly there are three or four, placed one under the other.

The other particulars agree in each so exactly, that the same Description will serve for both. The head slopes down considerably from the back, which at the beginning is very convex, and rather sharp: the Body from thence grows gradually less to the Tail. The under jaw is rather *longer* than the upper; the Teeth very minute. The *dorsal* Fin is placed very near the Centre, is small, and the middle rays are the longest: the *pectoral* and *ventral* Fins are small; the Tail vastly forked: the Belly extremely sharp, and most strongly serrated. The Back is of a dusky Blue; above the Gills begins a line of dark spots, which mark the upper part of the Back on each side; the number of these Spots is uncertain in different Fish, from *four* to *ten*.

hook, near the sides of these posts or piles: this is to be pulled up very leisurely, a *Roach* will generally attend the *Fly* to the surface, there gaze on it for a moment, and then take it.

Stern fishing is by fixing a boat (for without Roach of any size are hardly to be caught) to the stern of a Vessel returned from a Voyage, whose bottom is foul and furnished with insects, which the fish greedily devour. The *line* should not exceed *four feet*, the float be within a *foot* of its *top*, and the *rod* very short; the bait to be *three* or *four* gentles, and dropped close to the Ship's sides, not allowing the bait to swim more than *eight* or *nine feet:* begin at the *first* of the *ebb* tide, and for two hours the *Roach* will bite freely.

To *London* bridge, and among the shipping below it, numbers of *Roach* return in *June* and *July*, after having been up the river to spawn, and many of them are taken by means of a strong *cord*, to which is fastened a *leaden* weight, more or less, according to the strength of the *Current;* a *foot* above the lead a *twine* twelve feet long is joined to the *cord*, and to this *twine*, at convenient distances, are tied a dozen *hair* links, with Roach *hooks* at their ends; these are to be baited with *white snails* or *periwinkles*, taken *whole* from the shell; the twine with the hooks is then first thrown in, that the stream may run it out its full length without entangling, the *weight* is then let down to the bottom, the fisherman holds the *cord* in his hand, and readily feels the biting of the fish, which is a signal to pull up the weight and line: frequently *five or six*, and seldom less than *two* or *three*, are taken at a haul, and they are for the most part very *large:* by standing in a *lighter* or *lug*-boat, that is fastened to some vessel, this method can be best managed.

In the *Elements* of *Natural History*, this Fish is described in the following manner. In *May* and *June* the *Shad* ascends the Rivers, and deposits its Spawn in rapid streams. In *Autumn* it returns. It is from *two* to *three feet* long, lives on Worms and Insects; it is preyed upon by the *Siluri*, *Pikes*, and *Perches*. It is detested by the *Russians* and the Inhabitants of the *Wolga*, although it is much relished elsewhere, and in *India* its *Ova* are as highly esteemed, as *Caviar* is by the *Russians*. It is covered with large Scales which easily come off.

Some, in both pond and river, chew and throw in *white* bread, baiting with *one* large gentle, and fish *six inches* from the bottom: others, for *Winter* fishing, when Maggots (which are beyond question the best *winter* bait) are not to be had, use *Graves* from the *Tallow-chandlers*, thus prepared: put them in cold water upon the fire in pieces of about half a pound, let them continue until near boiling, when they will become *white* and *soft;* the *whitest* is to be reserved for the *hook*, and the rest used as *ground-bait;* the hook should be No. 6, and the bait either touch the bottom, or lie within *one* inch of it. *Earth bobs* and gentles are famous winter baits, using boiled *Malt* or *fresh* grains as ground-bait; in *Autumn* Roach will take *white paste*, on a hook No. 9; in *Summer* snails and flies under water, for they never rise at a fly like the *Dace*. In April *Cadis*, *Oak-worms*, and small *red*-worms, the *latter* especially in *windy* weather.

The season for Roach fishing in the *Thames* (in which, near *Shepperton* and *Hampton*, many have been taken above two pounds weight) begins about the latter end of August, and continues longer than most *Anglers* (of which the *Londoners* for *Roach*, are perhaps the best,) choose to brave the weather. In the *Summer* they live on the *weed*, and do not quit for the *deeps* until it becomes *putrid*, which depends upon the *drought* or *wetness* of the weather, much Rain hastening its rotting; the fishermen all along the River are at this time upon the watch, and the instant the *Roach* move, sweep them away with their *drag-nets;* it requires, therefore, skill in the Angler to attend to this critical period, or the objects of his diversion are by *wholesale* carried to *Billingsgate**.

* The *Thames*, both above and below London Bridge, was formerly much resorted to by the London Anglers. One favourite Station was near the Starlings of the Bridge. About 1730 JOHN REEVES, a Waterman, died, who had made a comfortable living by *attending* Anglers in his boat, for which the hire was *two shillings* a *tide*. He used to ply at *Essex Stairs;* and his method was to watch when the Shoals of *Roach* came down the river from the upper parts of it; and when he had discovered them to go round to his Customers, and give them notice. Sometimes they settled opposite the *Temple*, at others at *Black-friars* or *Queen-hithe*, but most frequently about the *Chalk-Hills*, near London Bridge. His Employers, as a reward for his diligence and attention, bought him a *Waterman's Coat* and *Silver Badge*, the Device upon which was himself with an Angler in his Boat. The Coat was *annually* renewed to the time of his Death.

The *tackle* for *Roach* must be fine and strong: by some are recommended a Rod not exceeding *six feet*, a *line* somewhat *shorter*, of six hairs, and about *two feet* of *gut* for the bottom links, a *swan* quill float, and hooks No. 11 or 12, (although if not made of stouter wire than those usually sold of those sizes, No. 9 or 10; *Roach* rarely break the hook *in* the water, yet the *beard* of these very fine hooks is frequently broken at the time of being extracted by the fish's springing about, and their mouths being so *bony;)* the baits, *gentles*, *red paste*, *boiled wheat*, or *malt:* the gentles of a *pale red* colour, with a *white* one, are often taken both by *Roach* and *Dace* with great eagerness; *red paste* is also excellent. (The Angler is cautioned to be provided with several sorts of baits, as these fish are capricious in their feeding, and in the course of a *morn* or *eve* will shun *what* they had just before taken, and in a short time again with avidity seize *that*, rejecting all others.) Great attention must be paid to strike *quick*. In using boiled *malt* or *wheat* select those corns that are soft and plump; *one* is sufficient: put the hook into it so that the point may lie where it is burst and the *white* appears, the fish will be more readily hooked. The *ground*-bait should be boiled malt, with which some holes may be previously baited; if that mode is not adopted whilst fishing, throw it in from time to time *sparingly*.

The following method is mentioned as being more generally successful than any other. A *rod* rather stiff, which will strike *true*, and in length proportioned to the place where used; the *line* a *foot* shorter than the rod, strong at top and tapering to the bottom, which must be a fine, smooth, silk-worm gut, dyed *brownish*, or of a *water* colour; the hook No. 8; one small shot is to be put on the line, about *ten* inches from the hook, the rest *(large)* close together, *four* or *five* inches higher up, sufficient so to *sink* a *swan* quill float as that its *top* may just be discerned above the surface. When a spot is fixed on *plumb* the depth, and the float is to carry the bait not more than *one inch* from the bottom, which must be *level*, the run *gentle*, and the water *deep* when *clear*, or in *winter;* at other times, when the water is coloured with *rain*, and especially if in the *rain*, the bait should swim from about three quarters of a yard to the

depth of a yard and a half: if in a *Tide*, or where streams rise or fall, the depth by means of the plummet is to be ascertained and observed as above directed. At the top of the *swim* throw in three or four balls of ground-bait, (about the size of an *egg*, and a pebble in each to sink them, and which is to be made with large wheat *bran*, enough sweet coarse flour to bind the bran, and *scalding* water; this is to be so kneaded as to be sufficiently stiff to prevent its breaking in sinking to the bottom, and yet so as to fall gradually to pieces soon after it reaches it,) and care should be taken so to throw the balls as that the bait may rest as directly over them as possible. The bait is a *grain* or *two* of *Salmon*'s *roe*, or a small piece of *red-paste* in imitation of it, (which is as good as the *roe*, and will continue on the hook a long time, if properly made, even if the fish is struck at and missed, and there be no *cotton* mixed with it.) A sharp eye must be kept on the *float*, and the least *nibble* is the signal for striking; if a full-sized *Roach* is hooked he should be played, for they struggle much; and although many accustom themselves to a *single hair* line, yet where the fish run large it is not always to be depended upon. A *landing*-net is useful in getting out the big ones, and by drawing them two or three yards *below* where the ground-bait lies there will be less disturbance to the fish beneath.

Should the water not be very clear, *two* hooks may be used, by neatly looping a piece of gut two or three inches long, with a hook to it, close above the *single* shot, so that it may stand out from the *line;* bait it with Gentles, and the *lower* hook with the *paste* or *roe*, and if they are shy, with a Gentle slipped into the *bend* of the hooks, and a grain of the *roe* or *paste* upon the *point*.

Roach are also to be caught in warm weather with Cadis and natural flies *under* water; and will sometimes in warm, close Evenings, a little before *Sun-set*, take an *artificial* fly at *top*, but then a well-scoured *Gentle* must be placed at the *end* of the *fly*. In mild, cloudy weather, the *Roach* will bite *all day;* in hot, *morning* and *evening;* and in cold, the middle and warmest parts of it.

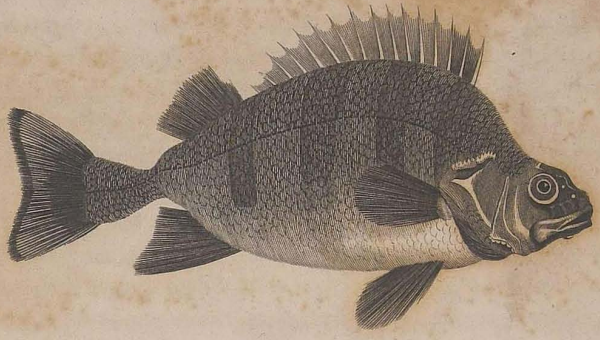
Large Roach, after having some flour thrown upon them, should (without *scaling)* be laid upon a Gridiron over a slow fire; as they grow brown, a *cut*, not more than *skin* deep, is to be made along the back, from head to tail, and then replaced on the fire; when sufficiently broiled, the skin and scales will peel off, and leave the *flesh* perfectly clean and very firm. The belly is then to be opened, and the inside will come away more cleanly than if Water had been used before broiling, which washes away all the *firmness* and *flavour* of any fish. The Sauce to them is *Anchovy* and *butter*.

The late Mr. Bamber Gascoyne always had *large Perch* dressed in the above manner, except slitting them down the *back:* he was also celebrated for the very capital style in which he himself dressed them as *Water Souchy*, and the hospitable and mirthful Welcome with which he always presented these Efforts of his Art in Cookery will not, by those who had the pleasure of his Acquaintance, be readily forgotten.

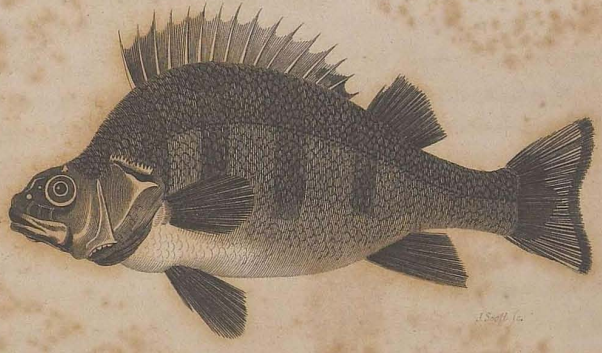
Perch

have one particularity, which is contrary to the Nature of all fish of Prey in *fresh* water (and they are so voracious as to attack their own kind,) that they are gregarious, swimming in Shoals. The body of the *Perch* is deep, the *scales* very rough, the back much arched, and the side line approaches near to it; the *irides* are golden; the *teeth* small, disposed in the jaws and on the roof of the mouth, which is large; the edges of the covers of the gills serrated, on the lower end of the largest, in a *sharp spine*, and the head is said to consist of no fewer than *eighty* bones: the colours of the *Perch* are beautiful, the back and part of the sides being of a deep *green*, marked with broad *black* bars pointing downwards; the belly is white, tinged with red; the ventral fins of a rich *scarlet*, the *anal* fins and tail (which is a little forked) of the same colour, but rather *paler*.

PEARCH, *Variety.*



N°2.	N°3.	N°5.	N°4.
Lob Wòrm.	*Minnow.*	*Brandling.*	*Marsh Wòrm.*



J. Scott fc.

PEARCH.

Published May 1800, by Bunney & Gold 103 Shoe Lane, London.

This fish is a slow grower*, and seldom with us is caught of an extraordinary bigness; in *Lapland* it arrives at a size far superior, for SCHÆFFER asserts, "that there is a dried *head* of a *Perch* preserved in the Church of *Luehlah*, which from the *top* to the *under* jaw is above *two hands* broad†." The largest ever heard of in this Country was taken in the *Serpentine* river, in *Hyde Park*, which weighed *nine pounds;* but that weight is very uncommon.

One of *eight* pounds was caught in *Dagenham Breach* by Mr. CARTER; and in the *Angler's Sure Guide* is noticed the portrait of one, taken near *Oxford, twenty-nine* inches long, and deep in proportion. Where the Perch are considered to run *large*, their general length is from about *ten* to *sixteen* inches.

The *Romans* esteemed the *Perch* highly, and it is not less admired at present as a firm and delicate fish. The Germans have this Proverb, "More wholesome than a *Perch* of RHINE." The *Dutch* (and I believe the *English*, who have a little of *Epicurism* in their taste) are particularly

* A circumstance which occurred in Middlesex, and mentioned by Sir JOSEPH BANKS, proves, however, that in some Water, and with plenty of small fry, the *Perch* will rapidly increase in Weight. In the Autumn 1797, a Pond was emptied, wherein various fish had been kept for Years, and among the rest *Perch*, none of which ever attained to half a pound weight; that all the Fish and Spawn also might be destroyed, the Pond was left dry for more than a week. In the ensuing Spring, *Gold* fish were put into it, and observed to breed very fast. In July 1800, a *Perch* was seen in the Pond that seemed not much to exceed a quarter of a pound. In July 1801, the Perch was again seen, and noticed to be much grown; but as the Pond was full of water plants intended for Ornament, it was not disturbed in order to take the Perch, which however was caught in April 1802, and weighed 1 *lb.* 10 *oz.* As it is not probable that this fish could be hatched from the Spawn that might accidentally be preserved before the Spring of 1798, it was four years old when taken: when two years and a quarter old (in July 1800,) it was little more than a quarter of a pound; it therefore increased after that period 22 Ounces in 20 Months, or more than one Ounce a Month, Summer and Winter, and acquired this Size from the abundance of the fry of the Gold fish.

† The Author of the EASTERN SPORTS says that the *Cuttah*, which is a Species of *Perch*, acquire in India the weight of from *Thirty* to *Forty* pounds.

fond of it, when made into a dish, called *Water Souchy*, for which purpose, those weighing about half a pound are considered the best *.

It is a common notion that the Pike will not attack the Perch, on account of the *spinal fins*, which are erected at the approach of the former. This may be true with respect to *large Perch*; but the Compiler has had ample proof in many waters of the *small* ones being a most *tempting* Bait for the Pike, especially in *Whittlesea Mere*, where the *Trimmers* baited with that fish were always most successful.

The *Perch* is tenacious of life; and it has been said, they have survived a journey of *sixty miles* packed in *dry* Straw.

Perch are found as well in clear, swift rivers, with pebbly, gravelly bottoms, as in those of sandy and clayey soils; they love water moderately deep, and frequent holes by the sides of, or near to, gentle streams, where there is an *Eddy;* the hollows under *banks*, among *weeds* and *roots* of trees, *piles* of bridges, or in *ditches* and the *back* streams, that have communication with the larger river. *Ponds* which are fed by a *brook* or *rivulet* Perch thrive very fast in; their haunts are *there* chiefly deep holes, between weeds or stumps of trees, or on gravelly *scours*.

Perch spawn, according to the opinion of many, in February or March; certainly some of them spawn in May. In the *Elements of Natural History* it is said, "in *April* or *May*, while rubbing itself on some sharp body, to deposit its ova, sometimes to the amount of 280,000 (this number is vastly beyond the Calculation in Mr. HARMER's Tables, but this fish weighed *two pounds and three quarters*, and the Spawn alone *seven ounces*, a Weight nearly as heavy as the whole fish described by Mr. H.;) it lives mostly upon the smaller fishes, and in its turn is preyed upon by the *Pike*, but more by the *Eel*, and likewise by *Ducks*."

* Some Gentlemen who are Connoisseurs in making *Water Souchy* allow *Four pounds* weight of *Perch* to every Man expected to eat of it, so that there is a greater Consumption of this Species of Fish, in *thus* bringing it to the Table, than in any other.

The *Perch* affords the Angler great diversion, and not only the baits are various, but the modes of using them. Of *Worms*, the best kinds are small *Lob*-worms which have no *knot*, *Brandlings*, *red-Dunghills*, or those found in *rotten Tan*, all well *scoured;* the *hook* may be varied from No. 2 to 6, being well whipt to a strong silk-worm gut, with a shot or two a foot from it: put the point of the hook in at the head of the worm, out again a little lower than the middle, pushing it above the shank of the hook upon the *gut;* take a smaller one, beginning the same way, and bring its head up to the *middle* of the shank *only*, then draw the first worm down to the *head* of the *latter*, so that the *tails* may hang one above the other; keeping the point of the hook well covered. This is the most *enticing* method that can be adopted in *Worm-fishing;* use a small *cork* float, to keep the bait at *six* or *twelve inches* from the bottom, or sometimes about *mid-water:* in angling *near* the Bottom, raise the bait very frequently from thence almost to the Surface, letting it *gradually* fall again. Should a good Shoal be met with, they are so greedy that they may be all caught, unless one escapes that has *felt* the hook; then all is over, the fish that has been *hooked* becomes restless, and soon occasions the whole Shoal to leave the place. *Two* or *three* rods may be employed, as they require time to *gorge* sufficient to allow the Angler to be prepared to strike them. To draw these fish together, *three* or *four* balls of stiff *clay* should be procured, and holes made in them; one end of a *Lob-worm* should be put into each hole, and the clay closed fast upon them, and these (a yard or two distant from each other) thrown into the water where it is proposed to angle; the *worms* being alive in the *balls*, by their moving and twisting about, tempt the fish to feed upon them: but the Angler's worms being of a *superior* kind, they will, on sight of them, leave those on the *clay*, and seize with eagerness the others: not *Perch* only, but many sorts of fish are collected by this *ground-bait;* so that at times the *Gentle* and other baits may be tried.

In a bad day, when the Perch will not be thus brought on feed, take off the *float*, and extend the line as long as the rod will throw the bait out (which should be *worms*) without injuring it; cast it in all directions,

sometimes *across*, at others *up* or *down* the water, drawing the bait *towards* you, and playing with a similar motion as in *spinning* a *Minnow*; try not long in one spot; when a fish bites, slacken the line, and give time before striking: this often succeeds in bad weather, when all other methods fail, but more especially in a rough *southerly* or *westerly* wind.

If the Angler roves with a *Minnow*, let it be *alive*, (and by putting them as soon as caught into his Minnow-*kettle*, and placing them in the stream, they are easily preserved,) and the hook stuck in under the *back* fin, or through the *upper* lip; let the *Minnow* swim in *mid*-water, or rather lower; use a *cork* float of a size that he cannot sink it *under* water, with a few shot, about *nine* inches from the hook, to keep him *down*, or, when tired, he will rise to the Surface. When using the *Frog*, put the hook through the skin of its back, and it will swim *easier* than if the hook was thrust through the skin of its *hind legs*; recollect to keep this bait as far from the Shore as possible, for he will constantly be making to it: always give *line* enough at a bite, to let the *Perch* gorge. *May* and *June* are the best months, as the *Perch* are then prowling in search of the young fry of *Dace*, *Roach*, and other fish. Where *Pike* are suspected to haunt, the hook should be fixed to *gimp*; as, in this way of fishing, *they* will take the bait as well as the *Perch*.

Some use *Minnows*, as in the *dead Snap* for Pike, with three fine gut twisted together, or a piece of small *gimp*, to which the hook is tied; the baiting *needle* must be shorter, the wire of it small, and the Minnow exactly baited as a *Dace* for Pike. By this mode there is a greater certainty of *hooking* the fish, as all fish of prey seize their food by the *middle*: when the hooks are thus placed, they are more sure than the common method with a large hook, and a smaller above it; the way of using the latter is, to a hook, No. 3, tie a link of *gut*, or fine *gimp*, at about three quarters of an inch above it; tie a hook, No. 9, (there are small ones called *lip-hooks*, adapted to this sole purpose of keeping the *Minnow* in a proper position,) join this link, which should be *eight* inches long, to another, by a small Swivel closed at both ends, fastening a small *lead weight* (shaped like that

directed to be used in the *dead snap* for *Pike)* about *an inch above* the swivel; these swivels are to be fastened to the links with fine double silk well *waxed*, and the end of the upper link formed into a noose, (secured also with waxed silk,) to fix it to the *line;* the point of the large hook is to be put in at the *shoulder* of the Minnow, and down as far as the *bend* of the hook will permit, bringing the point out so that the *tail* may be a little *curved* with the bend of the hook, which will cause it to *spin* better: fasten the *head* with a small hook, by running it through the middle of the *bottom*, and out at the top of the *upper jaw*. The only recommendation to this plan, is the *readiness* of *baiting* the Minnow; the other being unquestionably the best for *hooking* the fish which bite at it.

Other baits for the *Perch* are *Loaches*, *Sticklebacks*, with the *spines* cut off, *Miller's Thumbs*, *Horse beans boiled* (after the place has been well baited with them, put one at a time on the hook,) Cat-bait, *Bobs*, and *Gentles*.

Although generally termed a bold Biter, the *Perch* is extremely abstemious in *Winter*, and scarcely ever bites at that Season, but in the middle of a warm Sun-shiny day: he bites best in the latter part of the *Spring*, from seven to eleven in the *forenoon*, and from two to six in the *afternoon*, except in hot and bright weather, and then from *Sun-rise* to six in the morning, and in the Eve from six to *Sun-set*. If a day be cool and cloudy, with a ruffling *south* wind, *Perch* will bite during the whole of it. In clear water, sometimes a dozen or more of *Perch* have been observed in a deep hole, sheltered by trees or bushes; by using *fine* tackle, and a well *scoured* worm, the Angler may see them strive which shall first seize it, until the whole Shoal have been caught. The Perch may be angled for and taken until the end of *September*, and indeed at particular times all the Year round; but the preferable Season is from the beginning of *May* to the middle of *July*.

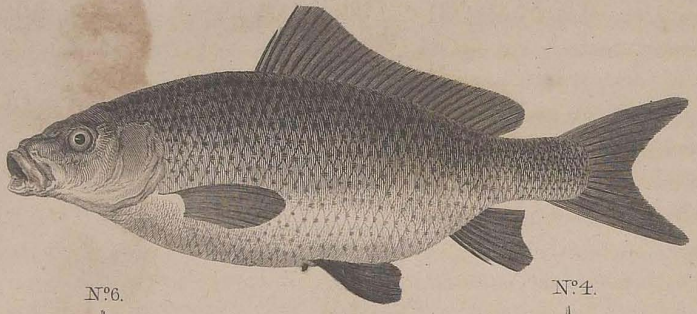
In a lake called *Llyn Raithlyn*, in *Merionethshire*, is a very singular Variety of *Perch*, (of which an engraving is given;) the lower part of the

back bone, next the tail, is strangely distorted; in colour, and in other respects, it resembles the common kind, which are as numerous in the lake as these *deformed* fish; of which latter some have been taken of nearly two pounds weight. They are not, says Mr. PENNANT, peculiar to this water, for LINNÆUS notices a similar Variety found in small lakes near *Fahlun*, in his own Country; and Mr. P. also heard it was to be met with in the *Thames*, near *Marlow*. In *Sweden*, the country people imagined this alteration in the shape of the *Perch* to be occasioned by the quality of the water in those lakes, being impregnated with some *mineral* salt, especially as they are situated near the largest *Copper mine* in *Europe;* but there is *no* Copper mine near *Llyn Raithlyn* or the river *Eynion,* where *Trout* are found crooked in the same manner as the *Perch*, although from the *taper* make of the former, the *Curve* does not appear so strongly as in the latter.

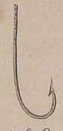
The Honourable DAINES BARRINGTON, in a letter to Doctor WATSON, remarks, that these fish in *Llyn Raithlyn*, (of which he had received specimens, as he desired, *very small*, for the convenience of preserving them in Spirits,) were not only crooked near the tail, but for about one *third* of the whole length of their body; and had likewise a very remarkable protuberance on each side, which he had opened with a knife, but it did not materially differ from other parts of *flesh*, and when dressed, there was nothing in the taste to distinguish them from the common *Perch.*

In the summer of 1801, the Compiler caught some *Perch* in PERRY'S *Dock* at *Blackwall;* upon opening them, a lining of solid *fat* was taken out, (lying on each side, without adhering to the Ribs,) that weighed in the heaviest, *three ounces and a half;* the Stomach was completely closed, and appeared, from its thickness, not to have been distended by food for some time: both the Fat and the Stomach were shewn to many Fishmongers, Tackle-makers, and others, who were or had been in the habits of seeing this species of fish at *all Seasons*, and from *various* parts of *England;* but they unanimously agreed, that they never met with any

CARP.



N°6.

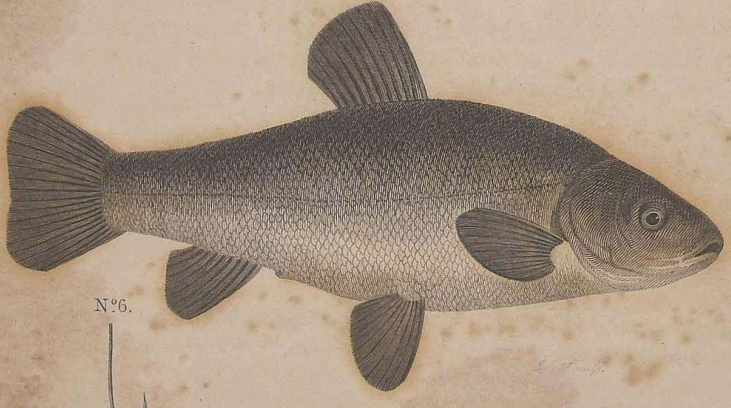


Paste & Gentles.

N°4.



Marsh Worm.



N°6.



Marsh Worm or Paste.

TENCH.

Published May 1.1807, by Darling & Thompson, New Bond Street, London.

circumstance at all similar. The *Perch* weighed from *two* to *two pounds* and *a half*.

At *Malham Water*, not far from *Settle* in *Yorkshire*, the Perch grow to *five pounds* weight and upwards; and this remarkable circumstance attends them, that these large fish are all *blind* of *one* or *both* Eyes.

Perch will strike a *Flew Net* freely; the rougher the Wind, if from the *South* or *West*, the more they range in quest of food: in a *North* or *East* wind they stir as little as possible from their holds: Success with either *Net* or *Line* is not to be fairly expected with the Wind from these Quarters.

Carp

is one of the naturalized fish of this country, being supposed to have been brought by Leonard Mascal, a Sussex Gentleman, (in which county, perhaps, this fish abounds more than in any other,) about the year 1514; and it is remarked in an old *distich*, enumerating the good things of which this Island was destitute, prior to this period, that

> "Turkies, *Carps*, Hops, Pickerell, and Beer,
> Came into England *all* in one year."

This, however, is erroneous, for in the *Boke* of *St. Albans*, printed at Westminster by *Wynkyn de Worde*, in 1496, the *Carp* was mentioned as a *dayntous fisshe*, although scarce. Turkeys* were unknown until 1524; in the

* It is generally allowed that the *Turkey* was originally brought from America, and in its wild state is considerably larger than our *Domestic* Birds. Michaux in his Travels to the Allegany Mountains, says, "The *Wild Turkeys*, which begin to be very scarce in the *Southern* States, are plentiful in those to the *Westward*. In the most uninhabitable parts they are so tame as to be easily killed with a pistol shot. In the *East*, on the contrary, and particularly in the neighbourhood of the Sea Ports, they cannot be approximated without great difficulty: they are not alarmed by a Noise, but they have a very quick Sight, and so soon as they discern the Hunter, flee away with such rapidity that it takes a *Dog* several minutes to come up with them; and when they see themselves on the point of being caught, they escape by taking to flight. The *Wild Turkeys* generally remain in the Swamps, and by the sides of Rivers and

same year *Hops* were introduced; before this, *Wormwood* and other *bitter* plants were used to preserve *Beer;* and the Parliament, in 1528, petitioned against *Hops*, as a *wicked weed.* *Pike* are related to have been first known in 1537, although in the above book, they are mentioned as not being a

Creeks, and only come out in the Morning and Evening. They perch on the Top of the highest Trees, where notwithstanding their Bulk, it is not easy to see them: when they have not been frightened, they return to the same Trees for several *Weeks* in succession.

" To the *East* of the MISSISSIPPI in a Space of more than *Eight hundred Leagues*, this is the only Sort of *Wild Turkey* which is met with. They are larger than those reared in the Poultry Yards. In Autumn and in Winter they feed chiefly on *Chesnuts* and *Acorns;* and some of them killed at these seasons weigh *Thirty-five* or *Forty pounds.* The Variety of *domestic* Turkeys, to which the name of *English* Turkeys is given, in FRANCE, came originally from this Species of *Wild Turkey*, and when they are not crossed with the common kind, retain the primitive colour of their *Plumage*, as well as that of their *Legs*, which is a deep *Red.* If, subsequent to 1523, our *domestic* Turkeys were naturalized in SPAIN, and thence introduced into the rest of EUROPE, it is probable that they primarily came from some of the more *Southern* parts of AMERICA, where there doubtless exists a Species different from that of the *United States.*"

In the *Elements* of *Natural History*, the Turkey is said to eat when young *Garlic* and the *Nettle*, but is killed by the *Fox Glove* (Digitatis purpurea); this Bird is so well known as not to require Description, their Colours vary, but in all of them the *Tuft* of *black Hair* upon the Breast of the male is prevalent. Turkeys are bred in great Numbers in *Norfolk*, *Suffolk*, and other Counties, whence they are driven to the *London* Markets in Flocks of several Hundreds each. The Drivers manage them by means of a bit of *red Rag* tied to a long Pole, which, from the antipathy these Birds bear to that Colour, acts as a Scourge to a *Quadruped*, and effectually answers the purpose. The Hen Turkey begins to lay early in the Spring; is very attentive to the business of Incubation, and will produce *fifteen* or *sixteen* Young at one time, but seldom has more than one Hatch in a Season in this Climate, (they are said to have *Three Broods* in the *West Indies,*) the Poults at the first Extrication from the Shell, are very tender, and require attention in rearing them, the *Cottagers* who bring up this peculiar sort of Poultry, usually make them a part of their Families during the *breeding* Season: they are subject to a Variety of Diseases from *Cold*, *Rain*, and *Dews;* even the *Sun* itself, when they are exposed to its more powerful Rays, is said to occasion almost immediate Death. As soon as they are sufficiently strong, they are abandoned by the Mother, and are then capable of enduring the utmost Rigour of our Winters. The Motions of the *Male* Turkey, when agitated with Desire, or inflamed with Rage, are very similar to those of the *Peacock:* it erects its Train, and spreads it like a Fan whilst the Wings droop and trail on the Ground, uttering at the same time a dull hollow sound; it struts round and round with solemn pace, assumes all the Dignity of the most *Majestic* of Birds, and thus expresses its Attachment to its Females, or Resentment to those Objects which have excited its Indignation.

scarce fish, as was the case with the *Carp;* numbers of *Pike* are recorded to have been dressed at the great feast given in 1466 by GEORGE NEVIL, Archbishop of *York**. At the Inthronization Feast of Archbishop WAR-

* According to LELAND, *the goodly provision made for the same,* was

In Wheat † . . .	300 Quarters	Pigeons . . .	4000
In Ale	300 Tunne	Conyes	4000
Wyne	100 Tunne	In Bittors . . .	204
Of Ypocrasse . .	1 Pype	Heronshawes . .	400
In Oxen . . .	104	Fessauntes . . .	200
Wylde Bulls . . .	6	Partriges . . .	500
Muttons . . .	1000	Woodcockes . . .	400
Veales . . .	304	Curlewes . . .	100
Porkes . . .	304	Egrittes . . .	1000
Swannes . . .	400	Stagges, Buck, and Roes	500 and mo.
Geese	2000	Pasties of Venison, colde	4000
Capons	1000	Parted dyshes of gellies	1000
Pygges	2000	Playne dyshes of gellies	3000
Plovers	400	Colde tartes, baked .	4000
Quales	100 Dozen	Colde custardes, baked .	3000
Of the Foules called Rees	200 Dozen	Hot pasties of venison .	1500
In Peacockes . .	104	Hot Custardes . .	2000
Mallardes and Teales .	4000	Pykes and breames .	608
In Cranes . . .	204	Porposes and seals .	12
In Kyddes . . .	204	Spices, sugered delicates, and wafers plentie.	
In Chyckens . . .	2000		

Besides the Birds in the above List, there are mentioned, in the Particular of the Courses in LELAND, *Red-Shanks, Snytes, Larks* and *Martynettes rost;* if the last were the same with the Martin Swallow, our Ancestors were as general devourers of small Birds as the *Italians* are at present, to whom none come amiss.

We must observe, (says Mr. PENNANT,) that in the order of the Courses it appears, that only the greatest Delicacies were served up, as we may suppose, to the Table where the Nobility, Gentlemen, and Gentlewomen of *Worship* were seated; and these seemed to have been dressed with almost as much art and disguise as at present. They had likewise their Desert, or as the time was, *Sutteltie;* which was in form of Dolphins or other Animals; and sometimes recourse was had to the Kalendar to embellish the Table; and St. *Paul*, St. *Thomas*, St. *Dunstan*, and a whole Multitude of *Angels*, *Prophets* and *Patriarchs*, were introduced as *Suttelties* to honour the Day.

As no mention is made among the dishes that composed two of the Courses, of the Geese,

† Probably there never was in this or any other Country so great a difference in this chief Article of Human Food as in the Years 1270, when Wheat sold at *L.*19. 4*s. Shillings* per *Quarter*, or *L.*96. per *Load;* and in 1316, Wheat was bought at *two modern Shillings* the *Quarter*, or *ten* Shillings the Load.

HAM A. D. 1504, in the first Course we read of ‘ *Carpe in sharpe Sauce*,’ and of ‘ *Carp in Armine*,’ as a dish of the second Course. Beer was

the Pygges, the Veales, and other more substantial Food, these must have been allotted to the *franklins* and *head-yeomen* in the *lower hall*: and those most singular provisions, the Porposes and Seals, indelicate as they may now seem, in old times were admitted to the best tables: the former at least, as we learn from Doctor CAIUS, who mentions it not only as a common Food, but even describes its Sauce.

The Feast given to his present Majesty in 1761, during the Mayoralty of Sir SAMUEL FLUDYER, is a splendid instance of City magnificence. The Bill of Fare at the KING's Table is here given.

FIRST SERVICE.	£.	s.	d.
12 Dishes of Olio, Turtle, Pottages, and Soups	24	2	0
12 Do. of Fish, viz. John Dorees, Red Mullett, &c.	24	2	0
7 Do. Roast Venison	10	0	0
3 Westphalia Hams consumé, and richly ornamented	6	6	0
2 Dishes of Pullets, à la Royale	2	2	0
2 Do. of Tongues Espagniole	3	3	0
6 Do. Chickens à la Reine	6	6	0
1 Do. Tondron Devaux à la Dauzie	2	2	0
1 Do. Harrico	1	1	0
1 Do. Popiets of Veale Glasse	1	4	0
2 Do. Fillets of Lamb, à la Comté	2	2	0
2 Do. Comports of Squabs	2	2	0
2 Do. Fillets of Beef Marinate	3	0	0
2 Do. of Mutton à la Memorance	2	2	0
32 Do. fine Vegetables	16	16	0
SECOND SERVICE.			
6 Dishes fine Ortolans	25	4	0
10 Do. Quails	15	0	0
10 Do. Notts	30	0	0
1 Do. Wheat-ears	1	1	0
1 Goodevau Patte	1	10	0
1 Perrigoe Pye	1	10	0
1 Dish Pea-chicks	1	1	0
4 Do. Woodcocks	4	4	0
2 Do. Pheasants	3	3	0
4 Do. Teal	3	3	0
4 Do. Snipes	3	3	0
2 Do. Partridges	2	2	0
2 Do. Pattys Royale	3	0	0

THIRD

known in *England* in 1422, in which year a license was granted by HENRY VII. to a *Fleming*, to *export fifty tons;* and we read of an Excise on *Beer* in 1284.

	THIRD SERVICE.	£.	s.	d.
1	Ragout Royal	1	1	0
8	Dishes of fine green Morells	8	8	0
10	Ditto fine green Peas	10	10	0
3	Ditto Asparagus Heads	2	2	0
3	Ditto fine fat Livers	1	11	6
3	Ditto fine Combs	1	11	6
5	Ditto green Truffles	5	5	0
5	Ditto Artichoaks à la Provinciale	2	12	6
5	Ditto Mushrooms au Blank	2	12	6
1	Ditto Cardons, à la Bejamel	0	10	6
1	Ditto Knots of Eggs	0	10	6
1	Ditto Ducks Tongues	0	10	6
3	Ditto of Peths	1	11	6
1	Ditto of Truffles in Oil	0	10	6
4	Ditto of Pallets	2	2	0
2	Ditto Ragout Mille	2	2	0
	FOURTH SERVICE.			
2	Curious ornamented Cakes	2	12	0
12	Dishes of Blomanges, representing different Figures	12	12	0
12	Ditto clear Marbrays	14	8	0
16	Ditto fine cut Pastry	16	16	0
2	Ditto Mille Fuelles	1	10	6

THE CENTER OF THE TABLE.

1	Grand Pyramid of Demies of Shell Fish, of various Sorts	2	2	0
32	Cold Things of Sorts, viz. Temples, Shapes, Landscapes in Jellies, Savory Cakes, and Almond Gothes	33	12	0
2	Grand Epergnes filled with fine Pickles, and garnished round with Plates of Sorts, as Landpicks, Rolards, &c.	6	6	0

Total Expence of the KING's Table 374*l.* 1*s.* 0*d.*

The Whole of this Day's Entertainment cost the CITY 6,898*l.* 5*s.* 4*d.* A Committee had been appointed out of the Body of *Aldermen*, who most deservedly received the Thanks of the LORD MAYOR, and whole Body Corporate, for the skilful discharge of this important Treat. The Feast consisted of *Four hundred and Fourteen Dishes*, besides the *Desert;* and the

Where *Carp* were transplanted from is uncertain; *Russia* wants these fish at this day; in *Sweden* they are only in the Ponds of people of Consequence. *Polish Prussia* is the chief seat of the *Carp*, where in the

Hospitality of the CITY, and the Elegance of the Entertainment, might vie with any that had ever preceded.

As a Parallel to the above is inserted the Account of another ROYAL Feast, given in 1487 at *Whitehall*, on occasion of the Coronation of ELIZABETH, Queen of HENRY VII., whom he treats with characteristical Œconomy, notwithstanding a KINGDOM was her DOWER.

NUPTIAL TABLE, HENRY VII.

FIRST COURSE.

A Warner byfor the Course
Sheldes of Brawne in Armor
Furmetye with Venison
Bruet riche
Hart powdered graunt Chars
Fesaunt intram de Royall
Swan with Chawdron
Capons of high Goe
Lampervey in Galantine
Crane with Cretney
Pik in Latymer Sawce
Heronusew with his Sique
Carpe in Foile
Kid reversed
Perche in Jeloye depte
Conys of high Grece
Moten Roial richely garnyshed
Valance baked
Custarde Royall
Tarte Poleyn
Leyse Damask
Frutt Synoper
Frutt Formage
A Soteltie, with writing of Balads

SECOND COURSE.

A Warner byfor the Course
Joly Ypocras
Mamane with Lozengs of Golde
Pekok in Hakell
Bittowre
Fesawnte
Browes
Egrets in Beorwetye
Cokks
Patrieche
Sturgyn freshe Fenell
Plovers
Rabett Sowker
Seyle in Fenyn entirely served richely
Red Shankks
Snytes
Quayles
Larks ingraylede
Creves de Endence
Venisone in Paste Royall
Quince baked
Marche Payne Royall
A colde bake Mete flourishede
Lethe Ciprus
Lethe Rube
Fruter Augeo
Fruter Mouniteyne
Castells of Jely in Temple wise made
A Soteltie

These

rivers and lakes they abound, and are taken of a great weight; are an article of Commerce; are bought by the Merchants from the waters of the *Noblesse*, (who, like some of the Gentry in Great Britain, draw no

These *Sotelties*, or Subtilities as they were called, were the ornamental part of the Desert. At the Inthronization Feast of Archbishop WARHAM, on March 9, 1504, the first Course was preceded by a *Warner**, "conveyed upon a rounde boorde of viii panes, with viii Towers embattled, and made with flowers, standynge on every Tower a Bedil in his habite, with his Staffe: and on the same boorde first the King syttinge in his Parliament with his Lordes about him in their robes; and Saint Wylliam, lyke an Archbishop, sytting on the ryght hand of the Kyng: then the Chaunceler of *Oxforde*, with other Doctors about hym, presented the said lord *Wylliam*, kneelyng, in a doctor's habite, unto the Kyng, with his commend of virtue and cunnynge, &c. &c. And on the third boorde of the same warner the Holy Ghoste appeared with bryght beames proceedyng from hym of the gyftes of Grace towarde the sayde lord of the feaste." This is a Specimen of the ancient Sotelties. This was a *Lenten* feast of the most luxurious kind. Many of the Sotelties were suited to the occasion, and of the Legendary nature; others Historical; but all, without doubt, contrived "with great Cunnynge."

To these Scenes of Luxury and Gluttony (says Mr. P.) let me oppose the simple Fare at a Feast of the *Wax-chandlers*, on October 28th, 1478. These were a flourishing Company in the days of old, when gratitude to *Saints* called so frequently for Lights. How many thousands of Wax-candles were consumed on those Occasions, and what quantities the *expiatory* Offerings of *private* persons, none can enumerate. Candle-Mass day wasted its thousands, and those all blessed by the *Priests*, and adjured in solemn terms. "I adjure thee, O waxen Creature! that thou expel the Devil and his Sprights," &c. &c. Certainly this Company, which was incorporated in 1484 with all the before-mentioned Advantages, might have afforded a more delicate Entertainment.

	£.	s.	d.
Two Loins of Mutton, and two Loins of Veal	0	1	4
A Loin of Beef	0	0	4
A Leg of Mutton	0	0	2½
A Pig	0	0	4
A Capon	0	0	6
A Coney	0	0	2
One Dozen of Pigeons	0	0	7
A hundred Eggs	0	0	8½
A Goose	0	0	6
A Gallon of Red Wine	0	0	8
A Kilderkin of Ale	0	0	8
	0	6	0

* A Warner was the first Sotelty, and which preceded or gave Warning of the Courses.—Vide Leland's Collect. VI. P. 21.

inconsiderable Revenue from their fish,) and are conveyed in *Well-boats* to the two first-mentioned Countries.

ELY HOUSE.

In 1531, Eleven Gentlemen who had just been honoured with the *Coif*, gave a grand Feast here five days successively. On the first, the KING and his QUEEN, CATHARINE of ARRAGON, graced them with their presence. For quantity of Provisions it resembled a Coronation Feast: the *minutiæ* are not given, but the following particulars of part will suffice to shew its greatness, as well as the wonderful Scarcity of Money in those days, evinced by the smallness of the prices compared to those of the present.

	£.	s.	d.
Brought to the Slaughter-house 24 Beeves, each	1	6	8
One Carcase of an Oxe from the Shambles	1	4	0
One hundred fat Muttons, each	0	2	10
Fifty-one great Veales, at	0	4	8
Thirty-four Porkes, at	0	3	3
Ninety-one Pigs, at	0	0	6
Capons of *Greece*, of one Poulter, (for he had Three) Ten dozens, at (a-piece)	0	1	8
Capons of *Kent*, nine dozen and six, at	0	1	0
Cocks of Grose, seaven dozen and nine, at	0	0	8
Cocks Course xiii dozen, at 8*d.* and 3*d.* a-piece			
Pullets, the best 2½*d.* each; other Pullets	0	0	2
Pigeons 37 dozen, each dozen	0	0	2
Swans xiii dozen			
Larks 340 dozen, each dozen	0	0	5

In the Account of the Expenditure of the Ancient Feasts, which certainly shame even the profusion of *modern* Entertainments, we read of that of the Seignior GUILLAUME GROS DE MARTEL, who in 1174 gave an immense Dinner, the Viands being all cooked by the *Flame* of *Wax Tapers*. Upon the Marriage of the Earl of CLONMELL, which was celebrated at London, A. D. 1243, at the Dinner not less than *Thirty Thousand Dishes* were served upon the Tables.

The COOKS* in the fifteenth Century were also held in high Esteem. The Office of chief Cook in a Monastery was never conferred but on such as had made the Art their Study. Brother LAWRENCE CHATERES, Cook to *Croyland Abbey*, is recorded with Honour for having expended at his own cost, *Forty* (equal to *Four hundred modern) pounds*, in supplying the Monks with *Almond Milk* on Fish-days. A Statute too is quoted, made to enforce an equitable distribution of this *Almond Milk* with fine Bread and Honey. In the Houses of Noblemen and opulent Gentlemen, the long and stout *Oaken* Board was well covered with large joints of Meat, by abundance of Poultry, Game, Fish, Wild-fowl, &c. while the Side-board abounded with Wine and Ale, with

* The Charter of the *Cooks Company*, is dated 1480. The Livery Fine is 10*l.* 7*s.* 6*d.* and rank as the *Thirty-fifth* Company among the Livery of London.

Carp are very *long-lived:* GESNER instances one, that was known to be an *hundred years* old. A pond in the garden of *Emmanuel College*, Cambridge, contained a *Carp* that had been an inhabitant *seventy* years. They also grow to a very large size; are sometimes caught in the LAGO DI COMO, in *Italy*, weighing two hundred pounds, and in the DNEISTER, *five feet* in length. Sir JOHN HAWKINS was told by Mrs. GARRICK, that she had seen in her own Country *(Italy)* the head of a *Carp* served up at table sufficient to fill a *large dish* *. The largest Mr. PENNANT speaks to, did not exceed *twenty* pounds. Mr. LADBROKE, from his Park at *Gatton*, presented Lord EGREMONT with a *brace* that weighed *thirty-five* pounds, as Specimens, to ascertain whether the *Surrey* could not vie with the *Sussex carp.* In 1793, at the fishing of the large piece of water at *Stourhead*, where a *thousand brace* of killing Carp were taken; the largest was *thirty* inches long, upwards of *twenty-two* broad, and weighed *eighteen* pounds. Two Carp, a Male and Female, were put into a small pond in *Sussex*, which was emptied every Year, and the young ones taken out: in *sixteen* years they came to the weight of Thirty-two pounds, *sixteen* pounds each.

Carp are also extremely tenacious of Life, will live long out of their *Element*, and during the Night in Summer, or in *mild* weather in Winter, may be safely removed alive to a great distance, packed with clean *dry wheat* straw, in *flat* baskets, or on the bottom of a *carriage*, which is a far better mode of conveying them than in a *water cart*, as large fish, by the agitation of the water, must bruise themselves against the sides of the Barrel. It is a

which the Domestics supplied the Guests in Goblets of Wood or Pewter. In the middle of the table stood the Family Vase of *Silver* filled with *Salt*, and the being seated *above* this splendid Utensil was a Mark of decided Respect. The general hour of Breakfast was *Seven;* Dinner came at *Ten;* Supper at *Four;* and the Liveries or Collations at about *Nine* in the Evening. Beer, Wine, Salt-fish, and Herrings ushered in the Morn; and a Gallon of Beer, with a Quart of Wine, warm and mixed with Spice, concluded the Day as to the private Table of the Master or Mistress. The Dinner was generally prolonged from ten o'clock during the next *three hours*, and it is singular that the Meals of Tradesmen, Yeomen, &c. were held at Hours considerably *later* than those used by the Nobility and Gentry.

* The ROOCA a kind of *Carp* in India weighs from *Thirty* to *Forty* pounds.

common practice in *Holland* to keep *Carp* alive for three weeks or a month, by placing them in a *net* well wrapped up with *wet moss*, hanging them up in a Cellar or cool place, and feeding them with *bread* and *milk;* and the same experiment has been tried successfully in England, with this addition, that the fish were *often plunged* into water, and their food was frequently given; and thus managed, they have not only lived above a *fortnight*, but have grown fat, and been superior in Flavour to those that were killed *immediately* from the Pond.

The *Carp* is a noble looking fish; his head is short in proportion to the body; he is *leather-mouthed;* the jaws are of equal length, having no *teeth* either in them, or upon the fleshy *palate*, which some call the *tongue;* but at the entrance of the *gullet*, *above* and *below*, are certain bones * that act on each other, and comminute the food before it passes to the Stomach; on each side the mouth are two *beards*, one short and placed above the other; the *dorsal* fin extends far towards the tail; a ray of both that and the *anal* fin is very strong, and armed with sharp teeth pointing downwards, and which, in Nets, help much to entangle them: the *Carp*, when *well-fed*, is of a thickish shape, the scales are very large, and when full grown and in high season, of a fine *gilded* hue; the young ones appear more *dusky;* the tail is broad and forked, and, as well as the lower fin, is of a colour between red and black. The flesh is wholesome, and if taken from good water, of a nice flavour; but this is absolutely lost in the *rich sauces*, in which this fish swims upon our tables: a *Carp* plainly *boiled* will not turn out such insipid meat as is generally thought †. *Carp* are frequently sweet and well-

* It is said there are 4389 Bones in the Gills of a *Carp*. DUVERNOY. A notable discovery for minute Philosophers.

† In an Account presented to the *Constituent Assembly* by Mr. LAVOISIER, *Chemist*, of the Quantity and Value of Articles consumed *Annually* in PARIS, consisting of Fresh Water *Fishes*, *Fowl* and *Game*, the number of *Carps* far exceed the Consumption of any other Fish.

800,000 Carps.
36,000 Pikes.
56,000 Eels.

flavoured when taken out of the *muddiest* ponds where they have plenty of food, and the stock of fish is not too large; and it is a singularity that *these* fish put into a Stew made in the clear Channel of a Trout stream, shall soon become lean and acquire the taste we call *muddy*.

The *Carp* is a prodigious *breeder;* its quantity of *roe* has been sometimes found so great, that when weighed against the fish itself, the *former* has preponderated. According to the *Elements* of *Natural History*, a fish of three pounds weight will produce 237,000, and one of *nine* pounds upwards of 621,000 *Ova*, (a fecundity far exceeding that recorded by PETIT;) they certainly spawn several times in the year, (as the male or female is seldom caught without having *milt* or *spawn*,) but their *first* and chief time is in *May*, and they are in highest perfection in *April:* they breed more abundantly in *ponds* than in running waters, yet the *river Carp* are much preferable to all others. The *Carp* is apt to mix its *milt* with the *roe* of other fish, from which is produced a spurious breed: Mr. PENNANT

30,000 Tench.
6000 Perches.
75,000 Cray fish.
Fowl and Game to the Value of 278,340 pounds *Sterling*.

As a corroboration of the Preference given to and the Demand for *Carps* in PARIS, the Fish-women carry about for sale *live Carp* in leathern Vessels, suspended at their Girdles: these Ladies are dangerous to encounter, as any Derangement of their Fish-ponds, occasions a torrent of abuse; and sometimes a *live Carp* serves as an Instrument of manual Exercise. It is likewise said that the most delicious Carp are found in the *Rhine;* and when any particular Entertainment is given at PARIS, these Fish are brought a hundred and twenty Leagues, or *three hundred and sixty English miles* by Land Carriage, from the City of *Hamburgh*.

The French have recently discovered a mode of sending *Carp* and *Pike* alive to any Distance. The Receipt is the following.

Steep the *Crumb* of *new* Bread in *Brandy*, and when it is sufficiently swollen, completely fill the Mouth of the Fish with it, and then pour in a small quantity of *Brandy*. Wrap up the Fish afterwards in *fresh Straw*, secured with *Packthread*, and cover the whole with a *Linen cloth*. When the Fish reaches its Destination, let it be unpacked and thrown into a Tub of Water, where it will remain a *quarter* or *half an Hour* without giving any signs of Life, but at the Expiration of that time, it will *disgorge* itself copiously, and resume its *ordinary Motions*.

says he has seen the offspring of the *Carp* and the *Tench*, which bore the greatest resemblance to the former; he also heard of a similar mixture between the *Carp* and *Bream*. The *Carp* is gifted by nature with such Cunning, as to be, on that account, by some termed the *fresh water Fox:* sometimes, when enclosed with *nets*, they will leap over, and so escape them; at others, will immerse themselves so deep in the *mud* that the *lead line* slides over them; they are also very cautious in taking a *bait*, and yet at the time of *spawning*, are so far off their guard, as to suffer themselves to be handled and caught, by any one that will go into the water, and make the attempt.

Wonderful stories are told of the *docility* of the *Carp;* Sir JOHN HAWKINS was assured by a Clergyman, a friend of his, that at the *Abbey* of *St. Bernard*, near *Antwerp*, he saw *Carp* come at the *whistling* of their feeder; but this *attendance* has been, in the former Pages, supposed to proceed from other causes.

Dr. SMITH, speaking of the PRINCE of CONDE's Seat at Chantilly, says, " the most pleasing things about it were the immense shoals of very large *Carp*, silvered over with Age like *Silver* fish, and perfectly tame, so that when any passengers approached their watery habitation, they used to come to the Shore in such numbers as to heave each other out of the Water, begging for Bread, of which a quantity was always kept at hand on purpose to feed them. They would even allow themselves to be handled."

The *Frog* is a mortal enemy to the *Carp*, more so by destroying its *spawn*, than by fastening himself on its *head;* a circumstance which has, however, been strongly asserted as a fact, and that the *Carp* pines away in consequence of the close adhesion of the *Frog*, which cannot be separated from the head of the fish without extreme force, or killing.

The *haunts* of the *Carp* in the *Winter* months are in the broadest and most quiet parts of *rivers*, with soft, muddy bottoms; but, during *Summer*,

they lie in deep holes near some *scour*, under roots of trees, hollow banks, and amongst or near great beds of *weeds*, or flags, until they begin to *rot*. In *Ponds*, they cannot be said with propriety to have *any* haunts: but it is to be noticed, that they love a rich marl or clayey soil, where they can be well shaded with trees; they never thrive in a cold, hungry water.

The Angler's patience will be peculiarly called forth, in attempting to beguile the *large Carp*, although *small* ones will generally bite eagerly; the rod and line should both be long, and of the strongest materials; a *quill* float, a hook of size corresponding to the bait, and whipt to good silk-worm gut, on which one shot should be placed twelve inches from it. *Three* rods may be employed, one with the bait at *mid-water*, another a *foot* or less from the bottom, and the third to lie upon it, when the line and lead are not discovered, as in the two former: the places intended to be fished in should, the Night before, be *ground*-baited with grains, blood, and broken worms, incorporated together with *clay;* the *hook*-baits should be *red*-worms taken out of *tan*, *flag* or *marsh* worms, *green peas* so boiled as to soften, but not to break the skin, and throwing some in now and then: when this bait is used, (which should be with one on the hook to swim a foot from the ground,) in case of a bite, strike immediately; a large *Carp*, upon taking the bait, directly steers for the *opposite* side of the river or pond.

Another way in hot weather, when the *Carp* are near *spawning*, and whilst among the *weeds*, near the Surface, is, with as fine a line as can be ventured upon, *without* float or shot, baited with a red-worm, *two* gentles, a *green*-worm found on *trees*, or a cad-bait; the line is to be thrown out gently as in *fly-fishing*, and drawn towards the Angler, so as to keep the bait a little *under*-water; but contrive, if possible, to let the bait fall on the leaves of *weeds* that float on the Surface; then draw it off very slowly, and the *Carp* will frequently take it upon its dropping into the water.

Some use a long rod with the running line, and having chosen the

deepest part of the pond, near the side where the bottom is free from *roots* and *weeds;* for three or four days before angling they *ground*-bait it with *boiled malt*, *lob-worms*, and *crusts* of *white bread* cut in small pieces, and soaked in *milk;* they fish with *two* hooks, one within an inch of the bottom, and the other a foot above it, baited with a well scoured middle-sized *lob-worm;* using a small *cork* float, which, in its natural colour, resembles a decayed piece of wood, often seen upon the surface near the side of ponds, which does not alarm the fish, and which will also better sustain the weight of the *lob-worm*. *Carp* will sometimes suck the worm before they gorge, and when hooked must be governed with a tight line, to prevent their entangling it in *weeds* or *roots*, yet must be played for some time, or they will break the tackle, which they will try to cut with the *saw fin* on their backs: a landing-net is very necessary. Another mode, in very hot weather, and in the middle of the day, is with a very strong rod and line, without a float, and only a large shot a foot from the hook, which is to be baited with a *lob-worm;* drop the bait in a hole among the *weeds*, resting the *shot* upon the leaf of one of them, so that the worm may not hang lower in the water than *eight inches;* the Angler must retire as far as he is able to discern the *shot*, which when he sees drawn off the *leaf* he is to strike his fish, and with all expedition get him to shore.

One Gentleman recommends the taking *Carp* with a sort of small *trimmer;* the *Cork* to be the size of what fits the *wide-mouthed* Gooseberry-bottles; the line *tree feet* or more, according to the depth of the water; the last *six inches* near the hook to be *silk-worm gut;* the *hook* of a moderate bigness, with two or three shot fastened a few inches above on *the line*, to keep the bait (which should be *marsh* or other worms) straight in the water: if the pond is large, or not easy of access at the sides, a *boat* is requisite to attend the *corks*, otherwise a line fixed to a long rod, with a few Thorns tied to the end, will, by being thrown beyond a *cork*, so entangle as to bring it to hand. He asserts, that by this method he has caught many *brace* of a morning, and some of them the best fish the water contained.

The most ingenious plan (but not illustrated by any proofs of its efficacy) for reducing the *Carp* to the necessity of taking a bait is said to be by giving him a dose of *physic* (which he never refuses) over Night; by which means he is purged, his Stomach emptied, and he is consequently so *hungry* that his natural Shyness forsakes him, and he falls to with the appetite of an Alderman; and this, we are *gravely* told, *beans* boiled with *succotrin aloes* will effect: the Morning bait is to be a bean dipped in *honey*, doubtless to dispel the disagreeable Bitter of the *aloes*.

There are many other baits used for the *Carp;* as *bobs, cherries, green gentles, sweet pastes*, &c.; the best months to angle for him are May, June, and July; (though WALTON hints the *tenth* of *April* is a fatal day for *Carp;)* and his chief biting times are from *Day-break* to eight in the morning, and from *Sun-set* until dark, and perhaps best in the Night: no one ever angled for this fish too *early* or too *late*, kept himself too much *retired* and out of *sight*, or laid his line too gently in the water. It is needless to angle for *Carp* from a *boat*, as they will not come near it.

Tench

underwent a similar fate with the *Barbel*, as to its notice by the early writers; and AUSONIUS, who first mentions, treats it with that disrespect, which evinces the capriciousness of Taste; for the *Tench*, which is *now* held in such repute, was, in his days, the Repast only of the *Canaille*. The *Germans* adopt his opinion, and, by way of contempt, call it *Schoemaker;* and GESNER says, it is *insipid and unwholesome*.. By some it is termed the *Physician* of the Fish, and who believe, from tradition, that the *slime* is so healing, that the wounded apply it as a Remedy, and that even the *Pike* will spare the *Tench*, on account of its healing powers; but it is apprehended, this observation has no Evidence to support it, and this supposed self-denial of the *Pike* may be fairly attributed to a different cause; namely, that *Tench* are so fond of Mud, as to be constantly at the

bottom, where they are probably secure from the attacks of their voracious neighbour; for, as all the different species are in some degree Enemies to each other, it cannot be imagined that so timid a fish as the *Tench* would passively admit the approach of the *Pike:* however, Mr. Diaper, in his piscatory Eclogues, poetically says,

> " The *Pyke* fell tyrant of the liquid plain,
> With ravenous waste devours his fellow train:
> Yet howsoe'er with raging famine pin'd
> The Tench he spares, a medicinal kind,
> For when by wounds distrest, or sore disease,
> He courts the salutary fish for ease;
> Close to his scales, the kind Physician glides,
> And sweats a healing balsam from his sides."

Gesner relates a most extraordinary mode of exposing the *Pike* to sale in *England*, which raises the *sanative* powers of the *Tench* to a high pitch indeed; but, after speaking so positively to the *Pike*'s *longevity*, he might possibly think it but fair to guard against all Diseases that could curtail its Existence, by affording it such *medical* Aid as should defy all Maladies whatever. He alleges, he heard from an *eye-witness*, that the *Pike*'s breast was cut up about *two inches*, to shew its degree of *fatness*, and if no Purchaser offered, the wound was sewed up, and the fish again committed to the Pond; where, by being rubbed with the glutinous matter on the body of the *Tench*, it was soon cured, and of course was ready for the next Market day.

Without vouching for the Virtue of its Slime upon the inhabitants of the *Water*, its flesh is undoubtedly a delicious and wholesome food to those of the *Earth*. The *Tench* does not commonly exceed *four* or *five* pounds in weight: Mr. Pennant says he has *heard* of one that weighed *ten*, and Salvianus speaks to some that weighed *twenty* pounds: it is thick in proportion to the length; the scales are very small, and covered with Slime; the eyes are large, and of a gold colour; the *irides* are red: he is leather-mouthed, and sometimes there is a small barb at each corner of the mouth;

the colour of the back is dusky, the dorsal and ventral *fins* of the same hue, and those of the male much bigger than those of the female; the *head*, *sides*, and *belly*, of a greenish cast, most beautifully mixed with gold, (especially those taken in *rivers*,) which is in its greatest splendour when the fish is most in Season: the tail is quite even at the end, and very broad.

Tench love still waters, and their haunts in *rivers* are chiefly among Weeds, and in places well *shaded* with Bushes or Rushes: but they thrive best in standing waters, where they lie under weeds, near *sluices*, and at Pond heads; they are much more numerous in *pools*, and *pits*, than in *rivers*, although those taken in the *latter* are far preferable: they begin to spawn in *June*, and may be found spawning in some waters until *September*; their best Season is from that period until the end of *May*.

The *Tackle*, in angling for the *Tench*, should be strong; a *swan* or *goose* quill float, except in Rivers, where the *Cork* is always to be preferred; the hook No. 4 to No. 6, whipt to a sound *silk-worm gut*, with two or three shot ten or twelve inches from it; where there are *weeds*, fish about *two feet* deep, at *mid-water*, and sometimes rather lower, (according as they are in the humour to take;) frequently drawing the bait gently towards the Surface, and letting it sink in the slowest manner: bait with the small red-worms, taken out of *rotten tan*, without any scouring. Should there be no great quantity of *mud* at the bottom, use small *clay balls*, with *lob-worms*, as directed in *Perch* fishing, and let the bait be *six inches* from the ground; but where the *mud* is so deep as to cover the *clay balls* when sunk, keep to the former method, and bait the spot with bits of *lob-worms*; when using *gentles* (which should be near the ground,) throw in some at the taking of every fish, which will not only entice them to bite, but be a means of keeping them together: they should be allowed time in biting, before they are struck.

Some use the middle-sized *bob* or *marsh* worms, well scoured and

dipped in *Tar*, (which certainly has the property of alluring them,) previously *ground*-baiting the place with *lob-worm* and *boiled malt*, and fishing at bottom. Other baits for this fish, are the *wasp-maggot*, *earth-bob*, *green-worm* shaken from the boughs of trees, paste of *brown* bread mixed with *honey*, and of *white* bread, in which a little *Tar* is incorporated: the best time for angling is *late* and *early*, an hour *before* and *after* the *rising* and *setting* of the Sun; but in warm, *foggy*, *mizzling* weather, with a *southerly* wind, the *Tench* will bite during the greater part of the day: the *Tench* will live long out of water, and may with safety be removed in dry Straw to a considerable distance.

Tench are said to love *foul* and *weedy* more than clear water, but situation does not always influence their taste: the Compiler has taken *Tench* out of *Munden Hall Fleet*, in *Essex*, belonging to Mr. WESTERN, which was so thick with weeds, that the *Flews* could hardly be sunk through them, and where the *Mud* was intolerably fœtid, and had dyed the Fish of its own colour, which was that of *Ink*, yet no *Tench* could be better grown, or of a *sweeter* flavour; many were taken that weighed *nine*, and some *ten* pounds the *brace*; and the *Skull* and *back-bone* of one preserved at the Hall, which was found dead by the side of the water, when compared in *length* to any one of those before-mentioned, must have nearly doubled its *weight*. In a pond at *Leighs Priory*, the Compiler caught a quantity of *Tench*, weighing about *three pounds* each, of a colour the most clear and beautiful; but when some of them were dressed and brought to table, they smelt and tasted so rankly of a peculiar *Weed*, that no one could eat them: some that were conveyed alive, and put into *other water*, soon recovered themselves from this obnoxious Taint; an *experiment* that will always answer in this kind of fish, where it is suspected that there is a necessity for *cleansing* them; and the above circumstance is recited to shew, that no decisive judgment can be formed from the *external* Appearance of the *Tench*, however prepossessing it may appear.

The *Tench* that has occasioned most animadversion, is that which the



TENCH *caught at* THORNVILLE ROYAL, *Nov.r 1801.*

Length 2 Ft 3 Inches. Weight upwards of 11 Lb.

Engraving represents: the unusual size and form are alike impossible to be accounted for; its *Bulk* perhaps exceeds that of any one ever known to be an inhabitant of the most extensive waters of this Country, and the shape, which seems to have accommodated itself to the scanty *Space* allotted for its residence, together stamp it a *Lusus Naturæ*. Its history is, that a piece of water at Thornville Royal, Yorkshire, which had been ordered to be filled up, and wherein wood, rubbish, &c. had been thrown for years, was in November 1801, directed to be cleared out. Persons were accordingly employed, and almost choaked up by weeds and mud, so little water remained, that no person expected to see any fish, except a few Eels; yet nearly two hundred brace of Tench, of all sizes, and as many Perch, were found. After the pond was thought to be quite free, under some roots there seemed to be an Animal, which was conjectured to be an Otter; the place was surrounded, and on opening an entrance among the roots, a *Tench* was found of most singular form, having literally assumed the shape of the hole, in which he had for many years been confined. His *length*, from fork to eye, was *two feet nine inches;* his circumference, almost to the tail, was *two feet three inches;* his *weight*, *eleven pounds nine ounces and a quarter;* the Colour was also singular, his belly being that of a Charr, or a Vermilion. This extraordinary fish, after having been inspected by many Gentlemen, was carefully put into a pond; but either from confinement, age, or bulk, it at first merely floated, and at last, with difficulty, swam gently away. It is now alive and well.

To this account some *Sceptics* have demurred, and have expressed their doubts, in *prose* and *verse*, as follows:

The *yellow-bellied* TENCH of *Thornville House*, in Yorkshire, which is *supposed* to have lain so many *Centuries*, and lived under the *roots* of some ancient *trees*, without *water*, is to be dressed at that celebrated Mansion, as soon as an instrument is procured in which a proper *kettle of fish* may be made of this *amphibious* Animal: it is to be served up with *Sauce piquant*, at a kind of *Arthur*'s *Round Table*, to a select Corps of *Knights of the Long-bow!*

The TENCH of THORNVILLE HOUSE:

A TRUE STORY!!!

O' the marvellous,
At *Thornville House*,
We read of feats in plenty,
Where with *long bow*
They hit, I trow,
Full nineteen shots in twenty!

Their fame to fix,
'Midst other tricks,
In which they so delight, Sir,
These blades, pray know,
The *hatchet throw*,
Till it is out of sight, Sir!

Of beast and bird
Enough we've heard,
By *cracks* as loud as thunder's;
So now they dish
A monster *Fish*,
For those who *bite at wonders!*

The scullion wench
Did catch a *Tench*,
Fatter than Berkshire hogs, Sir,
Which, pretty soul,
Had made his hole
Snug shelter'd by some logs, Sir!

Sans *water* he
Had liv'd d'ye see,
Beneath those roots of wood, Sir!
And there, alack,
Flat on his back,
Had lain since NOAH's flood, Sir!

Now he's in stew,
For public *goût*,
And fed with lettuce-cosse, Sir;
In hopes the Town
Will gulp him down,
With good *humbugging* sauce, Sir!

NIM.

But, notwithstanding the *Squibs* and *Witticisms* of incredulity, the Account is authentic.

Pike,

according to the common saying, were introduced into England in the Reign of HENRY the VIIIth, and were then so rare, that a *Pike* was sold at *double* the price of a *house-lamb* in *February*, and a *Pickerel* for more than a *fat Capon*. In the History of the Carp, this account respecting their Introduction is rather doubted, for reasons there stated.

But whenever first known in this Country, the *Pike* is common in most of the lakes of Europe; the largest are in those of *Lapland*, where, according to SCHÆFFER, they are sometimes *eight feet* long, and are taken

in such abundance, as to be dried and exported as a considerable article of Commerce.

The head of the Pike is very flat, the *eyes* small, and of a gold tinge; the upper jaw broad, and shorter than the lower, which turns up a little at the end, and is marked with minute punctures; the *teeth* are very sharp, disposed not only in the front of the upper jaw, but in both sides of the lower, in the roof of the mouth, and has often *three rows* upon the tongue, and even down to the Orifice of the Stomach; the gape of the jaws is wide, although loosely connected; they have on each side an additional bone like the Jaw of a *Viper*, which renders them capable of greater distention when the prey is swallowed: the body is long, the back broad, and almost square when in its best state; the belly is always white. When in high Season their colours are very fine, being *green*, spotted with bright *yellow*, and the gills are of a most *vivid red:* out of Season, the *green* assumes a *grey* appearance, and the yellow spots turn pale. The *dorsal* fin is placed low on the back.

All writers who treat of this fish bring instances of its uncommon Voracity. Mr. PENNANT speaks of one in his own knowledge, that was choaked by attempting to swallow one of its own Species, that proved too large a morsel: the *Pike* does not confine itself to feed on *fish* and *frogs*, but will devour the *water rat* and *young ducks*, as they are swimming; and in Dr. PLOTT's History of Staffordshire, the following fact is recorded: that "at Lord GOWER's canal at *Trentham*, a *Pike* seized the head of a *Swan* as she was feeding under water, and gorged so much of it as killed them both; the Servants, perceiving the *Swan* remain in the same position for a considerable time, went in the Boat, and found both *Swan* and *Pike* dead."

Instances of their fierceness are related still more marvellous. GESNER says, that a famished *Pike* in the *Rhone*, fixed on the lips of a *Mule* that was drinking, and was drawn out by the beast before it could disengage

itself; that people have been bit by *Pike* whilst bathing, and that they will even contend with the *Otter* for its prey. In December 1765, a *Pike* was caught in the River *Ouse* that weighed upwards of Twenty-eight pounds, and was bought by a Gentleman in the Neighbourhood for a Guinea. When it was opened, the Cook to his great astonishment found a *Watch with two Seals* annexed to it by a black ribband, in the body of the *Pike*. These, it was afterwards discovered, had belonged to a Gentleman's Servant, who had unfortunately been drowned about six weeks before, between *Littleport* and South-Ferry. In 1798, whilst two Gentlemen were angling in a pond near *Warnham*, in *Sussex*, a *Pike*, weighing upwards of seven pounds, seized a Dog that was lapping the water, and was landed by holding fast to the Dog, to the astonishment of the fishermen. Near *Youghall*, a yearling Calf drinking in the River *Blackwater*, was seized by a *Pike*, which was drawn out of the water before quitting its hold; on killing the fish, a water rat and a Perch entire were found in its stomach; the Pike's weight was thirty-five pounds. *Ireland* is remarkable for abundance of Pike, and for the size to which they arrive in its Waters; in the river *Shannon* and in *Lough Corrib* they have been found near *Seventy* pounds weight.

Small fish shew a similar uneasiness at the presence of the *Pike*, as the little *Birds* do at the sight of the *Hawk* or *Owl;* and when they lie dormant near the Surface, (as they frequently do in sultry weather,) the lesser fish swim around in vast numbers, and with evident anxiety. Pike are often taken, in the hottest part of the days in Summer, while they are thus asleep, by a noose of wire, fixed to a strong pole about four yards long; by which the wire with great slowness is conducted over the *Pike*'s head and *Gill fins*, and then hoisted with a jerk to land.

Pike are also frequently *shot* while thus basking themselves: the Marksman aims directly *under* them: from the deception there is in the water, and its causing the shot to rise much when fired into, he would otherwise miss his object.

The Longevity of the *Pike* is truly remarkable, if credit may be given to the assertion respecting it.

Rzaczynski speaks of one *ninety* years old; but GESNER's Pike, that was taken near *Hailbrun*, in *Swabia*, in 1497, with a brazen ring, denoting, that from the hands of the *Governor* of the *Universe*, FREDERICK the *Second*, he was put into that lake in 1230, places the former almost in a state of *Infancy*.

Pike love a still, shady, *unfrequented* water, with a sandy, clayey, or chalky bottom, (arriving at a larger size in *Pools* than Rivers;) and from *May* to the beginning of *October*, they usually place themselves amongst or near *Flags*, *Bulrushes*, and *Waterdocks*, and particularly under the *Ranunculus aquaticus* when in flower, and which floats on the surface; they will sometimes be found in the termination of sharp currents: from *March* to the end of *May* they resort to *back* waters that have direct communication with the main stream: as *Winter* approaches they retire into the deeps, under clay banks, bushes impending over the water, stumps and roots of trees*, piles of bridges, and flood-gates. They spawn in *March* or *April*, according to the coldness or warmth of the weather, quitting the *rivers* for the creeks and ditches communicating with them, and there dropping their *Ova* in the *grass* and *reeds*; in *Ponds* they choose the *weeds* upon the *shallows* for depositing it: *Ducks* and other Wild fowl eagerly devour the spawn, and by them it is transported to other waters. The appearance of the *Pike* in ponds, where none were ever put, has been deemed as extraordinary as its asserted *Longevity*; it is however easily accounted for upon the well-known principles of the Generation of fishes: if a *Heron* has devoured their *Ova*, and afterwards ejected them, while feeding in one of

* In the extensive Lakes in the interior part of the Country at Hudson's Bay, *Pike* and *Perch* are caught in those Lakes *only* that are surrounded with Woods, and into which Trees have fallen, and numbers of the Roots of others are far protruded into the Water; nor do these two Species even in the Summer Season go down the Rivers issuing from those Lakes, and which run into what is termed the *barren ground*, where the Lakes are not sheltered by Trees and Bushes.

these ponds, it is highly probable that they may be produced from this original, in the same way as the *Seeds* of *Plants* are known to be disseminated.

Mr. PENNANT (who states that the largest *Pike* he had ever heard of in *England* weighed thirty-five pounds) notices a method of taking *Pike*, in the shallow water of the *Lincolnshire Fens*, which he considers peculiar to that *County* and the Island of *Ceylon*. The Fishermen use what is called a *Crown-net*, which is no more than a hemispherical *basket*, open at top and bottom; the person stands at the end of one of the little *Fen*-boats (called *Punts*,) and frequently puts his *basket* down to the bottom of the water; then poking with a stick in it, discovers whether he has any booty, by the stirring of the fish, which is then hoisted into the *Punt:* vast numbers are taken in this manner.

Pike are in Season from May to February, (the Female fish are to be preferred;) are bold biters, afford the Angler good sport, and may be fished for all the Year; but the best months (especially for *trolling*) are *February*, before the *weeds* shoot, and *October*, when they are rotted; the latter is to be preferred, as the *Pike* are fattened by their feed during the *Summer*, and from the *lowness* of the waters, their Harbours are easily discovered.

For *Trolling*, the rod should be *twelve* or *fourteen* feet long; but a strong *top* for this fishing, with a ring at the end for the line to run through, may be fitted to a *fly* or *general* Rod; there should be *one* Ring upon each joint to conduct the line, which is better than a greater number, (and these *rings* must be set on straight, that it may run freely, so that no sudden check after the bait is taken prevent the *Pike* from *gorging* it:) the line should be of *silk*, with a swivel at the end to receive the armed *wire* or *gimp*, and at least *thirty yards* long, wound upon a *winch* or *reel*, fixed to the *but* end of the rod. Hooks for *trolling*, called *dead gorges*, and other sorts for *trolling*, *snap*, and *trimmer*, and fishing-*needles*, are to be bought at every Shop where *Fishing-tackle* is sold, (and many kinds, both

naked and baited, the Engravings represent:) in the choice of the first, let them not be too large, nor their temper injured by the *lead* on the shanks, nor the points stand too proud; and, although usually sold on *Wire*, it is recommended to cut off the *Wire* about an inch from the lead, and with double silk, well waxed, fasten about a foot of good *Gimp* to the *Wire*, with a noose at the other end of the *Gimp*, large enough to admit the bait to pass through, to hang it upon the line. The best baits are *Gudgeons* or *Dace*, of a middling size; put the baiting-needle in at the *mouth*, and out at the middle of the *tail*, drawing the gimp and hook after it, fixing the point of the hook near the Eye of the fish; tie the tail to the *gimp*, which will not only keep it in a proper position, but prevent the tail from catching against weeds and roots in the water: thus baited, the hook is to be fastened to the line, and dropt gently in the water, near the sides of the River, across the water, or where it is likely *Pike* resort; keep the bait in constant motion, sometimes letting it sink near the bottom, and gradually raising it; the Angler need not make more than two or three trials in a place, for if a *Pike* be there, he will within that time bite, if he means to do so; when the bait is taken, if at a depth too great to see, it will easily be ascertained by the line being drawn *tight*, and by some resistance: let the *Pike* have what line he chooses, it will be soon known when he has reached his harbour by his not drawing more; allow from *five* to *ten* minutes, for his gorging the bait; wind up the line gently until the *Pike* is seen, (which he will permit, though he has not gorged:) should the bait be *across* his mouth, give more time; but if he has swallowed, manage him with a gentle hand, keeping him however from roots and stumps, which he will try to fasten the line upon; in clear water veer out line until he is sufficiently tired, and a landing-net can be used; but by no means, however apparently exhausted, attempt to lift him out with the *rod and line only*; for the moment he quits the water, he will open his mouth, and from his own weight, tear the hook from his stomach; and the fish will be lost to the Angler, although it must inevitably perish.

In trolling, the *bait* should never be thrown too far: in small rivers the opposite bank may be fished with ease, and the violence of its fall upon

the water, in extensive throws, soon spoils the bait, by rubbing off its *scales*, and alarms the *Pike*, instead of enticing him.

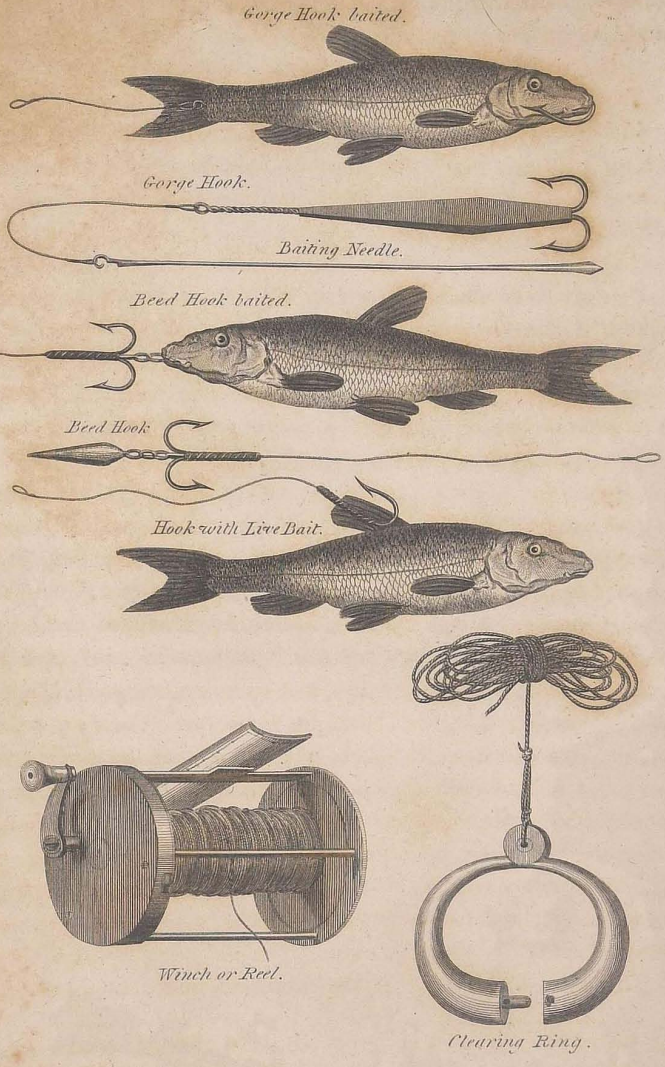
The *bead*-hook is used by putting the lead into the mouth of the live bait and sewing it up; the fish will live some time, and, notwithstanding the lead, will swim with the support he receives from the line, with nearly the same ease as if at liberty: this is the most successful way of tempting the *Pike*.

Pike are to be allured by a *large* bait, but a *small* one is more certain to take them: never suffer *weeds* to hang upon the *hook* or *bait* when recast into the water, and which cannot touch the Surface too *softly*. Always prefer a *rough* Wind, and when the Stream is *clear*, for trolling: *Pike never* bite in *white* water after rain, &c. If a *Pike* goes slowly up the Stream after taking the bait, it is said to be a Signal of a good fish.

The largest *Pike* ever known to be caught by *Trolling*, was in Scotland, in the year 1784, by Colonel THORNTON; an engraving of this fish is given, which wanted only *two ounces* of *fifty pounds* weight; he was an hour and a quarter upon the line, before he submitted to his fate; nor would the *tackle* have held him, although purposely prepared for large fish, had not the Colonel been in a *boat* upon the lake, and by that means enabled to humour the *Pike*'s struggles to escape. Upon the belly, in the print, may be seen a small Speck, which was a wound from whence was taken a *hook* he had swallowed and broke away with *ten years* before, (from a person who ascertained the fact,) and which had then worked itself through the Skin; for, upon the discoloured part being pressed, the hook appeared and was extracted: from eye to fork this fish was 4 *feet* 1 *inch*; extreme length, 4 *feet* 9 *inches*; depth 11½*.

The next *Pike* in size to the foregoing, taken by the *Troll*, was in

* In the *Sporting Tour*, this Fish is said to have been caught in *Loch Alva*; but Colonel T. in the Account he was so kind to give me, mentioned *Loch Patuliche* as the Water from whence it was taken.



TROLLING IMPLEMENTS.

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December 1792, by Mr. BINT, in the Pool at Packington, (the Earl of AYLESFORD's,) being from eye to fork 2 *feet* 11, full length 3 *feet* 10½; circumference 1 *foot* 10 *inches*, and weighed *thirty-four pounds* and *three quarters*.

In 1804 a *Pike* was taken out of the same water, with a *Carp* that weighed *ten pounds* stuck in his throat, and which had choaked him. The Pike when empty was *thirty pounds* weight.

Mr. WILSON caught a *Pike* by *Trolling* in the *Driffield* Canal near Brigham, which weighed *twenty-eight* pounds, measured *two feet* round the belly, and *three feet five inches* in length; and what was singular, *five pounds* of *solid fat* were taken out of its inside.

Sir CECIL WRAY's *Pike*, caught in June 1799, at the draining off the water from the Lake at his seat at Summer Castle, in Lincolnshire, weighed 47 lb. *gross*, 36 lb. after being cleaned, of eatable Meat; was 48½ inches long, and 2 feet 2 inches in circumference: this fish must have got into the Lake when very small, and had acquired this enormous size in *twenty-two years;* for at that time the Lake was laid dry. Sir CECIL computes that he consumed three fish *per diem*, progressively larger as his own size increased, and that he at least destroyed 24,000; all of which, in the latter years of his growth, must have been valuable fish; so that the cost of his support exceeded, by some hundred times, his own Value*. A river *Pike* grows fast until he arrives at *twenty-four* inches; he then ceases to

* BOWLKER, in his *Art of Angling*, remarks that his Father caught a *Pike* that was an *Ell* long, and weighed thirty-five pounds, which he gave to Lord CHOLMONDELY. By his lordship's directions it was put into a Canal in the garden, wherein were numbers of fish of various sorts. Twelve months after the water was drawn off, and it was discovered that the *Pike* had devoured all the fish but a single *Carp*, which weighed between nine and ten pounds; and even this had been bitten in several places. The *Pike* was again put into the Canal, and an abundance of fish for him to feed upon. All these he devoured in less than a year, and was observed by the Gardener and Workmen to draw *Ducks*, and other Water-fowl, under water. *Crows*, and other birds, were shot and thrown in, which he seized in the presence of the Servants. From this time his Lordship ordered him to be supplied with the Entrails of Poultry, and also those of Calves and Sheep: being neglected afterwards he died, as it is supposed, for want of Food.—The above is a further proof of the cost of maintaining one of these overgrown Fish.

extend so rapidly in *length*; (for in good water, with plenty of feed, a Pike spawned in March will, by the March following, be grown from *sixteen* to *eighteen* inches,) and proportionably thickens; afterwards he will be much longer arriving at his full Bigness, (which is about forty-six inches,) from the length of *thirty*, than he was in acquiring the *first thirty* inches *.

In May 1796 Mr. Bishop, of Godstow, between *Weir* and *Wytham Brook*, landed the biggest Pike ever remembered to be taken in the *Isis*; it was 4 feet two inches long, 2 feet 10 in *girth*, and, after being disgorged of a *Barbel* nearly *six*, and a *Chub* upwards of *three* pounds, weighed *thirty-one pounds* and *a half*.

In June 1796 a male Pike was caught in *Exton Park* pond, (Lord Gainsborough's,) the length 42½ from *eye* to *fork*, and from nose to tail 49 inches; the *girth* 28 inches, and weighed thirty-seven pounds and a quarter. Neither this, nor the fish taken in the *Isis*, was so well grown as Sir Cecil Wray's.

In 1797 a Pike weighing near 40 lb. and measuring in length 3 feet 6, and in *girth* 2 feet, was caught in a pond at *Totteridge*, in *Hertfordshire*; a Tench of *four* pounds, and four pounds and a half of *solid fat*, were taken from his inside.

In *Munden Hall* Fleet, (already mentioned for its remarkable *Tench*,) a *Pike* was found that had been killed by a long frost; in its putrid state

* Sir Joseph Banks mentions a *Pike* caught in Lincolnshire, October 1794, which weighed *Thirty-one* pounds, and was from beak to the tail three feet ten inches; and gauged, by a pin thrust through, was four inches five-eighths thick at the shoulder. The pond had only been stocked *twelve* Years with small *Pike*, none exceeding a pound weight; notwithstanding which, several of *Eighteen* and *Twenty* pounds weight had been taken out in the last three years. The growth of the *largest* fish must, therefore, have been *two pounds and a half Annually*, for the Average of *twelve* Years, in which it had increased from 1 lb. to 31 lb. The pond from which this *Pike* was taken had a communication with a Small River well stocked with Fish, so that its supply of Food had always been abundant; and when dressed the Flesh was particularly juicy and tender.



PIKE.

Caught Trolling. A.D. 1784. in Loch Petulloch. Weight 49.lb ¼

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it weighed 42 lbs. but had wasted considerably; was 8 feet 6 long, and 2 feet 9 inches in *girth;* the Teeth were nearly as long, though not so stout, as those of a Greyhound: the *head* of this fish was dried with the skin on, and long preserved at the *Hall* as a great curiosity, not only on account of its immense size, but from a peculiarity in the lower *jaw*, which had *bristles* like those growing on the breast of a *turkey-cock*, proceeding from the under part of it. This head was given to the Reverend Mr. KAY, of *South Bemfleet*, in Essex, by Mr. LUGAR; and from Mr. K.'s house some *friendly* Collector of natural Rarities took the opportunity of marching off with it, during a very severe Illness with which that Gentleman was afflicted in 1792*.

In some places Pike are taken by what is termed *dipping;* the hook used is a large sized *gorge* hook, very slightly *leaded* on the shank, and baited as in *Trolling*, only the mouth of the fish is to be sewed up, and the back fin cut away, and then looped to the swivel; the line is let out from the Reel to a convenient length, and the bait is dropped in any small openings where the water is not very deep, and overspread with *docks* and *weeds*. The fish hanging with his head downwards will, when gently moved, (and all baits, especially *dead* ones, should be kept in *constant* Motion,) shoot and play about among the *Weeds* so naturally that the *Pike* will be eager in taking it this way, even from the surface: when the bait is seized the line is to be slackened, and the Pike allowed line to run; in a short time it will be perceived to shake, which is a signal to strike; when hooked he must be cautiously managed, winding up the line gradually: in getting the *Pike* through the *Weeds* endeavour to keep his Nose above them, and

* In January 1803 the Gamekeeper of Mr. SHIFFNER of Comb Place, near Lewes, in Sussex, discovered in the Lewes River, near Barcomb Mills, a dead *Pike* of an extraordinary size, jammed between a Willow stump and the Bank. In length it measured, from Eye to Fork, four feet, was one foot thick across the back, and weighed, in its wasted state, *Forty pounds*. This confined situation of the fish is attributed to the rapidity of the Current forcing it into a Position from which it could not afterwards extricate itself, and consequently there remained till it was literally *starved* to death.

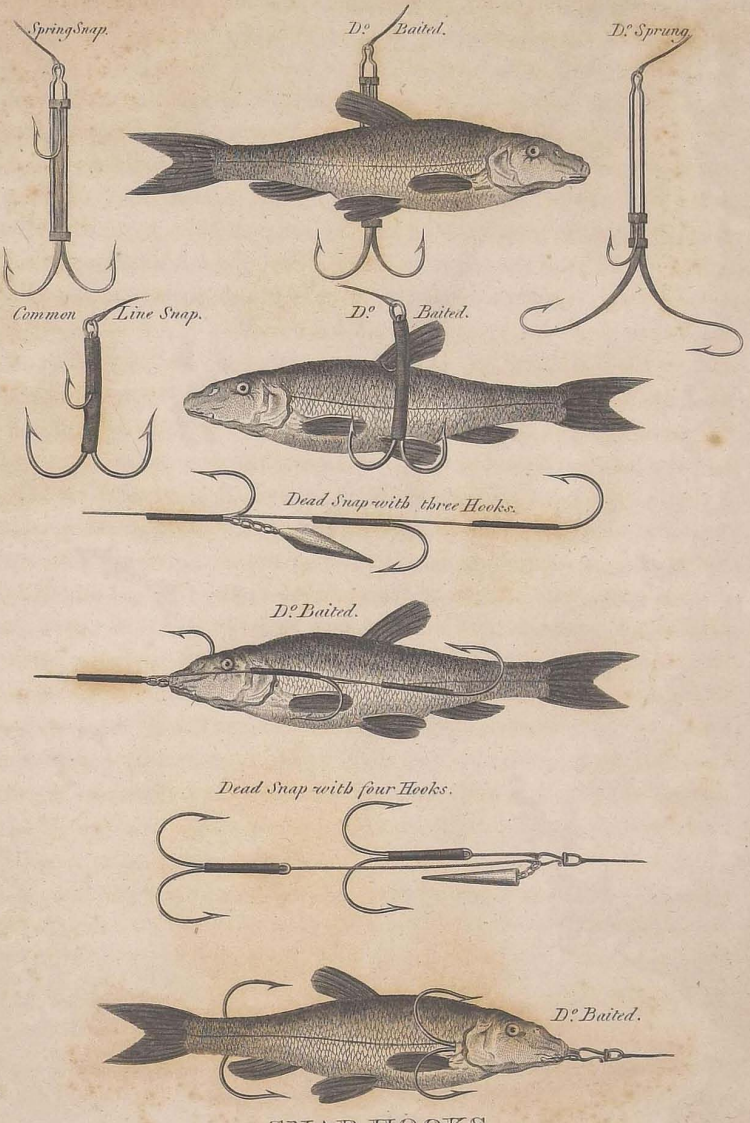
At *Shardeloes*, the Seat of Mr. DRAKE, is a good Painting by *Francis Barlow*, of a *Pike* caught in the Lake before the House, which weighed *Thirty-four pounds*.

use the landing-net in taking him from the water. In this method the baits must be as *fresh* as possible.

For *Snap*-fishing, (which is best used in *March*, the *Pike* being then very shy of *gorging*, although with seeming eagerness they seize the bait,) should the *rod* be purposely made for it, the length should be about *twelve* feet; if a common rod is employed, the *top* should be stouter than that used in *Trolling*, with a strong loop to fasten the *line* upon, which must be a *foot shorter* than the rod: for the *live* Snap no hook is so proper as the *double spring* hook: to bait it nothing more is requisite than to hang the fish to the small hook under the *back fin*, which may be done with so little hurt to the fish that it will live many hours. *Gudgeons* (which, in *all modes* of *Pike*-fishing, are superior to every other) and *Dace* are the best baits; they must be kept alive in a Tin kettle, with holes in the lid, and which in *hot* weather should be placed in the water.

The other *live* snap-hook is baited by the small hook being thrust *through* the fish beneath the *back fin;* and some use a piece of silk or thread doubled, hung on the *point* of the small hook, and brought under the belly of the bait, and tied on the other side to the shanks of the large hooks; Care and Expedition are required in doing this, otherwise the bait will be so injured as to be incapable of swimming briskly in the water: a cork float, the size of a common Burgamot pear, with a small pistol bullet or two, not only to poise but to keep the bait at a proper depth, which is from *two* to *three* feet. If a Pike be near where the bait is put in, it will come to the surface, or increase the quickness of its motion to avoid him; these signs will put the Angler on his guard: when the float is drawn under allow it to be sunk considerably before striking, which in all *snap*-fishing should be with a smart stroke, and directly *contrary* to the course the *Pike* appears to take; the line must be kept tight, and the *landing*-net should be used, as the throwing out a large *Pike* by force will certainly strain the *sockets* of the rod.

Some use only one large long-shanked hook, whipped to *gimp*, with a



SNAP HOOKS.

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swivel at the upper end; the hook baited with a Gudgeon under the back fin, or through the upper lip, with a float as above, that will swim the Gudgeon; fish at *mid-water*, and allow a minute after the float is sunk before striking: by this method Perch may be taken, if the bait be a *Minnow* or *very small* Gudgeon.

A variety of hooks are used for the *dead snap*, as the Engraving represents; and this mode of catching *Pike* is well adapted to both shallow and deep waters, to the still and rapid parts of the river; will take *Pike* at all seasons of the year, supposing the water and weather favourable; and it will be no trifling recommendation that the idea of cruelty, which the use of a *live* fish naturally impresses, is by this substitute completely removed. The *Rod* should be longer than that for trolling; the *line* fine, strong, and twenty yards in length; the hook by some most preferred is like that for the common *live* snap; the length of the *gimp*, on which the hook is tied, should be regulated by the size of the bait, and should be rather *longer* than the distance from the *back fin* to the *mouth*; that the *looped* end may be hung on a strong *swivel*, tied neatly to about a foot more of gimp, with a noose at the other end, to hang it upon the line, fastening a piece of lead of the shape of a *barley-corn*, and weighing about an *ounce*, with a hole through it two inches above the *swivel*. The bait should be a middle-sized *dace*: insert the baiting needle close behind the back fin, letting it come out of the mouth; draw the gimp to which the hook is tied after it; the *short* hook must stand with the point *upright* behind the *back fin*; the others will consequently be on each side; then hang it upon the swivel, and try if it will *spin*: if it does not, move the bait a little to the right or left, (which may be done without moving it from the hook:) the whole Success depends on its *quick turning* when drawn against the Stream; and when it does it appears like a fish unable to escape, and becomes too tempting a morsel for the Pike to resist: this method will not only enable the Angler to fish a greater extent of water than the others, but is more certain to secure the Pike. The large ones, though bold in seizing the bait, are very cautious in *gorging* it: most *Trollers* have experienced that after running out a

considerable length of line the bait has been mumbled to pieces and deserted; a disappointment here remedied, for a Pike has but to seize the bait and he is caught.

At both Troll and Snap some persons have two or more swivels to their line; by which means its twisting is prevented, the bait plays more freely, and to the dead bait in Rivers it certainly is an improvement: in ponds or still waters *one* will answer the purpose.

Another way of taking the Pike is with an *artificial fly:* many have asserted that they are not to be caught at all with a *fly*, but, as a convincing proof to the contrary, the Engraving of the skeleton of the *head* of a Pike is given, which is the biggest taken by a line, or perhaps ever known in this Country, and which was caught in *Loch Ken*, near *New Galloway*, in Scotland, with a common *fly*, made of the *Peacock*'s *feather;* it weighed *seventy-two pounds;* the Skeleton of the head is at *Kenmore Castle;* the Jaw at the top is that of a *Pike*, weighing *twenty-five pounds:* a Scale is annexed by which the respective proportions of the two may be ascertained, and which will convey some idea of the largest Pike ever seen in Great Britain *.

The *Pike* fly must be made upon a double hook, fastened to a good link of *gimp*, and composed of very gaudy materials; such as *Pheasant*'s, *Peacock*'s, or *Mallard*'s feathers; the brown and softest part of *Bear*'s fur; the reddish part of that of a *Squirrel*, with some yellow Mohair for the

* If the following Account however be fact, which is given as a Note in WALTON's Complete Angler, 6th Edition, 1797, the above-mentioned *Pike* is but a *Minnow*, in comparison; for it is there said that in January, 1765, at *Lillishall* Lime-works, near *Newport*, a pool of Water about nine yards deep, and that had not been fished in the Memory of Man, was let off by means of a Level brought up to drain the Works, when an enormous *Pike* was found, which was drawn out amidst hundreds of Spectators, by a rope fastened round his head and gills; he weighed above 170 pounds, and is considered the largest ever seen in this Country. By way of Addenda, it is asserted, that some time before the Clerk of the Parish, who was a *dextrous Troller*, had his bait taken by this *Leviathan*, and himself, by a sudden jerk, pulled into the water, where, but for his expertness in Swimming, he might have become a delicious morsel to the voracious Animal.

body. The head is formed of a little fur, some gold twist, and two small black or blue beads for the eye; the body must be framed rough, full, and round; the wings *not parted*, but to stand upright on the back, and some smaller feathers continued thence all down the back, to the end of the tail; so that when finished they may be left a little *longer* than the hook, and the whole to be about the size of a *Wren*. A *fly* thus made will often take *Pike*, when other baits are of no avail, especially in *dark windy* days; the fly must be moved quick when in the water, and kept on the surface if possible. Several sorts of these *flies* are to be had at all the Fishing-tackle shops.

Pike are also taken with a live bait, fixed to a certain place, termed a *ledger* bait: if a *fish* is to be used the *hook* is to be run through the *upper lip* or *back fin;* if a *frog*, (of which the *yellowest* are the best,) the arming wire is to be put in at the *mouth*, and out at the *gill*, and tie the *leg* above the upper joint of the *wire;* fasten the wire to a strong line, about *twelve* or *fourteen* yards long; the other end being made fast to a stake or stump of a tree, a *forked* stick is to be placed near the surface, through which the line is to pass, and suspend the bait about a yard in the water, by a notch made in the *fork;* but which, when the bait is taken, will easily slip out; but the best way is to have a *wheel* or an *iron* spindle to stick into the ground.

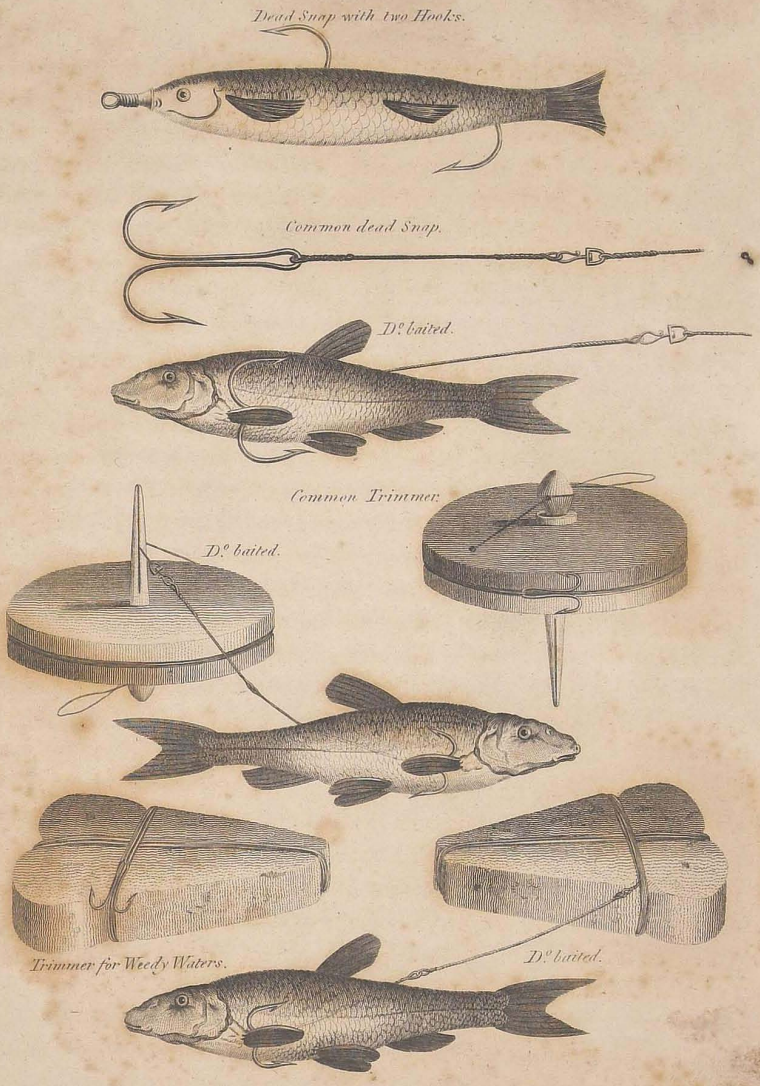
Huxing Pike is with large bladders, blown up and tied close; at the mouth of each fasten a line, (longer or shorter according to the water's depth,) with an armed hook baited; launch them with the advantage of the wind to move up and down the pool: a *boat* will be necessary in this diversion.

Huxing Pike is also done by fixing an armed hook baited, at such a length as to swim about mid-water, to the leg of a *Goose* or *Duck*, and then driving the Birds into the water. It was thus formerly practised in the *Loch* of *Monteith*, in Scotland, which abounds with very large Perch and Pike. "Upon the Islands a number of *Geese* were collected by the Farmers,

who occupied the surrounding banks of the *Loch:* after baited lines of two or three feet long had been tied to the *legs* of their Geese, they were driven into the water; steering naturally homewards, in different directions, the baits were soon swallowed: a violent and often tedious struggle ensued; in which, however, the *Geese* at length prevailed, though they were frequently much exhausted before they reached the Shore." This method has not been so long relinquished but there are old persons upon the spot who were active promoters of the Amusement.

Trimmers of two sorts are described, and also the mode of baiting them, in the Engraving; the upper are made of flat *Cork*, or any *light wood painted*, to be seven or eight inches diameter, turned round with a *Groove* in the *edge*, large enough to receive a fine whipcord or silk line *twelve* or *fourteen* yards, or at least *five* yards longer than the depth of the water: a small peg, two inches long, is fixed in the centre, with the end slit; and a small double hook fixed to a brass-wire link is to be used. Insert the baiting-needle under the side-*fin* of the bait, (for which large *Gudgeons* are superior to all others,) and keep it just within the *skin* of the side; bring it out beyond the *back-fin*, drawing the wire after it, and the hook, when drawn home, will be partly covered by the *side fin*. This method, performed carefully, will preserve the fish alive for many hours longer than any other; one end of the line is of course fixed to the *cork*, the other to the *loop* in the wire; the line is then slightly put into the slit of the *peg*, to keep the bait at a proper depth, (from *three* to *four feet*, which is more likely to attract the *Pike*'s notice than if laid deeper, or nearer the Surface,) and to prevent its untwisting the line out of the groove. The Trimmer should always be started on the *windward* side of the pond, and the rougher the water the better sport; if not seized in one trip, it must be taken up and re-started from the windward side again.

The lower Trimmers are also of *Cork*, and are to be baited and used as above; their form is adapted to go easily through *weeds* when taken by the Pike; after the line is run off, they will follow in the shape of a Wedge, and will not long be kept from appearing on the Surface in the



SNAP HOOKS and TRIMMERS.

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weediest places: a *hole* is burnt through one corner of the Cork, by which with a cord it may be made *stationary* to the side of any water; and which method is sometimes preferred where a *boat* cannot be readily commanded. No species of fishing does more execution than this: in windy weather, at all Seasons of the Year, and both *day* and *night*, the Trimmer presents itself as the most deadly Foe the *Pike* can encounter.

The largest Pike ever known to be taken with a *trimmer*, was by Messrs. Hitch and Major Rhode, in Dagenham Breach; it weighed *thirty-five* pounds.

Pike, in clear water and a gentle gale, from the middle of *Summer* to the latter end of *Autumn*, bite best about *three* in the afternoon; in the *Winter*, during the whole day; and in the *Spring*, most eagerly early in the *Morn*, and late at *Eve*.

The following facetious note was sent with a *Pike* by a Military Gentleman during the late rebellion in Ireland, to a Clergyman, who had requested the former to exert his Skill in providing him with some fish upon a particular day, when the Bishop of the Diocese was to dine with him.—"Dear Sir, I send you a *Pike*, God forgive me, designedly for his *Lordship*'s *belly:* into which, from what you have told me, there will be no great labour in *thrusting* it!"

A curious Anecdote is told of Abbot, Archbishop of Canterbury, in the Seventeenth Century, a Prelate of great Piety and Learning. He was born at Guildford, where his Parents lived in low Circumstances, his Father being a Weaver: his Mother, during her Pregnancy, dreamed if she could eat a *Pike*, her child would be a Son, and arrive at great Preferment: the *Pike* came miraculously to hand, for she caught it out of the River accidentally, whilst dipping a pail of water: the story of the Dream was circulated, the Child was befriended and put to School, and at length became Primate of all England. At the close of Life he met with a sad Misfortune; for, being upon a Visit at the Seat of Lord Zouch, he was

persuaded to exercise himself in the Park with a Cross-bow, and by accident shot the Keeper instead of a Deer. A commission was appointed to examine whether this Irregularity incapacitated him from the Office of Primate; and the Determination being left with the KING, he decided in favour of the Archbishop, who ever after kept a *Monthly Fast* on account of the Disaster, and settled *Twenty pounds a year* upon the Keeper's Widow.

The Gudgeon

is to be found in many of the English rivers: it delights most in gentle streams, with gravelly and sandy bottoms, and is met with in the Kennet, Cole, and the Mersey, of a size superior to those generally taken elsewhere. Mr. PENNANT records one caught near *Uxbridge* that weighed *half a pound:* though properly a *river* fish, they thrive amazingly in Ponds which have gravelly scours, and are fed with brooks running through them. The Compiler had *Gudgeons* in a Pond of this description, so large, that their average weight was *five*, and at most *six* to the pound: the shape of the body is thick and round; the irides tinged with red, the gill covers with green and silver: this fish is leather-mouthed; the lower jaw is shorter than the upper; at each corner of the mouth is a single beard; the back is dark olive, streaked with black; the lateral line straight; the sides beneath that silvery, the belly white; the tail is forked, and, as well as the *dorsal* fin, is beautifully marked with black. The flesh of the *Gudgeon* is so delicious, as to be called the *fresh-water Smelt*, and is compared with the Smelt in point of flavour.

Gudgeons spawn twice or thrice in a year; the chief time is the latter part of April, again during the Summer, and in the beginning of Autumn: about the end of Spring they seek *shallows*, which they frequent all the *hot* months; but the rest of the year they are usually taken in deep water, upon a bottom *sandy*, with mud.

The *Gudgeon* bites freely, and from the latter end of Spring until

Autumn commences, in gloomy, warm days, from an hour after *sun-rise* to within the same space of its *setting:* during the rest of the year, the middle of the day, when it is *warmest;* for they do not take readily in cold weather, nor soon after Spawning. In angling for this fish in the *shallows*, the *tackle* must be very fine, a Hook No. 7 or 8, a short rod and line, and a *quill* float; the bait should drag on the ground; they will take the small *red*-worm, *gentles* and *blood*-worms; the last is perhaps the best, and a *rake* (or the *boat-hook*, if fishing from a boat) should be kept frequently stirring the bottom. To this Spot they assemble in shoals, expecting food from the discolouring of the water; and by now and then throwing in a few *broken* worms or *gentles*, they are also kept together, and sometimes great quantities are thus taken. They are apt to *nibble* at the bait; the Angler ought not therefore to strike at the first biting: some use two or three hooks on the line. Such singular Fascination had this fishing in one instance, that a Clergyman, Minister of *Thames Ditton*, who was engaged to be married to a daughter of the then *Bishop* of *London*, overstaid the *Canonical* hour, and the lady, justly offended at his neglect, withdrew her Assent; he however certainly proved himself an exception to the Poet's remark,

"What *Gudgeons* are we Men,
Every Woman's easy prey."

A fondness for *Coursing*, similar to that of the above Gentleman for *Angling*, seemed to have operated upon a Gloucestershire Justice, who, attending the funeral of his Wife, arrayed in all the pomp of woe, and seemingly torpid with sorrow, was suddenly roused from his Grief by the starting of a *Hare;* upon which, as if forgetting the melancholy business he was about, he immediately threw down his *black Cloak* and other incumbrances, and *hallooing* on a *brace* of *Greyhounds*, the constant attendants of all his steps, pursued the game. The *Hare* being killed, he rejoined the Procession, which had halted on the occasion, and the Bearers had set down the Corpse: "Come, Gentlemen," said he, resuming his melancholy tone, with his *sable* vestments, "in the name of God let us

proceed with the remains of my dearest Wife, and finish the Ceremony for which we are met."

Of the same complexion, in obeying the Impulse of the ruling Passion, are the two following Anecdotes.—A Nobleman asked his Gamekeeper whom he met on his return from Shooting, which way he had been? "I have been trying Drayton Wood, Sir." "Why, what took you that beat?" The Gamekeeper replied: "My dear Wife was buried this Morning, and I went to Drayton to attend the *Funeral*, so thought I'd try the Cover in my way back."

The Huntsman of a Gentleman addressed him one Evening with, "An please your Honour, I could be glad to be excused going to *Woolford Wood* to-morrow, because I should like to go and see my poor Wife buried." The Master expressed concern at his loss, and of course granted his leave of Absence; when, to his astonishment, *Tom* was the first in the Field the following morning. "What is the reason," said his Master, "you are not attending the Interment of your Wife, as you requested permission to do?" "Why," replied the Huntsman, "I shall always remember your Honour's kindness, but I thought the morning was so promising that we should have famous Sport, so I desired our *Dick* the Dog-feeder to see her *Earthed*."

The Grayling

haunts rapid and clear streams, and particularly such as flow through mountainous Countries; it is found in those of *Derbyshire*, *Shropshire*, *Yorkshire*, &c.; in *Lapland*, where it is very common, the inhabitants use its Entrails, instead of *Rennet*, to make the *Cheese* which they get from the milk of the *Rein-Deer*. It is a fish of very elegant form; the body is less deep than that of the Trout; the head small, with protuberant eyes, whose irides are *silvery*, speckled with yellow; the mouth is of a middle size,

GRAYLING.



Camlet Fly.

N°7.

Red or Meadow Worm.

N°8.

Gentle.



N°7.



Red or Blood Worm.



N°8.



Gentle.

GUDGEON.

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and the upper jaw the largest. The *teeth* are very minute, seated in the jaws and roof of the mouth, and feel like a *fine file;* the *head* is dusky, the *covers* of the *gills* are of a glossy *green*, yet when in prime perfection, *these parts* are blackish, (differing in this respect from all other fish, being *least* beautiful when *most* in Season;) the back is of a dusky green, inclining to blue; the sides of a fine silvery *grey*, (from which it derives the name;) yet when first taken, they seem to glitter with spangles of gold, and are marked with black spots irregularly placed. The side line is nearly straight; the scales are large, and the lower edges dusky; forming straight rows from the head to the tail, which is much forked; the large *dorsal* fin is spotted, the other fins are plain: it is rather hog-backed, and, from the nose and belly touching the ground together, it is conjectured that this fish feeds mostly at the bottom. In length, the *Grayling* seldom exceeds sixteen inches. Mr. PENNANT mentions one taken near *Ludlow*, above half a yard long, and weighing *four pounds six ounces*, as a rare instance. One was caught near *Shrewsbury* that weighed full *five pounds*.

Thymallus is a name bestowed upon the *Grayling*, on account of an *imaginary* Scent proceeding from it similar to that of *Thyme;* the name of *Umbra*, which this fish also bears, has a far better derivation, for it is so swift a swimmer, as to disappear like the passing Shadow.

Graylings are in great esteem, and their flesh is white and palatable all the year; they are in season from September to January, (some say are best in *October*, others in December,) and cannot be dressed too soon after they are caught. *Graylings* lurk close all the *Winter*, and begin to be very active, and to spawn in *April*, or early in *May;* at which time, and during the *Summer*, near the sides, and at the tails of sharp streams, they will take all the flies that Trout are fond of: they rise bolder than the *Trout*, and if missed several times, will still pursue; yet, notwithstanding they are so sportive after the *fly*, they are an inanimate fish when hooked, and the sides of the mouth are so very tender, that unless nicely treated, when struck, the hold will frequently be broken. In September they retire in shoals to the lower end of still holes, just where the water becomes shallow,

where they will take a fly at the top, which should be *small;* the *Camlet-fly* is perhaps the best, and the hook No. 7 or 8.

When the water is not proper for *flies,* and they are angled for *below* the surface, use *Gentles* (which they eargerly bite at,) Wasp-grubs, or well scoured Worms, as near the ground as possible. The Cad-bait, and other small Insects which hide themselves in husks, they greedily feed upon, and have often been observed rooting up the gravel, and catching at every thing of this kind. Some in fishing with *gentles* have *two* or *three* hooks, and fish with them as with an *artificial* fly; others recommend the bait, or at least the lead above it, to drag on the ground, as they will rather take it *there* than *ascend* to do so, and use a *running** line; while others prefer a *cork float,* insisting that the Grayling is more apt to *rise* than descend, and on that account keep the bait *eight* or *ten* inches from the bottom.

Walton has said the Grayling will take a *Minnow,* and his authority is not to be lightly questioned; but Anglers of great experience have never found this bait successful. Graylings bite during the whole of cool,

* So called, because it runs upon the bottom; it should be as long as the rod, or nearly so, and strong: about ten inches from the end fasten a small cleft shot, and through a hole made in a small or large bullet, according to the *current,* put the line, and draw the ball down to the shot; to the extremity of the line fasten a *grass* or silk-worm gut, with a large hook: some use only four *large* shot eight inches from the hook. Another kind of running line is, at the end, where the hook is looped in a common line, a cleft bullet is to be fastened, and half a foot above, a link ten or twelve inches, with a hook baited with a worm; and six inches over the former, a second fixed and baited in the same manner, with a worm of a different sort. By this means the *true* bottom will be found, which, with lead fixed otherwise, cannot be so well ascertained. A third mode, which Walton much recommends, is with a line a *yard and half* longer than the rod, with single hair next the hook (which must be small,) and for two or three of the adjoining lengths, and one, No. 5, shot, at top; the smaller brandlings, well scoured, are to be the bait, of which one only is to be placed on the hook, by putting the point of it in at the tail, and running up the body of the worm quite over all the arming, and an inch at least upon the hair, the head and remaining part hanging downward: with this fish, in clear water always *in and up* the stream, casting the *worms* before as if an artificial *fly,* with a light pliant rod, and keeping it in motion by drawing it back as in fly angling. The Worm is frequently taken *upon or near* the Surface, and almost always before the light shot can sink it to the bottom. According to Walton, this is superior to any other mode of angling with a *worm* for either *Grayling* or *Trout,* especially in *bright* water.

cloudy days; but the preferable times, in *Spring* and *Summer*, are from eight in the morn until twelve, and from four in the afternoon until after Sun-set; and from September to January, in the middle of the day.

Trout.

THAT this common fish has escaped the notice of all the Ancients, except AUSONIUS (who celebrates it more for its beauty than fine flavour) is, says Mr. PENNANT, matter of surprise; nor is it less singular, that so delicate a Species should be neglected at a time when the folly and extravagance of the *Table* was at its height, and that the Epicures should overlook a fish that is found in such quantities in their neighbouring lakes, when they ransacked the Universe for *Dainties*. The milts of *Muræna* were brought from one place, the livers of *Scari* from another, and *Oysters* even from so remote a spot as our *Sandwich;* but there ever was (and still continues) a Fashion in the article of good living. The *Romans* seem to have despised the *Trout*, the *Piper*, and the *Doree;* and it is believed Mr. QUIN himself would have resigned the rich paps of a *pregnant Sow*, the *heels* of *Camels*, and the *tongues* of Flamingos (though dressed by the cooks of HELIOGABALUS,) for a good *jowl of Salmon*, with *Lobster sauce.*

The general shape of *Trouts* is rather long than broad: in several of the Scotch and Irish lakes and rivers, they grow so much *thicker* than in those of England, that a fish from *eighteen* to *twenty-two* inches will often weigh from *three* to *five* pounds. The *Trout* is a fish of prey, has a short roundish head, blunt nose, mouth wide, and filled with teeth, not only in the jaws, but on the palate and tongue: the scales are small, their back is ash-colour, the sides yellow, and when in season, is sprinkled all over the body and covers of the gills with small beautiful red and black spots; the tail is broad.

There are several sorts of *Trout*, differing in their size, (for in many of the smaller streams there are Trouts that always continue small, but

are very great breeders,) shape and hue; but the flesh of the best is either *red* or *yellow* when *dressed:* the female fish has a smaller *head* and deeper *body* than the male, and is of superior flavour. In fact, the colours of the *Trout* and its spots vary greatly in different waters and at distinct seasons, yet each may be reduced to one species. In *Llyndivi*, a lake in *South Wales*, are *Trout* called *Coch-y-dail*, with red and black spots as big as *sixpences;* others unmarked, and of a reddish hue, that sometimes weigh nearly ten pounds, but are ill-tasted. In *Lough Neah*, in *Ireland*, are Trout called *Buddaghs*, which rise to thirty pounds; and some (probably of the same species) are taken in *Ulls-Water*, in Cumberland, of still greater weight; and both these are supposed to be similar with the large Trout of the lake of *Geneva*, a fish, says Mr. PENNANT, which I have eaten of more than once, and think very indifferent.

A *Trout* taken in *Llynallet*, in *Denbighshire*, which is famous for its excellent kind, was singularly marked and shaped; it measured 17 inches in length, depth $3\frac{3}{4}$, and weighed *one pound ten ounces;* the head thick, nose sharp, both jaws, as well as the head, of a pale brown, blotched with black; the teeth sharp and strong, dispersed in the jaws, roof of the mouth, and tongue, (as is the case with the whole *genus*, except the *Gwiniad*, which is *toothless*, and the *Grayling*, which has none on the tongue;) the back was dusky, the sides tinged with *purplish* bloom, both above and below the *side line*, which was straight and marked with deep *purple* spots, mixed with black. The belly was white; the first dorsal fin was spotted; the spurious fin *brown*, tipped with *red;* the pectoral, ventral, and anal fins of a *pale brown;* the edges of the latter white; the tail very little forked when extended.

Some peculiar remarks upon the various sorts of *Trout* in the *Northern* Counties of *England*, and of their Growth and Age, have been given by a very experienced *Angler*, to the following effect:—That he does not undertake to determine whether the *River* and *Burn Trout* are of one Species: in many points the *Trout* taken out of the same *river* and same *pools* will agree, and in some shall vary; so that, if the difference were owing to the

water or food, he could say nothing against their being of one species: he believes they spawn *promiscuously* together, are all similar in shape, in the number of their *fins*, and their *fins* being disposed in the *same places*. Whether the colour of the spots makes any specific variety, he leaves to the decision of Naturalists; but, in his opinion, the so much esteemed *Charr*, both *red* and *white*, is only a *Meer* or *Marsh Trout*, and the Colour perhaps owing to the *Sex*. In several of the *Northern* rivers he has taken *Trouts* as *red* and as well tasted as any *Charr*, and whose *bones*, when potted, have dissolved, like those of the *Charr*. That about Michaelmas he had caught Trouts of a *copperish* hue, without spots; the flesh, when dressed, was like Bees-wax, and well tasted: that likewise in April he took one of these *Trouts twenty-eight* inches long, and thick in proportion, which boiled *yellow*, but was equally good; and this he thinks was the *Bull-Trout* mentioned by WALTON, and several Authors, as extraordinary both for its size and goodness, and to be found no where but in Northumberland. He records a still larger fish caught in the same river (the Cocquet) by him in September, near *Brenkburn Abbey;* the length, which was nearly a *yard*, did not strike this Gentleman so much, as the bright spots upon the *lateral* line; by which it appeared to him to be an overgrown *Burn Trout*, and neither a *Salmon*, *Salmon-Trout*, nor the same with those two he thought were the *Bull-Trout*.

WALTON mentions the *Fordwich Trout*, taken in the river Stour, of which only *one* instance was ever known of its being caught by the Angle: it is said to be delicious eating: one weighing *twenty-six* pounds, and of a most beautiful colour, was taken with a Net in December 1797; they grow to a larger size.

Another Trout in Northumberland (called the *Whitling)* the former Gentleman describes as being from twelve to twenty inches long, shaped exactly like the Salmon, and being red and high flavoured as the *Charr;* he has taken many of them with the *fly*, and with *night-lines*, in the *Tweed* and the *Wensbeck*, but never with any Spawn in them, which induced him to

consider them *Salmon Smelts*, that had been to the Sea and returned to the fresh water in the *same Summer*, and which the following *Spring* would be what is termed a *gilse*, or year old Salmon: none of them had spots either *red* or *black*, which the *Burn* and Salmon *Trouts* have; but the Fishermen of the Tweed flatly contradicted his Suggestions, by positively affirming that *none* were ever known to grow above twenty inches long.

The Burn or River Trout, he says, with plenty of food and good water, grows rapidly: several Experiments were made in ponds fed by *river water*, and some by *clear springs*, into which the young *fry* have been put at *five* or *six* months old, (that is, in *September* or *October*, reckoning from *April*, when they first come from the spawning beds,) at which time they will be *six* or *seven inches* long: in eighteen months the change has been surprising: he has seen a pond drained *ten months* after being thus stocked, which was in *July*, when the fish were *fifteen* months old; some were *fifteen* or *sixteen* inches, others not more than *eleven* or *twelve:* the fish were returned into the pond, and it was again drained the *March* following, when some were *twenty-two* inches, and weighed *three* pounds; others were sixteen inches, and some not more than twelve. To what, asks this Gentleman, can we attribute this difference? In water, food, and weather, they all fared alike: his opinion is, that the fry were the produce of *Trouts* of various ages, and that the *older* and *larger* the parents the more *speedy* is the *growth* of their Offspring.

He is certain that *Trouts*, in a good *pond*, will grow much faster than in some Rivers*; and from the accurate observation of a Gentleman, who kept them in Ponds to ascertain the *progress* and *duration* of their Lives, he asserts, that at four or five years they are at their full growth, which in some was *thirty* inches, in many considerably less; that for *three* years they continued with little Alteration in their size or goodness; *two* years after the Head seemed to be enlarged, and the Body wasted, and in the

* Mr. Toomer, of *Newbury* in *Berkshire*, used to keep Trouts in Stews, and fed them to a very great Size in a short time.

winter after that *change* they died. According to this computation, *nine* or *ten* years are the term of their Existence; possibly that may be prolonged, and their bulk increased, when they have liberty to go into the Tide-way and *Salt water*.

Of the *Gillaroo Trout* (the inhabitants of certain lakes in IRELAND) mention has been made in the account of the Waters of that Country.

In some rivers, *Trouts* begin to spawn in *October*, but *November* is the chief month; the end of *September* they quit the deep water to which they had retired, during the latter part of the hot weather, and make great efforts to gain the source of the Currents, (they also swim up brooks, where they are too often destroyed by the *poacher*, who is always upon the watch, and is sure to cause terrible havock at this Season,) seeking out proper places for spawning: this is always upon a gravelly bottom, or where gravel and sand are mixed among stones, towards the end and sides of a stream and in *lakes*, &c. where the bottoms are gravel, among *weeds*, where they make themselves beds and deposit their Ova; (they are very *prolific*, and the spawn is most eagerly sought after and devoured by the *Grayling;)* at which period they turn *black* about the head and body, and become soft and unwholesome; in fact, they are never good when big with *roe*, which is contrary to the nature of most other fish: after spawning they become feeble, their bodies wasted, and those beautiful spots, which before adorned them, are imperceptible; their heads appear swelled, and the eyes dull, (and Mr. PENNANT says, the under jaw is subject, at certain times, to the same Curvature as that of the *Salmon)*. In this state they seek still waters, and continue there *sick*, it is supposed, all the Winter; a prey also to Vermin, which breeds upon and keeps them poor. Thus does "the Monarch of the Brook" pass nearly one-fourth of his Existence, until roused from his torpor by the returning *Spring*. It is to be remembered, that in all Trout rivers there are some barren Female fish, which continue good all the Winter.

In *March*, or if mild open weather, in *February*, Trouts begin to leave their winter quarters, and approach the shallows and tails of Streams, where they cleanse and restore themselves to Health: as they acquire strength, they advance still higher up the Rivers, until they fix upon their *Summer* residence, for which they generally choose an eddy, behind a stone, a log, or bank that projects forward into the water, and against which the Current drives; whirlpools and holes into which sharps and shallows fall, under roots of trees, and in places shaded by boughs and bushes: in small rivers they frequently lie under sedges and weeds, especially in the beginning of the year, before their perfect strength is recovered; but when in their *prime*, they feed in the swiftest Streams, and are often found at the upper end of *mill-pools*, at locks, flood-gates, and weirs, also under bridges, or *between* two streams running from under their *arches*, and likewise in the returns of Streams, where the water seems to boil; in the decline of Summer, they lie at *mill-tails*, or end of other streams, and in the deep water.

Trouts may be said to be in season from *March* to *September;* they are fattest from the middle of *August* until the latter month, from their having fed upon the spawn and young fry of various fish: which constitutes their firmness and flavour. Some however contend, that their prime season is in *May;* but in that month and *June* they so glut themselves with *flies* as to cause a Flabbiness which they neither have at the end of *April*, nor at the time above mentioned.

There are few fish that afford the Angler such diversion, or require more skill to take them, than the *Trout;* (such is the passion to fish for them, that the liberty of angling in some of the streams in the adjacent Counties is purchased at the rate of *ten pounds* per ann. by the *Amateurs* of the Metropolis;) they are at all times exceedingly circumspect, and it will be in vain to angle when the water is low by being *kept up* at the *mills*, as they then retire under the banks and roots, refusing all baits. In a

cloudy day, after a gentle shower, when the mills are going, they will freely take *Minnows*, *Worms*, and *Flies* of all kinds in their proper season: in *March* or *April*, angle for them with the *Worm* in the forenoon, and with a *Fly* or *Minnow*, according to the State of the Water, the rest of the day; in the swiftest and sharpest Currents provided the day be *warm* and bright, and in the *deeps* early and late; but if the water be discoloured or very thick, try the gravelly *shallows* near the sides and tails of Streams with a *worm only*, to run on the bottom with one large shot a foot at least from it. When there is a small *fresh*, or the water is clearing off, and is of a dark brownish colour, *first* use the *worm*, (which should be a well scoured *Brandling*, cast in as a *fly* at the head of the Stream, and moved gently toward you, still letting it go down with the Current, so as to keep it a little under water; the line should be rather short, with *no lead* upon it, and the hook fine,) then the *Minnow*, and as the Water clears, the Artificial flies.

When the water is clear and low in sultry weather, the *beetles*, *blue-bottle*, *palmer*, *cad-bait*, *wood-fly*, *earth-bob*, &c. may be successfully used. Barker has left directions in *night* angling for Trout, where the most killing baits are specified; his account states, that being solicited by a Nobleman, who was his Patron, to get a dish of Trout against the next morning, he set off to the river, and describes his progress there as follows: "It proved very dark; I threw out a line of three silks and three hairs twisted for the upper, and two hairs and two silks for the lower part, with a good large hook. I baited my hook with two *lob-worms*, the four ends hanging as meet as I could guess them; I fell to angle; it proved very dark; so that I had good sport, angling with the lob-worms as with flies on the top; you shall hear the fish rise on the top of the water, then you must loose a slack line down to the bottom, as nigh as you can guess; then hold your line straight, feeling the fish bite; give time, there is no doubt of having the fish; for there is not one amongst twenty but doth gorge the bait; the least stroke fastens the hook, and makes the fish sure; letting the fish take a turn or two, you may take him up with your hands. The night began to alter, and grow somewhat lighter; I took off the lob-

worms, and set to my rod a *white* palmer fly, made of a large hook; I had good sport for the time, until it grew lighter, so I took off the white palmer, and set to a *red* palmer, made of a large hook; I had good sport, until it grew very light, then I took off the red palmer, and set to a *black* palmer; I had good sport, made up the dish of fish, so I put up my tackles and was with my Lord at his time appointed for the service.

"These *three flies*, with the help of the *lob-worms*, serve to angle all the year for the Night, observing the times as I have shewed you in *this night*'s work, the *white* fly for darkness, the *red* fly in *medio*, and the *black* fly for lightness. This is the true Experience for angling in the *night*, which is the surest angling of all, and killeth the greatest *Trouts*. Your lines may be strong, but must not be *longer* than your Rod*."

The *Rod* for *general Trout*-fishing should be from fourteen to sixteen feet, the lower part of well seasoned *ash* or *hazel*, large enough to be so bored, as to hold a *stiffer top* for minnow and worm angling, and towards the but-end for the *Reel* to fasten on properly; the middle should be good *yew* or *hiccory*, the top of the same nicely spliced, and about half a foot of round *tortoise*-shell properly lessened to the end, and the Rod neatly ringed in the same manner as that for *Salmon*; it must be regularly taper from bottom to top, with a good spring, and pliable almost to the hand for *fly*-fishing.

Walton prefers the *Yorkshire fly*-rods, which are made up into one piece, though composed of many, and, from their lightness, are easily managed with one hand; after the *Season* they should be taken to pieces, and being kept *oiled*, may again be joined together for the next, and are as good as ever. The length of line, continues Mr. W. is no Incumbrance to a man who knows how to handle his Rod, and gives great advantage,

* Night fishing with a *fly* is best from *May* to the end of *August*; but the largest fish are caught in the latter month. *Trout* will take in the *dark* nights of any of the subsequent months, provided they are *soft* and *calm*.

for to fish *fine* and *far off* is the principal rule for *Trout* angling; and an Artist may easily throw twelve yards with *one*, and eighteen with *both* hands. The *line* should be eighteen or twenty hairs at the *top*, and gradually *diminishing* to the bottom; by this means, the *rod* and *tackle* will be taper from the *hand* to the *fly*, the line will fall straighter, with more exactness, and less violence and weight (which would circle the water and frighten the fish,) to any Spot where it is wished to be cast. There are lines now to be had, that are wove in one piece. Many inconveniences attend the use of twisted hairs for the *hook* links; *Indian grass* makes them excellent; and to prevent the *brittleness* which some attribute to the Grass, put as many of the *finest* as you please into a pot, and pour the scummed fat, wherein *fresh* meat has been boiled, upon them; after lying *four* hours, take them out *one by one*, and stripping the grease off with the finger and thumb, (without *wiping*,) stretch *each* grass as long as it will yield; coil them up in rings; and to keep them moist, use a piece of bladder well oiled, and before using, soak what lengths you want in water for half an hour: if the grass be coarse, its fall will be heavy upon the water; for this reason *alone*, *Silkworm gut* is preferable, which is both fine and very strong, but then the latter is apt to *fray*; by waxing it well, this may however, in some degree, be prevented.

Another *rod* for *Fly*-fishing, is recommended to be of two parts, without ferrules, and the lower *longer* than the upper, with the small end of the former, and the large end of the latter, cut *long*, and to fit nicely, as for splicing; it may be tied together at the water side, with Shoemaker's common waxed thread; this is by far the best, for throwing the line with freedom and accuracy, and for easing it in playing the fish when hooked; the Spring will be superior, if properly made, to that of the other sort of rods; upon leaving off fishing, the rod should be untied, and the string wrapped round the two parts, for carrying it more conveniently*.

* If the Top, or any other part of the Rod, should by accident break, cut the two broken ends with a long slope, so that they exactly fit together; spread some wax very thin on each slope, and with waxed thread or silk, according as the size of the fractured part requires, bind

When the *rod* is joined, and the *reel* (which should have a *multiplying* Wheel) properly fixed thereon, the line is to be brought from it through the rings upon the rod; to this the foot-length is to be looped, and which should be about *three yards* and a half long, made of strong *single* silk-worm *gut* well tied, and the knots whipped, running a little finer towards the lower end, where there must likewise be a whipped *loop*. The *first* fly or *Stretcher*, (which should be made to one or two lengths, nicely whipped together, of level-*gut*, as fine or rather *smaller* than that of the foot-length, with a loop at the end to fasten to it,) is to be looped to the foot-length, and then the *Drop-fly* (just above a knot where it is whipped) a yard or more from the *End-fly*, and to hang from the line not more than *two or three inches;* if more flies are fished with, they must be kept about the same distance; observing, that if the *Drop-flies* be *larger*, or even as *big* as the *Stretcher*, a good line cannot be thrown. (A beginner should never use but a *single* fly, and until he is a *proficient*, every throw will go near to cost him a *hook;* it is therefore best to practise for some time without one.) Supposing this precaution to have been adopted, the line is to be let out half as long again as the rod, and the part near the *fly* held in the *left* hand; the rod is to be moved from *right* to *left;* and in moving it backwards in order to throw out the line, the hold of the left hand near the Fly is at the same instant to be abandoned: try several throws, and when perfect at this length, (of which nine yards are quite sufficient for any one to practise with,) extend the line, progressively using more, until any necessary length can be managed, remembering, that in raising the line to recast it, the Rod should be waved in a *small circle* round the head, and not brought immediately *backwards;* nor must the line be checked until it has gone to its full extent behind the *thrower*, or the end-fly will certainly be *whipped off*.

them neatly together; to *fasten off*, lay the fore finger of the left hand over the binding, and with the right, make four turns of the thread over it, then pass the End of the thread between the under side of the finger and rod, and withdraw the finger; lastly, with the fore finger and thumb of the right hand, take hold of the first of the turns, and gathering as much as can be of it, bind until the three remaining turns are wound off, and afterwards take hold of the End, which had before been put through, and draw it close. The Engraving will further explain the method.

There is great art in making the line fall *light* on the Water and shewing the *flies* well to the fish: perhaps the best mode is, after contriving to let the *flies* touch the Surface as lightly and naturally as possible, to raise the rod by degrees, and sometimes with a tremulous motion, which will bring them a little towards the Angler, still letting the *flies* go *down* the Stream, (never draw them *against it*, for it is Unnatural,) and before the line comes too near, throw it out again. When a fish is seen to rise at a *natural* fly, cast about a yard above him, but not directly over his head, and let the *fly* or *flies* move gently towards him, by which they will be shewn in a more natural Attitude. Experience and Observation are however essential to complete an adept in the art, so as to enable him to throw his fly into holes, under banks, and other places mentioned as the haunts of the *Trout*, and where in general the largest sized ones are to be met with. In angling for Trout, whether with a fly, or at the ground, there is no occasion for more than *three* or *four* trials at a Spot*.

During the *Summer*, even when the water is quite low and clear, no *wind* stirring, and the *Sun shining* in its utmost lustre, and in the hottest part of the day, it is insisted Trout may be taken (although very few Anglers are disposed to credit it) with a small *wren's tail*, *grouse*, *smoky dun*, and *black hackles*, fishing straight down the water, by the sides of streams and banks; keeping out of sight and with as long a line as can conveniently be managed, with the foot length *very fine:* they may be often seen with their fins above water, at which time they will eagerly snap at the above-mentioned flies; and though upon hooking one the

* WALTON's instructions for *artificial* fly-fishing, were for the fisherman always to throw the line before him, so that the fly first touched the Surface, with as little of the line as could be avoided; though in a stiff wind it would be necessary to drown some of the line, to keep the *fly* in the water; to make the most of the wind in casting the fly, either to the further or nearer bank, according to the Course of the river, always endeavouring to keep it at *his back*, and to stand as *far from the bank* as the length would permit when fishing the opposite one; and when constrained to fish on the *same side* whereon *he stands*, to place himself on the *very brink* of the Current, and cast his fly at the utmost extent of his *rod* and *line*, up or down the River as the Gale serves.

rest will fly off, they will soon be composed, and return for two or three times.

At the time of the Year when the Trouts retire to the deeps in *still* water, they will often take very well when there is a proper bottom, provided the wind is *strong*, to make a good *curl*, particularly if it blows across the water; the Angler will of course fish with the wind in his *back*, not only for the advantage of throwing his line, but because the fish will be on that side, waiting for *flies* that are blown from the *grass* and *trees* into the stream; he will also keep out of sight, and fish the *nearest* bank to him. In a *warm* wind keep the *flies* as much upon the Surface and in View as possible; but with the wind *bleak* and *cold*, allow them to sink a little beneath it: in such weather fish take *under* water, and in a manner hook themselves, not rising or taking *so freely*, but more *surely*, than when they rise to the Top.

In *fly-fishing* the Angler should recollect to take with him some portion of all the different Materials for Fly-making: so whimsical sometimes are *Trouts* that they may be seen to take insignificant flies greedily, which at other times they would not look at. When this happens catch one of such flies, and try how nearly *Art* can imitate *Nature*, by framing one as similar as can be. The *fish-basket* and *landing-net* he should likewise be equipped with.

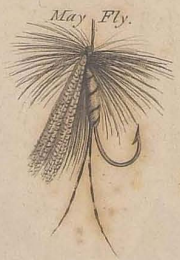
Mr. Gay has beautifully described the substances with which *Flies* are formed.

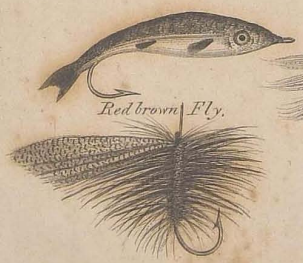
> " To frame the little Animal provide
> All the gay hues that wait on female pride;
> Let Nature guide thee, sometimes golden wire
> The shining bellies of the fly require.
> The peacock's plumes thy tackle must not fail,
> Nor the dear purchase of the sable's tail.
> Each gaudy bird some slender tribute brings,
> And lends the growing Insect proper wings.

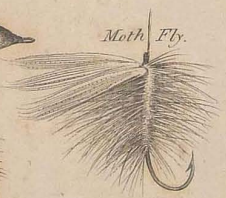
TROUT.

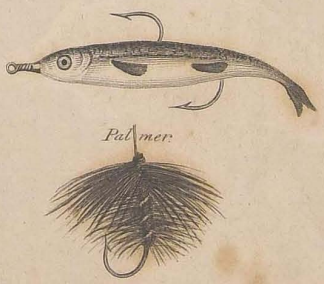














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'Silks of all colours must their aid impart,
And ev'ry fur promote the fisher's art.
So the gay Lady, with expensive care,
Borrows the pride of land, of sea, of air;
Furs, pearls, and plumes, the glitt'ring thing displays,
Dazzle our eyes, and easy hearts betrays."

WALTON enumerates the Materials for fly-making, and also recommends how to keep them *unmixed*, and ready for the Angler, in the following manner:

Take a piece of fine grained *Parchment*, of *seven* inches by *nine*, and so fold it that the size and proportion will be that of a small *Octavo;* then open, and through the first leaf, with a sharp penknife and ruler, make three cross cuts, and with silk stitch the two leaves together, as in the Engraving; leaving the margin half an inch at least.

Take the distance from A to B with a pair of compasses, and set in the middle of a small piece of parchment, cutting off at each extremity what is to spare, and observing that the sides are quite parallel; set on the distance from A to C, and act as before, leaving the middle division an inch longer at bottom than the others; it will then be in the shape of figure 2; the whole work must be square; turn in the sides and ends of the cut parchment, and fold them close, and there will be a pocket shaped as No. 3, which is to be put in the first partition. Pursue the same method with the small pockets, and those for the other partitions, until six leaves are completed, which compose the first of the book; the larger pockets are to hold the coarse, the smaller the finer furs: a hole may be punched in each, which will shew what the pockets contain.

The next leaf may be *single;* stitch it with double silk, cross these stitches with others, and the spaces will be *lozenge*-shaped; let the stitches be half an inch in length; into these the *dubbing*, when mixed ready for use, is to be tucked.

The following leaf should be doubled, sewed with a margin as the others; through the first fold cut a *lozenge;* into this may be put a wing of the *starling*, *land-rail*, *thrush*, &c.; at the back of this leaf sew, very strongly, two parchment straps, half an inch wide, to hold a sharp pair of *Scissars*.

On another single leaf four or five cross bars of long stitches, as well on the back as fore-side, may be made to hold large feathers from the *cock pheasant*'s tail, a ruddy *brown hen*, &c. The next three leaves should be doubled, stitched through the middle from side to side; with the compasses make a circle an *inch and half* diameter, cut out the interior parchment of the circle: under some of the margins, when the leaves are sewed together, may be

tucked *peacock*'s and *Ostrich herl;* in others lay smoothly the golden feathers of the *Pheasant*'s breast, and the grey and dyed *yellow mail* of a *Mallard.*

Three double leaves should be made with only two large pockets in each; those may be allotted for *silk* of various colours, gold and silver *twist*, &c.; six single leaves more will complete the book; stitch them from side to side at *half inch* distances, and cross those stitches with others from top to bottom rather wider, and into every other space (reckoning from top to bottom) lay neatly a Starling's feather; the other leaves may be filled with *land-rails*, and other small feathers, with red and black *hackles.*

The *first* and *last* leaves may be double, and so sewed, as to make pockets similar to the common pocket-books; into these, *hooks*, a piece of *wax* wrapped in leather, &c. may be put. To that page containing the mixed *dubbings* there should be an *index*, referring to every division, and expressing what *fly* such *mixture* is adapted for. When thus prepared let the Binder make it up as strong as possible, and either to tie, or fasten with a clasp. The conveniences of such a book are vastly preferable to any magazine *bag;* and for its contents WALTON selects, as essential, *Bear*'s *hair*, grey, dun, light, dark coloured, bright brown, and that which shines. *Camel*'s, dark, light, and of a colour between both. *Badger*'s and *Spaniel*'s hair from behind the ear, light, dark brown, tawny, and black.

Hog's *down*, which may be had, about Christmas, of Butchers, or rather of those that make Brawn; it should be plucked from under the throat, and other soft places of the Hog, and must be of the following colours: *viz.* black, red, whitish, and sandy; and for other colours you may get them dyed. *Seal*'s *Fur* is to be had at the Trunkmakers; get this also dyed in all the different shades of Cow's and Calves' Hair; you will then never need either, both are harsh, and never work kindly, nor lay handsomely; get also *Mohairs*, black, blue, purple, white, violet, dull buff; a dead leaf, yellow and orange; *Camlets*, (both hair and worsted,) blue, yellow, dun, light and dark brown, red, violet, purple, black, horse-flesh, pink, and orange Colours.

A piece of an old *Turkey Carpet* will furnish excellent *Dubbing:* untwist the Yarn, and pick out the Wool, carefully separating the different colours.

Some use for Dubbing *Barge Sail*, which, when old, is usually converted into Tilts: underneath them there is almost a continual smoke arising from the fire and the steam of the Beef-kettle; which in time dyes the tilt of a fine brown: this would be excellent Dubbing, but that these sails are made of Sheeps' wool, which soaks in the water, and soon becomes very heavy; however, get of this as many different Shades as you can, and have Seal's Fur and Hog's Wool dyed to match them; which, from being more stiff and light, float better, and are in most cases to be preferred to Worsted, Crewels, and, indeed, to every other kind of Wool. Observe, that the Hog Wool is best for *large*, and the Seal's Fur for *small*, flies.

Get also *Furs* of the following animals: *viz.* the *Squirrel*, particularly from his tail; *Fox-cub*,

from the tail where it is downy, and of an ash-colour; an *old Fox*, an *old Otter*, *Otter-cub*, *Badger*, *Fulimart*; a *Hare*, from the neck, where it is of the colour of withered Fern; and, above all, the *yellow Fur of the Martern*, from off the gills or spots under the Jaws. All these, and almost every other kind, are easily got at the *Furrier*'s.

Hackles are a very important article in *Fly-making*; they are the long slender feathers that hang from the head of a Cock down his neck; there may also be fine ones got from near his tail: be careful that they are not too rank, which they are when the fibres are more than *half an inch* long, and for some purposes These are much too big. Be provided with these of the following colours: *viz. red*, *dun*, *yellowish*, *white*, *orange*, perfect *black*, and *strong brown red*. Observe, that the feathers of a Cock-*chicken*, be they ever so fine for shape and colour, are good for little, for they are too downy to stand erect after they are once wet; and so are those of the *Bantam* Cock.

Feathers are absolutely necessary for the wings, &c. of flies; get therefore those from the back and other parts of the *wild Mallard*, of a *Partridge*, especially those red ones that are in the tail; from a *Cock Pheasant*'s breast and tail; the wings of a *Blackbird*, *Brown Hen*, *Starling*, *Jay*, *Land-Rail*, *Woodcock*, *Throstle*, *Fieldfare*, and *Water-Coot*; from the crown of the *Lapwing*; green and copper-coloured *Peacock*'s and black *Ostrich* Herl; Feathers from a *Heron*'s neck and wings: and remember, that in most instances where the *Mallard*'s Feather is directed, *that* from a *Starling*'s wing will answer better, being of a finer grain, and less *spongy*.

Be provided with *marking silk* of all colours; fine, but very strong, *floss silk*; gold and silver *flatted wire* and *twist*; a sharp knife, *hooks* of *all sizes*, Hog's *bristles* for *loops* to *flies*, *shoemaker*'s wax; a large *needle* to raise the *dubbing* when pressed close by working, and a small pair of *Scissars*. Remember with all *dubbing* to mix *Bear*'s hair and *Hog*'s *Wool*, which will not imbibe Water, as the *fine furs* and most other *dubbings* do; and keep in mind that *Martern*'s fur is the best *yellow*. Should the Angler find any superior Articles to the aforementioned, he should be careful to make such Additions to his Stock.

WALTON proceeds with instructions for making a Fly, (neither *Hackle* nor *Palmer-fly*,) which will be noticed afterwards.

The *hook* is to be held fast betwixt the fore finger and thumb of the left hand, with the back of the shank upwards, and the point towards the finger's end: then take a strong small silk, of the colour of the fly intended to be made; wax it well with wax of the same colour, (to which end, always have wax of all colours ready,) and draw it betwixt the finger and thumb, to the head of the shank, whip it twice or thrice about the *bare* hook, which is done, both to prevent slipping, and also that the shank of the hook may not cut the hairs of the towght, which it might otherwise do: take the line and draw it likewise betwixt the finger and thumb, holding the hook so fast as only to suffer it to pass by, until the knot of the towght is almost to the

middle of the shank of the hook, on the inside of it; then whip the silk twice or thrice about both *hook and line*, as hard as the strength of the silk will permit: this being done, strip the feather for the wings proportionable to the bigness of the fly, placing that side downwards which grew uppermost before, upon the back of the hook, leaving so much only as to serve for the length of the wing of the point of the plume, lying reversed from the end of the shank upwards; then whip the silk twice or thrice about the root-end of the feather, hook, and towght: this effected, clip off the root-end of the feather close by the arming, and then whip the silk fast and firm about the hook and towght, to the bend of the hook, but not further, (as is done in *London*; and so a very unhandsome, and, in plain *English*, a very unnatural and shapeless fly, is made:) cut away the end of the towght, and fasten it, and then take the dubbing, which is to make the body of the fly, as much as is thought convenient, and holding it lightly with the hook betwixt the finger and thumb of the left hand, take the silk with the right, and twisting it betwixt the finger and thumb of that hand, the dubbing will spin itself about the silk, which, when it has done, whip it about the armed hook backward, to the setting on of the wings, and then take the feather for the wings, and divide it equally into two parts, and turn them back towards the bend of the hook, one on each side of the shank, holding them fast in that posture betwixt the fore-finger and thumb of the left hand; which done, warp them so down as to stand and slope towards the bend of the hook; and, having warped up to the end of the shank, hold the fly fast betwixt the finger and thumb of the left hand, and then take the silk betwixt the finger and thumb of the right, and, where the warping ends, nip it with the thumb nail against the finger, and strip away the remainder of the dubbing from the silk, and then with the bare silk whip it once or twice about; make the wings to stand in due order, fasten, and cut it off; after which, with the point of a needle, gently raise up the *dubbing* from the *warp*; twist off the superfluous hairs of the dubbing, (leaving the wings an *equal* length, or the fly will never swim true,) and the Work is finished.

For the construction of the plain *Hackle* or *Palmer*, (which are synonymous terms,) the following rules are given.

Hold the hook in a horizontal position, with the shank downwards, and the bent of it between the fore-finger and thumb of the left hand, and having a fine bristle and other materials, lying ready, take half a yard of fine red marking silk, well waxed, and with the right hand, give it four or five turns about the shank of the hook, inclining the turns to the right hand; when near the end of the shank, turn it into such a loop as is hereafter directed to be made for fastening off, and draw it tight, leaving the ends of the silk to hang down at each end of the hook. Having singed the end of the bristle*, lay the same along on the inside of the shank of the hook, as low as the bend, and whip four or five times round; then singeing the other end of the bristle to a fit length, turn it over to the back of the shank, and, pinching it into a proper form, whip down and fasten off, as before directed, which will bring both ends of the silk into the bend. After waxing the silk again, take three or four strands of an Ostrich feather, and hold-

* The same should be done by the flame of a Candle to the Hair to which any hook is whipped, to prevent its drawing.

ing them and the bend of the hook as at first directed, the feathers to the left hand, and the roots in the bend of the hook, with the end of the silk newly waxed, whip them two or three times round, and fasten off; then turning the feathers to the right, and twisting them and the silk with the fore-finger and thumb, wind them round the shank of the hook, still supplying the short strands with new ones, as they fail, till come to the end, and then fasten off. This done, clip off the ends of the feathers, and trim the body of the Palmer small at the extremities, and full in the middle, and wax both ends of the silk, which are now divided, and lie at either end of the hook.

Then take a strong bold hackle, with fibres about half an inch long, straighten the stem very carefully, and holding the small end between the fore-finger and thumb of the left hand, with those of the right stroke the fibres the contrary way to that which they naturally lie; and taking the hook, and holding it as before, lay the point of the hackle into the bend of the hook with the hollow, which is the palest side, upwards, and whip it very fast to its place: in doing whereof, be careful not to tie in many of the fibres; or if you should chance to do so, pick them out with the point of a very large needle.

When the hackle is thus made fast, the utmost care and nicety is necessary in winding it on; for if this is failed in, the fly is spoiled, and it must all be begun again: to prevent which, keeping the hollow or pale side to the left hand, and, as much as possible, the side of the stem down on the dubbing, wind the hackle twice round, and holding fast what is so wound, pick out the loose fibres, which may have been taken in, and make another turn: then lay hold of the hackle with the third and fourth fingers of the left hand, with which it may be extended while the loose fibres, as before, are disengaged.

In this manner proceed till within an eighth of an inch of the end of the shank, where will be found an end of silk hanging, and the fibres at the great end of the hackle somewhat discomposed; clip these off close to the stem, and, with the end of the middle finger, press the stem close to the hook, while, with the fore-finger of the right hand, turn the silk into a loop, which when twice put over the end of the shank of the hoop, loop and all, the work is safe.

Then wax that end of the silk now used, and turn it over as before, until it has taken up nearly all that remained of the hook, observing to lay the turns neatly side by side; and lastly, clip off the ends of the silk: thus will a bait be made that will catch Trout of the largest size, in any water in *England*.

And lest the method of *fastening off*, which occurs so often in this kind of work, should not appear sufficiently intelligible, the reader will see it represented in the Engraving.

The foregoing directions mention the Materials and the Mode of using them in making *flies;* but the Reader may yet be at a loss both with respect to their form and size; therefore in the Engraving is given the *five* which may be considered as *radical* flies; and they are, the *palmer*, the *greendrake*, the *dun-cut*, the *hawthorn-fly*, and the *ant-fly*. The first two are each a species

by itself; the third is a horned fly; the fourth has hackle under his wings; and the fifth, as most flies of the Ant kind have, has a large bottle tail; and to one or other of these figures, it is imagined, all flies are reducible.

In adjusting their different sizes, it must be owned there is great difficulty: all that can be said is, that the *Palmer* and *Greendrake* exhibit the usual size; the *Dun-cut* may serve as a specimen for most flies that are not directed to be made *large;* and when Directions are given to make the fly *small*, the Reader is to consider the *Hawthorn-fly* as an Example. *Gnats* cannot be made *too small.*

Some, in making a fly, work it upon, and fasten it immediately to the hook-link, whether it be of gut, grass, or hair; others whip on the shank of the hook a stiff hog's bristle, bent into a loop: the latter, except for small flies, seems the more eligible way, and has this advantage, that it enables the flies to be kept in excellent order; to do which, string them, *each species separately*, through the *loops*, upon a fine piece of cat-gut, of about seven inches long; and string also thereon, through a large pin-hole, a very small ticket of parchment, with the *name* of the *fly* wrote on it; tie the cat-gut into a ring, and lay them in round flat boxes, with paper between each ring, and in using, by having a neat loop at the lower end of the hook-link, they may be put on and taken off with ease and expedition; in the other way, the Angler has a great length of hook-link, which when even a few flies are put together is sure to entangle, and occasion trouble and loss of time: as to the Objection that has been started against the *loop*, that the fish *discern* it, and therefore refuse the *fly*, depend upon its having no Foundation.

In forming the *Palmer-fly*, suit the colour of the silk to the *hackle* dubbed with; a *dun* hackle requires *yellow* silk; a *black* hackle, *sky blue;* a *brown* or *red* hackle, red silk; and in constructing other flies, dub with silk that resembles the colour most predominant in the fly; always remembering to make *flies* in hot *Sunshiny* weather, the waxed silk will draw better, and in selecting the *dubbing* to imitate a fly, *wet* and place it between the Sun and the Eye; this will ascertain the Colour, which often varies when moist, from what it appears in its dry state.

The first *Seven* Flies now to be described are, by a very scientific Angler, considered as *Standards*, that will kill *Trout*, *Grayling*, and other fish, at all times of the Season; the remainder have their respective Periods, which are mentioned in the account of their Formation.

The Black Hackle.

This must always be the end fly or Stretcher.

The wings are the light part of a feather from that of the Starling, stript off from the stem; the body, black dog's fur, and a black cock's hackle over it; and is thus made:—Take a good



JAW BONES OF PIKE, &c. &c.

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even silk worm-gut, a hook No. 5, and proceed as with the Salmon flies, always observing to keep the feathers close together, even, and level at the points, laying it on (as before observed) with the wrong side uppermost; when using the fur for the body, lay it on very thin, and work the hackle (which must be sizeable) neatly over it, till it comes up to the wings, there bring it twice or thrice round; if there is too much, strip it off, whip the stem fast, and cutting away the end that remains, take a needle, and divide the feathers for the wings into two equal parts, and bring back the nearest by turning it downwards, and holding it a little tight and smooth; give it two or three laps over and near the top of the feather, so that the silk may not slip off, keeping all the parts of the hackle downwards, out of the way; then take the other part, bring it down in the same manner, and, holding all between the thumb and finger, taking care that no part of the wings get too low on the sides, whip them both over together, the same as the first, very tight, give two laps above them, and fasten by noosing the silk three times, which finishes the shoulders and head of this sized fly, without any other addition: after this is done, with the needle put the hackle and all in order, with the wings sloping towards the tail. This way of *parting the wings* renders them the most natural; those that are made to stand *upright*, or nearly so, affright instead of enticing the fish, by the *unnatural streak* they make along the water when moved (which they should never do;) and as Artificial flies cannot be kept sitting on the surface of the water like some of the Natural ones, it is supposed they are mistaken for those that are driven under by the Current, which makes the fish more eager in seizing them, for fear they should recover and get away; and it has often been remarked by this Gentleman, that when hundreds of flies have been upon the water, he has not perceived any fish rise at *them*, yet they have taken his very freely.

The Wren's Tail

may be used either as Stretcher or Dropper;

Has no wings; the body, sable fur, a little mohair of a gold colour, with a feather from the tail of a *Wren;* is thus made:—Let the hook be No. 5 or 6, with a short shank, and whipt to the gut till the silk be opposite to its point; then take the feather, (being cut across near the point a litle way on each side near the stem,) and whip in the point of it, letting the rest hang downwards, with the right side of the feather uppermost, and giving one or two laps with the silk below it; twist on the stuff for the body sparingly, and making one lap below the feather, work it up neatly, leaving it a little thicker at the shoulders; then taking the feather, bring it up (as a hackle,) beginning to lap it very thin, but gradually thickening until got up to the top of the body, and there bring it two or three times round close together; then whip it fast, cut away the end of the stem, and fasten off as before, close as can be to the end of the shank; after which, put the fly in order, by opening the fibres, &c. with the needle.

If one of these feathers is insufficient, use two, lapping in the point of one whilst going down about the middle of the hook, and the other as before, and work it up properly a little past the first; then take that, and binding the other neatly with it, finish your fly, which may

sometimes be used with the fibres of the feather cut short from the tail upwards, to look a little rough, until arrived at the part where it stands thick at top, there only cut the ends, and let it stand all round alike.

The Grouse Hackle

is used either as Dropper or Stretcher.

This has no wings; the mixture for the body is dark olive, dusky yellow, and a little gold-coloured mohair; a fine mottled *Grouse*'s feather of a reddish brown, running a little dusky towards the but-end of the stem, with the downy part (if any) taken away. It is made in the same way as the *Wren*'s Tail, and the same *sized hook*, only the point of the feather is fastened about the middle of the length of the body, whilst going down in whipping on the hook; but in bringing forward the body, lap it thin and neat, though a little roughish, and passing the hackle, contrive to let it be a little more so to the top; then taking the hackle by the end of the stem, lap it pretty close, but thicker where ended, and finish as before, taking care that the fibres of the feather be not too long, but that they would only reach about half the length of the fly, or a little more, if laid down: to put it in good order, open every fibre with the needle, and let it stand well.

The Smoky-Dun Hackle

may be fished with either as Stretcher or Dropper;

Has no wings; the body, a little lead-coloured mohair or silk, with a smoky-dun Cock's hackle. It is made by fastening the hackle at the bottom, where it is finished, whipping on the hook No. 5; then with a bit of the mohair make the body very thin all the way up, or with the lead-coloured silk only, especially in the *hot months;* and finish by bringing the hackle, well suited to the size of the hook, very neatly over it, leaving it thicker at top. What remains to be done in opening the fibres, &c. has been before explained.

The Brown Rail

may be Stretcher or Dropper.

The wings are of a feather from a Partridge's tail (not the *red;*) the body sable fur and gold-coloured mohair. In making it, proceed in the same way as with the *black hackle;* only, as there is *no hackle*, make the body thin and neat, until near the wings, and there lap it pretty thick; then having finished the wings, and fastened off, pick out a little of the fur and mohair for the feet, and cut it to be natural, but not too long, letting the other part of the body be

without any superfluous hairs from the mohair or fur; then by placing the wings aright, the fly is complete.—In Summer make the wings with a *rail*'s wing feather.

No. 6 and 7.—The Hare's Ear.

These are to be used chiefly as Drop flies.

The wings are the light part of a Starling's wing feather; the body, the dark fur from a Hare's ear: and it is to be made exactly as the *brown rail*.

Where the Streams are deep, the same body winged with a Rail's wing feather, and a *red* hackle, is particularly killing in the Summer season.

Those not *termed Standard* Flies, are the following:

First.—The Red Hackle.

Always a Drop Fly.

The wings, starling; body, light red mohair and a red cock's hackle; and it is made exactly in the same way as the *black hackle*, and is in Season from about the middle of *April*.

No. 2.—The Dark Claret

is best as a Dropper when fishing with two or more flies.

This fly has four wings; the under are to be made of the light feather from a Starling's wing, and the upper from that of a Partridge's tail: the body, any dark claret proper for fly-making, and the darkish fur of a hare's ear. This is the *first* fly used when fly-fishing commences; some call it a *red* fly, and by mistake make it so. It is in Season from the latter end of *February* to the first week in *April*. In making, (having, prior to putting on the wings, laid ready a sufficient quantity of the Partridge's tail, with that of the Starling's upon it, the points of the last rather shortest,) put on the wings as before directed, keeping them close and smooth, with the Starling's feather uppermost; then proceed and finish as for the *brown rail*, taking care to divide both feathers equally, so that the Starling's may be undermost in each wing when turned back and completed.

No. 3.—The Dark or Blow Fox.

Either as Stretcher or Dropper.

The wings are Starling's feather, as before; the body, Fox's fur from the shoulder, some of the black tail of a Rabbit, with a little pale straw-coloured mohair; the fork at the tail, the ends of two fine hairs that grow next the skin of a Monkey, where the outer ends are yellowish; take them out so gently as not to break them, and they will be nearly of a fine ash-colour. Nothing can match this fly for the purpose intended, and its Season is from the beginning of *March*, ten days longer than the preceding, which, as well as this, again comes in the last week of *September*, and continues to the end of the Season. In making it, proceed as with the *dark claret*, until low enough to put in the fork; then making one lap below it, cut away the yellow ends, bring up the body, and finish the same way; picking out a little of the stuff for the legs, and leaving them natural, but not too long; and if the fork be left awkwardly so, cut it according to judgment, and let it stand open and in a proper form.

No. 4.—The Dun Fox.

Stretcher or Dropper.

The wings and fork the same as for that last described; the body, the fur next the skin of a Fox between the throat and shoulder, and brass-coloured mohair. It is made in the same manner as the *Dark Fox*.—In season all *March*, and again in *September*.

No. 5.—The Ash Fox.

Stretcher or Dropper.

The wings and fork the same as the above; the body, Fox's fur from the throat, and pale straw-coloured mohair.—In season all *April*.

No. 6.—The Light Fox

is used as Dropper or Stretcher.

The wings and fork the same as the other Foxes; the body, light Camel's hair, and the palest straw-coloured mohair that can be got. It comes in season the end of April, continues all Summer, and is made as the three last described; but, although these flies have been in rotation mentioned as

four different ones, yet it is believed they are one and the same; only as the Spring and Summer advance, the Colour is changed to the exactness here stated: some sooner than others, as they come early or late to the perfection of a fly.

No. 7.—The Brown Fly, Dun Drake, or Brown Caughlan.

The wings, Partridge's tail; the body, light brown bear's fur, high-coloured yellow mohair, hare's fur from the face, forked with two strips of a dark mallard's feather, and a partridge's hackle. It is in Season from the middle of *March* to the end of *April*. The method of making this fly is as before described; only the small fine Partridge's feather, for the hackle or legs, must be lapped two or three times round, and no more, under the but of the wings.

The dark claret, the dark fox, and this fly, are sometimes on the water the same day; but the *claret* is the first; the *fox* next; and the *brown* one follows. The *clarets* and *foxes* are most plentiful in *cold dark* days, and the *browns* in warm gloomy ones: it should be remembered, that the fly that comes first in the Month, is generally the first to be used in the Day; the others may be seen coming down the water in order, according to their time; and the fish may be observed to leave off taking the *former* for the sake of the *latter*; and thus they continue their succession through their several days, weeks, and months.

No. 8.—The Spider-Fly

is best as a Dropper;

Has no wings; the body, lead-coloured silk, a fine small black cock's hackle, and a Woodcock's feather from under the but-end of his wings. It is in season from the second week in *April* until ten days in *May;* they appear most in bright warm days, when they may be seen coming out of the beds of sand by the water; when the weather is cold and stormy they disappear. It is made thus: when about a quarter of the way down in whipping on the hook, put in the points of the Woodcock's feather (having it properly prepared as before directed,) and fasten it with the silk, going on till nearly opposite the point of the hook; there, with silk (which must be of a lead-colour, and *not waxed)* begin to form the body, leaving it pretty thick at the tail, and thinner upwards, like the Ant: when near to where the feather is fastened, put in the point of the black hackle, and lapping up the silk to be out of the way, take the black hackle, and lap it two or three times round close to where the other feather is tied in. If any more fibres remain, strip them off and fasten with two laps, and, passing the first feather put in, lap the silk very thin up to nearly the top of the shank, and wax it; then taking the Woodcock's feather, work it round pretty thick up to where it is fastened off, and so finish.

No. 9.—The Yellow Cadew, or May-Fly,

is always a Stretcher.

The wings a grey spotted feather of a mallard dyed yellow*, the body, a little fine ram's wool dyed the same colour as the wings, with a dark bittern's hackle for the legs; two hairs from a Fitch's tail for the fork; and a bit of a brown feather of a peacock's tail for the head. It is in Season from the middle of *May* to the third week in *June*. This a large fly, and should be made on a hook No. 4, or a large No. 5, and requires no further instructions for making it; only be careful to rib it neatly with the hackle, and to finish the head in the same way as that of the Salmon-fly.

No. 10.—The Grey Drake, or Grey Caughlan.

The *males* and *females* of these flies differ much; the wings of the *former* are the grey spotted part of a Mallard's feather, mixed with that of a Widgeon; the body, light camel's hair, and a dark Bittern's hackle; the fork has three fangs, and are the hairs from a Fitch's tail; and the head a bit of a brown peacock's feather from the tail. The wings of the latter are the grey mallard only; the body, part of a fine oaten straw, and a cuckoo-cock's hackle. They are in Season with the preceding fly, only not so forward by a few days. The *yellows* are on the water earlier in the day; but when the *grey* ones appear, the fish leave the former and take the latter. During the continuance of these flies, they are excellent, and may be termed the *Trout*'s delight†. The *female* of the *greys* is deemed more killing than the *male*, and which is accounted for by their frequenting the water in much greater numbers to deposit their *ova;* and probably their eggs may render them more tasteful to the fish, *particularly before they drop them.* These are large flies, and are best made on a large No. 5 hook. In making the *male*, let the three hairs for the fork be near an inch and half long, and to stand open; after carrying up the camel's hair, beginning with it rougher at bottom, and leaving it smoother towards the wings, take the bittern's hackle, and rib it very thick nearly to the tail, leaving the body clear towards the wings. The fork of the *female* is the same as that of the male: the straw must be whipped in at bottom, lapped neatly up to the wings, and ribbed with the cuckoo hackle, in the same way as that of the *male* fly. Finish both as directed in the foregoing ones.

* The best Yellow dye for all materials for *artificial* flies, is the Bark from the branches of a Crab-tree, taken in the spring when the *sap* is up. Before using it, put any quantity wanted into a vessel; just cover it with a mixture of one half *hard* water, and the other half *urine*, and let it stand *twenty-four* hours; then put it into a proper vessel, with some *alum*, so that it simmer over a slow fire about *two hours:* mix all well together, and take out the bark; then put in the Feathers, &c. and stir them round until the liquor just *begins to boil;* then take them out, and instantly throw them into some *hard* cold water, with a little *alum* dissolved in it; wash them out, and dry them for use. The shades of this colour may be made to vary, by dissolving more or less of the Bark, or letting the articles be in the dye a longer or shorter time.

† Trouts have been caught so full of them, that in taking them off the hook, lumps as big as a walnut have been pressed out of their throats; and the Fish are at that time so strong and hearty, that one of ten inches will struggle and more endanger the Tackle, than one twice as large in Winter.

After these flies disappear, the *Trouts*, for some time, become very shy: most *anglers* are at a loss what flies to use after the greys; but the *Wren*'s *Tail* and *Grouse Hackle*, two of the *Standards* before mentioned, are flies which the fish will not refuse, even when the former ones are on the water in the height of their perfection.

No. 11.—The Grizzle Hackle

may be used as a Dropper with either of the two Standards.

This fly follows the grey ones, and is the best, except the *Standards*, during its continuance; it has no wings; the body, the brown part of a feather from the tail of a peacock, dark red silk, and a dark grizzled cock's hackle. The Season is from the beginning to the end of *June*, and it is thus made: in whipping on the hook, lap in the point of the hackle when gone about half way; and at bottom do the same by the peacock's feather and the silk (which must not be too fine, nor *waxed;)* wrap the other silk very thin back again ready to fasten; then take the feather, and, making one lap close to another, pass the hackle, carrying it up near the end of the shank, and fasten it; then with the silk rib it at a small equal distance as high up as the other, and fasten that; lastly, begin to lap the hackle, and as you go up fold it thicker, and three times round at top, and so finish.

No. 12.—The Golden Sooty

may be fished with either as Stretcher or Dropper.

The wings Starling; the body, any very dark brown resembling a bright soot colour, mixed with a little gold-coloured mohair. This fly is in Season from *June* to the middle of *September*, and is made without a hackle, in the same way as the *brown rail.*

No. 13.—The Blue Blow

is always used as a Dropper.

This is a very small fly, and appears in the water like a piece of soot; it must therefore be framed on a small hook with a short shank; the wings are the feather of a Tomtit's tail; the body the fur of a mole, with pale copper-coloured mohair, and forked with monkey, the same as the *fox* flies, and is also made the same way, only very small. It is in Season the whole Summer, and is at times taken very freely, particularly when the water is clear and low.

No. 14.—The Green Caterpillar.

This and the next chiefly used as Droppers.

Has no wings; the body, one (or more, if necessary) of the green branches from the stem of a peacock's tail feather, gold or silver narrow plaiting*; and a red or black cock's hackle for legs. It is made by whipping the ends of all three together at bottom, a little lower down the hook than common: having nearly finished whipping it on, and lapping the silk neatly back again to the top, leave it there to fasten with; and, taking the plaiting, lap it neatly close together all the way up: then do the same with the peacock's feather, only be sure to let the plaiting appear between every fold of it, and to leave the body the same thickness from tail to head; lastly, wrap the hackle thinly, but very regularly, over all to the top, and fasten off.

No. 15.—The Black Caterpillar.

This is made in the same manner as the Green, only the *brown* part of the peacock's feather instead of the *green*, and a *black* hackle; the fibres of the hackle should be short for both these Caterpillars. They are in Season in the hot months, and may also be made plain, without any *plaiting*.

No. 16.—The Lochaber

is to be used either as Stretcher or Dropper.

This is a fly that is not noticed in England, and but by few in Scotland and Ireland, though it will kill fish exceedingly well, on all waters in the three kingdoms in its Season, which is *July*, *August*, and part of *September*. It is made of a mottled Grouse's feather, either of a bright shining brown, a reddish brown, or of a dusky colour, (for it differs exactly to these shades,) and with part of the same silk that is used to whip on the hook, which must be either orange or yellow, as best suits the feather: choose one with the fibres a trifle longer than the hook intended for the fly; strip away the short or downy part at top, and draw back the fibres near the point, leaving just enough for lapping in; then taking the silk, which must be waxed but a *little way*, just sufficient to fasten on the hook, whip it down to nearly opposite the point, and there lap in the point of the feather, with the right side outwards, and the other end towards the shank of the hook; then with the unwaxed silk make from three to six folds round below the feather, according to the size of the fly, so that it may show; and, bringing the silk neatly back again, continue so lapping (passing the feather) to the top, and there wax it ready for fastening; taking the feather by the end of the stem, (keeping the inside of it always next the hook,) begin to

* With *gold* plate, use a *red* hackle; with *silver*, a *black* one: by way of experiment, they may be reversed.

wrap it round close, and thickest at top, keeping the fibres of one lap from being entangled or tied down by another: fasten down the stem close to the feather, by lapping it round with the silk two or three times: cut away what remains of it, and then fasten and cut off the silk.

It now remains to put the fly in natural order; which is done, by taking all the feather that will stand properly together on the back of the hook for wings, and the rest stroked down with the thumb and finger to be underneath, and cut pretty short for the legs, but in a sloping form, to be longest at top, and short towards the tail, letting the wings stand sloping downwards.

When stroking the feather on the back to stand close and sloping, as before observed, if any superfluous fibre amongst, or that does not properly belong to that part, is perceived, pick it out; and if found necessary to add to the legs, cut it short accordingly, otherwise take it off.

No. 17.—The Green Bank Fly.

This and the next are to be used either as Droppers or Stretchers.

The wings Starling; the body a kind of mellow green mohair, with a little yellow, and a fine pale red hackle. It is chiefly to be fished with in the Evenings of warm and sultry days. In making it, lap in the point of the hackle at bottom, having stripped off the whole of one side of the fibres; then twist the stuff for the body thin and even on the silk, which should be *green*, and carry it up very neatly to the feather for the wings, for it is a very delicate fly; then with the hackle rib it thinly all the way up, and dividing the wings, finish as frequently before directed.

No. 18.—The Cream Camel.

The wings, the yellow part of a feather of an Owl, or a red thrush's wing; the body, deepish green-coloured Camel's hair, or fine Spanish wool, and gold-coloured mohair: the body must be made neat, and the stuff picked out for legs, as for some of the former flies. It is to be fished with early in warm Summer mornings, and in the evenings, as the *Green Bank Fly*.

No. 19.—The Red Spinner

is best used as a Dropper.

The wings are of the greyish feather of a Drake, tinged with a kind of reddish yellow, which is not to be found on all these birds; the body, gold twist, with a red hackle over it. This

is principally an Evening fly, in the month of *July* only, and is very eagerly taken by the *Chub*. In making it, whip in the ends of the twist and hackle together at bottom, and lap the silk back again up to the feather for the wings; then take the twist, and lap it close all the way up as high as the silk, and fasten it, cutting away what remains of the twist: with the hackle rib it neatly up to the wings, and there lap it twice or thrice round; then fasten, and, dividing the wings, finish the fly.

No. 20.—The Ant Flies

are best fished with as Droppers, with one of the Standards *for a Stretcher.*

Of these there are *four* sorts; the large *red*, and the large *black*, and a smaller sort of the same kinds and colours.

The wings of the *red* are the feather of a Starling's wing; the body, mohair of an amber colour, with a red cock's hackle. In making it, let the body be large at the tail, and small towards the wings, as natural as possible to the resemblance of the *ant*, (for all these, in their Seasons, from the real *ants* become flies, having wings, and fly about, frequenting the waters,) with a small fibred hackle twice round close to the wings; and so finish as in former cases.

The *black* ones have wings of the lightest sky-blue feather that can be procured, with the strongest gloss; the body, black ostrich feather, with a black hackle twice round to suit in size, the same as the former; and it is finished exactly in the same way. These flies are of short duration, the *large* ones being in Season from about the middle of *June* to the twenty-fifth; the *small*, from the beginning to the third week in *August;* they are *afternoon* flies, being chiefly on the water from half past *twelve* until *four*, or rather later.

No. 21.—The Pale Blue Fly.

Used either as Dropper or Stretcher.

The wings, the lightest blue feather of a Sea swallow; the body, the bluest part of the fur of a fox, mixed with a very little yellow mohair, straw-coloured silk, and a fine pale blue hackle. This fly is in Season from *August* until near Michaelmas; is a killing fly, especially for Graylings, which are at this period very sportive. It is made upon a hook about No. 6 or 7; and in making it lap in the ends of a piece of the silk and hackle together; then twisting the fur round the waxed silk, as usual, work it neatly up to the feather fastened in above for the wings, and give a lap or two; with the silk below, which should be a little open, *without wax*, rib it a middling distance all the way up, and fasten that the same way; then over all bringing the hackle neatly up, fasten it, divide the wings, and finish.

No. 22.—The Hare's Ear and Yellow.

Mostly used as a Dropper.

The wings Starling; body, the dark fur of a hare's ear, mixed with a little yellow mohair. It is made in the same form and size as that before described in the former part of No. 6, in the Standards, and is in Season in September.

The two last-mentioned flies, with the *dun fox*, (which, as before observed, comes again in this Month,) continue till the *dark fox* and *dark claret* come in again, which is in *October;* only recollect, from the beginning of the Month to about the *tenth*, to let the mohair be *green* for the *dark Fox*, instead of *straw-colour;* and after that time as before, to the end of the Season, which in some Countries continues till *November*, if the weather be moderate and without Frost*.

It should be always remembered to vary the size of the Hook as the Fly is intended to be either large or small, or according to the kind of Fish proposed to be angled for. Before the Beginning any fly, have a *proper* quantity of feather for the wings (if a *winged* fly) ready stripped from

* With the foregoing Species of *Baits*, an Artist will do uncommon Execution. WALTON asserts that, in 1754, a Gentleman in *Six weeks* Fly-fishing in *Wales*, killed a *Thousand brace* of *Trout* and *Grayling*, as appeared by an Account regularly kept in Writing of each Day's Success. As a further Proof of the destructive Effect of these tempting *Insects*, and also of the Abundance of Fish in the *Welch* Rivers, a similar Account of *Ten Years*, *One Month*, and *five Days Angling*, was sent to Mr. LOWE, in Drury Lane, in 1766, and is here inserted in the Gentleman's own Words.

Fish taken in the Counties of *Carmarthen* and *Glamorgan*, commencing 11th *April*, 1753, to the 10th *April*, 1754, inclusive	6272
Ditto in the Counties of *Pembroke*, *Carmarthen*, *Glamorgan*, and *Derby*, from the 11th *April*, 1754, to the 24th *October* following	3758
1756. Ditto in the Counties of *York*, *Salop*, and *Glamorgan*	3739
1757. Ditto in the County of *Glamorgan*	9272
1758. Ditto in the Counties of *Glamorgan*, *Brecon*, *Radnor*, and *Hereford*	7762
1759. Ditto in the same Counties	3490
1760. Ditto in the County of *Glamorgan*	2150
1761. Ditto Ditto	2522
1762. Ditto in the Counties of *Glamorgan* and *Carmarthen*	3183
1763. Ditto in the County of *Carmarthen*	3158
1764. Ditto in the County of *Carmarthen* to 23d *July*, being my last Day's Angling in the Principality	1814
The whole given to the Public	47120

The Rich, the Poor, the Sick, and the Healthy, have tasted of the Labours of my Hands.

In the first *Five Months* in 1751 I took in the Counties of *Pembroke* and *Carmarthen* above a *Thousand Trouts*, and though I have taken *Trouts* in every Month in the Year since, yet I could not in any *one* Year reach that Number; perhaps I have done it before 1751, but I did not then keep an account all the Year round, only noted those Days in which I had Diversion more than Common.

N. B. There were some *Pike*, *Chub*, *Eel*, and *Flounder*, taken, which are not stated in the above Account.

the stem, and a proportion of stuff for the body well mixed, (for the Colours should be kept properly shaded, never using the whole of any one mixture till mixed again; by which means, when the right shades have been once acquired in the different mixtures, they may always be preserved;) the hackles and all materials should be ready at hand, with silk to match in colour, and waxed; and when making a fly let the wings, and also the fibres of the hackle, be proportioned in length to its size.

Another mode of dressing *flies* is thus recommended. For a Hackle or Palmer, having selected materials, shorten the superfluous parts of the *Hackle*, so as to have no use for the *Scissars* after finishing, except to cut off the remaining part of the *stem* and the *silk;* place the hook upon the gut, holding the upper end of the shank between the forefinger and thumb of the left hand; fasten the end of the gut by three turns of the silk; then hold the hook by the bent, and whip it neatly up to the top of the shank, where it should be whipped two turns around the gut alone; to prevent its galling, place the hackle with the root end down the shank, and fasten with two turns of the silk: the *Dubbing* must next be whipped neatly down the shank, securing it with one knot; upon the place where began hold the point of the *Hackle*, and whip it down the body until opposite the point of the hook; there fasten, and the hook is complete. When small or tender *Hackles*, such as Partridge's or Woodcock's, are used, they may be whipped three or four times around the upper end of the shank, and there fastened; after which dress the body down to its proper place, and fasten it. If an *Hackle* is so short that it cannot conveniently be held, tie a piece of waxed thread to it.

To make a *Fly* with *Wings*, whip the hook as before directed; lay the feather provided for the wings upon the shank, with the points towards the bent; the roots are consequently upwards; fasten it on the top of the shank firmly by four or five turns of the silk; raise the feather from the shank, and divide it in two equal parts; then bring back between the wings the root ends of the feather, and fasten them. Dress the dubbing to the proper length of the body, and fasten it.

Where *Wings* and *Hackle* are used. When the *wings* are secured whip the root end of the *Hackle* close below them; then lap the *dubbing* one third the length of the body; hold the silk tight between the second and third fingers, while twisting the *hackle* to that place; *there* fasten it, and then finish the body.

A small slice of *Camphor* placed amongst the *Fur*, and a little ground *Pepper* strewed among the *Feathers*, will prevent either from being destroyed by *Moths* or other vermin. The Indian *Grass* and *Silk-worm Gut* will be best preserved in a piece of Bladder or oiled Paper, and *Hooks* may be protected from rust by the same inclosure.

In WALTON we find the following Instructions, by way of Appendix to the *Sixth* Edition of the COMPLETE ANGLER. These are here inserted, in the hope of rendering the List of Flies, and the mode of making them, so numerous and full as not only to suit the different Rivers, but also the various practice of Sportsmen who resort to them.

First List.

February.

PEACOCK-HACKLE. Peacock's herl alone, or interchanged with ostrich herl, warping red silk, red cock's hackle over all; it may be varied by a black cock's hackle and silver twist.

Taken chiefly from nine to eleven in the morning, and from one to three in the afternoon.

This, and the several other hackles, which we have before and are hereafter described, being most tempting baits, should always be first tried when the angler comes to a strange river; and not changed till he has found out, and is certain what particular fly is upon the water.

March.

GREEN PEACOCK HACKLE. Greenish herl of a peacock; warping, green silk, a black hackle over all.

Taken from eight to eleven in the morning.

ASH-COLOURED DUN. Dub with the roots of a fox-cub's tail; warp with pale yellow silk; wing of the pale part of a starling's feather.

Taken from eight to eleven, and from one to three.

This fly, which is also called the violet dun and blue dun, is to be found on almost every river; is produced from a Cadis: it is so small that the Hook No. 9 is full big enough, if not too large for it; the shape is exactly the same as the Green Drake; so early in the Year as *February* they will drop on the Water before Eight in the Morning, and Trouts of all Sizes will rise at them very eagerly. It varies much in its colour, according to the season of the year: in *March* and *September* it is called, and that very properly, the violet dun, for it has often that hue: and therefore we recommend the mixing blue-violet crewel with the fox-cub down. In *April* it assumes a pale ash-colour, and in *May* is of a beautiful lemon-colour, both body and wings. In *June* and *July* it is blue black, and from *July* it insensibly varies till it becomes of its primitive colour, violet dun, which it never fails to do by *September*.

April.

PEARL COLOUR, or HERON DUN. Dub with the yellowish or ash-coloured herl of a heron, warp with ash-coloured silk: wing from the short feather of a heron, or from a coot's wing; of an ash-colour.

Morning and afternoon.

BLUE DUN. Dub with the fur of a water-rat; warp with ash-colour; wing of a coot's feather.

Morning and afternoon.

May.

The Green Drake, or May Fly, should be made upon a large hook; the Dubbing Camel's hair, bright Bear's hair, the soft down that is combed from a Hog's bristles, and yellow Camblet, well mixed together: the body long, and ribbed about with green silk, or rather yellow, waxed with green wax; the whisks of the tail, of the long hairs of Sable or Fitchet; and the wings of the White-grey feather of a Mallard, dyed yellow.

Or it may be made the body of Seal's fur, or yellow Mohair, a little Cub fox down, and Hog's wool, or light brown from a *Turkey* Carpet mixed; warp with pale Yellow, pale Yellow or red Cock's hackle under the wings; the Wings of a Mallard's feather dyed yellow; three whisks in his tail from a Sable Muff.

Taken all day, but chiefly from two to four in the afternoon.

Silver-Twist Hackle. Dub with the herl of an ostrich feather; warp with dark green, silver twist, and black cock's hackle, over all.

Taken from nine to eleven, especially in a showery day.

Sooty Dun. Dub with black spaniel's fur, or the herl of an ostrich; warp with green; wing, the dark part of a land-rail or coot.

Taken best in a showery day, as also in April *or* June.

Light Flaming, or Spring Brown. Dub with light brown of a calf; warp with orange-colour; wing of a pale grey mallard's feather.

Taken chiefly before sun-set in a warm evening.—A good fly.

Oak-Fly. By some called the ash-fly, (by others, erroneously, the hawthorn-fly.) The head, which is large, of an ash-colour; the upper part of the body greyish, with two or three hairs of bright brown mixed, and a very little light blue, and sometimes a hair or two of light green; the tail part is greyish mixed with orange; wing of a mottled brown feather of a wood-cock, partridge, or brown hen; hook No. 8 or 9. This is the fly which is seen much in *March*, *April*, *May*, and *June*, on the body of ash-trees, oaks, willows, and thorns, growing near the water, standing with its head downwards; it is an excellent fly, but difficult to imitate, being of many colours, unequally mixed. It takes chiefly in the morning; and does not seem to come from any cadis, for it never drops in great numbers on the water; the wings are short, and lie flat on the back, like the blue-bottle, or large flesh-fly.

Orange-tawney, Orange-brown, Camlet-fly, Alder-fly, Withy-fly, or Bastard Cadis. Dub with dark-brown spaniel's hair, or calf's hair, that shines, or barge-sail; warp with deep orange, black hackle under the wing: wing of a darkish feather of a mallard or starling.

Taken chiefly in a morning, before the green-drake comes upon the water.

Huzzard. Dub with pale lemon-coloured mohair or ostrich feather dyed yellow; warp with yellow, gold twist and yellow hackle over all. Wing of a very pale mallard's feather dyed of a lemon-colour, the wings large, and longer than the body, lying flat on the back.

Taken in a blustering day, before the May-*fly comes in.*

A fly little known, but the most beautiful of the insect species that frequent the water. It is larger than the green-drake; of a beautiful lemon-colour, both body and wings, which are four in number, and lie close to its back. It is to be met with in but few rivers, and is therefore esteemed a great curiosity; in those rivers that produce them, they appear in great numbers about the latter end of *April;* at which time, and afterwards, the Trouts rise at them very eagerly: doubtless this is a true water-fly; and is supposed to be produced from a very large cadis.

Death-Drake. The body, one herl of black ostrich and two of peacock; silver twist, black hackle: wing of the dark feather of a mallard, of a copper colour.

Taken chiefly in an evening, when the May-*fly is almost gone.*

Yellow Miller, or Owl-Fly. The body of a yellow marten's fur, or ostrich herl dyed buff-colour: wing of the ruddy feather of a young peacock's wing, or pale brown chicken.

Taken from sun-set till ten at night, and from two till four in the morning.

June.

The *May*-flies most of them as above.

July.

Middling Brown. Made of calf's hair twisted upon pale yellow silk, for the silk to appear: wing of a mallard's feather.

Dark Brown. Warp with red silk, with a deep orange tag at the tail: wing of a mallard's feather.

Willow Cricket, or Small Peacock Fly. A herl of a green peacock's feather; warp with green silk: wing of a starling's feather, longer than the body.

A morning fly, especially for Grayling in rapid rivers.

Pismire. The body, some few reeves of a cock-pheasant's tail-feather, or ruddy barge-sail, or brown carpet, or old bear's hair, towards the roots, tanned with the weather: one peacock's herl may be twisted with it: warp with ruddy silk: wing, the light part of a starling's feather, left longer than the body.

A killing fly after an emmet-flight, but not before.

August.

The pismire through this month; as also the other flies of the last month.

September.

Large Fœtid Light Brown. The body of light calf or cow's hair, or seal's fur dyed of the colour; warp with ruddy or orange-coloured silk: wing, of a ruddy brown chicken, large and long.

A killing fly in a morning. This fly is much upon Hackney *river, and is much ruddier there than elsewhere. In the* Thames *Dace of the largest size, and in great numbers, are caught with it.*

Second List.

January.

Spring Black. Body, black wool of a sheep's face, with or without a greenish peacock's herl; warp with brown silk: wing, the grey feather of a mallard.

Second Spring Black. Body, the very blackest part of the darkest hare's scut you can procure, with or without a greenish peacock's herl: warp with ash-coloured silk: wing, of a fieldfare's feather.

This and the other spring black are best taken in bright weather.

Bloa * Herl. Body, black rabbit's scut; black of a hare's scut; greenish peacock's herl: warp with brown silk: wing, the light part of a fieldfare's feather.

Black Hackle. Body, pale yellow silk, with a black cock's hackle turned about it.

Dun Hackle. Body, dun-coloured silk, with a dun cock's hackle.

February.

The same flies as are directed for the preceding month.

* This is a north-country word, and signifies a colour resembling that of a mole's back, which has a blueish gloss: and it is thus explained in a catalogue of local words, communicated in a letter from Mr. *Thoresby*, of *Leeds*, to Mr. *Ray*, bloa, black and blue.

March.

The same flies as are directed for the preceding months; and also the

Turkey Fly, or March Fly. Body, brown foal's hair, tops of the wings of a woodcock, some ruddy, others grey, well mixed together; warp with pink and yellow, or pink and light-coloured brown silk, twisted together: wing, of pheasant-cock's feather.

N. B. *This, it is supposed, is the* cob-fly, *so much cried up in* Wales.

April.

Light Bloa. Body, light fox-cub fur, a little light foal's hair; a little squirrel's bloa, and the whitish yellow of the same, all these well mixed together; warp with yellow silk: wing, of a light fieldfare's feather.

Dun. Body, dunnest filmert or martern's fur; *Indian* fox-dun; light dun fox-cub; coarse hair of the stump of a squirrel's tail of a brightish brown, or a yellowish cast; warp with yellow silk: wing, the light feather of a fieldfare.

Plain Hackle. Body, black ostrich herl, with red or black cock's hackle over it; and in hot weather add gold twist.

Red Hackle. Body, red silk and gold-twist, and a red cock's hackle, till *June*. Afterwards use orange silk for the body. *An excellent fly.*

N. B. *This is more properly the Orange-fly. It resembles in colour a* Seville *orange. Wings may be added, either of a ruddy hen or chicken, or of the softest feather of a rook's wing; the first will give it an orange, the latter a dunnish hue. It has four wings, two next the body, of a very dark grey colour, and two serving as a case over them, sometimes of a dirty blackish colour, and sometimes of an orange colour.*

Bloa Watchet. Is a small fly, and appears on the water in a cold day (hook No. 9 or 10); the body, fur of a water-rat, black part of a hare's scut, the pale roots cut off, a very little brown bear's hair; warp with pale brown, or olive-coloured silk; wing, of a hen blackbird.

Yellow Watchet. Body, water-rat's fur, the blackest part of a hare's scut, greenish yellow crewel for feet; warp with green silk: wing, the lightest part of a blackbird's feather. Hook, No. 9 or 10.

Knotted Grey Gnat. Body, darkest part of a hare's scut, dark brown foal's hair, dark fur of the black of an old fox; warp with grey silk: wing, the bloa feather of a fieldfare.

Green-Tail. Body, dark part of a hare's scut, and darkest bloa fur of an old fox; light

part of a squirrel's tail, and a hair or two of the coarse brownish part of it for feet; warp with ash-coloured silk: wing, of a hen pheasant.

Sand Fly. Body, dark brown foal's hair, a little bloa squirrel's fur, and the whitish yellow of the same; warp with yellow silk: wing, the light part of a fieldfare's feather.

May.

The nine foregoing flies directed for *April*, and also the

Bloa Herl. Body, fox's fur, dark part of a hare's scut, greenish herl of a peacock (if the weather is warm for the season, otherwise little or none of the greenish herl); warp with brown silk: wing, of a starling's feather.

Dun. Body, dunnish bloa fur of an old fox, mixed with pale yellow, the ends of the hairs of an old fox almost red; some coarse hairs taken out of the tail or brush; warp with yellow: wing, starling's feather.

Stone-Gnat. Body, the roots of the darkest part of a hare's scut, the top or ends being cut off; warp with ash-coloured silk: wing, a blackbird's feather.

Light Bloa. Body, light fur of an old fox, mixed with pale yellow crewel; warp with pale yellow silk: wing, light feather of a jay.

Orange Brown. Body, orange-coloured wool, with bright brown bear's hair mixed; warp with orange silk: wing, of a starling's feather.

Peacock Hackle. Body, peacock's ruddy herl; red cock's hackle; warp with red silk.

Black Herl. Body, black herl of an ostrich, and ruddy herl of a peacock, twisted together; warp with brown silk: wing, the light feather of a fieldfare.

Pewet, or Lapwing's Topping. Body, peacock's herl, and that of a lapwing's crown feather, twisted together; warp with red silk: wing, the red feather of a partridge's tail.

Red Herl. Body, two herls of a peacock, twisted together; warp with ruddy silk: wing, the red feather of a partridge's tail.

June.

The dun, stone gnat, light bloa, orange brown, peacock hackle, black herl, pewet's topping, and red herl of the last month, go also through this: there are likewise taken the

WHITTERISH. Body, the root-end of the white part of a hare's scut; light grey foal's hair, or camel's hair, towards the tail, the dark part of a hare's scut with some brown hairs mixed: peacock's herl for the head; warp with white silk: wing, the feather of a sea-mew.

LIGHT GREY. Body, fur of the inner part of a rabbit's leg, the lightest of the dark part of a hare's scut; warp with ash-coloured silk: wings, light grey mallard's feather.

July.

The peacock hackle, black herl, pewet's topping, and red herl of *May* and *June*, and the *whitterish* and *light-grey* of the last month, serve also for this, and to those add the

BROWN. Body, hair of a very light brown or reddish calf or spaniel, and light bear's hair mixed; warp with pale orange: wing, the feather of a land-rail.

August.

The *peacock hackle*, and the *three* following flies of *May*, and those of the two subsequent months, and the brown of the last month, serve also for this; in which also are taken the

GREY-FLY. Body, light grey foal's hair mixed with the dark part of a hare's scut; warp with grey silk: wing, a hen-pheasant's feather.

BLACK ANT-FLY. Body, darkest part of a hare's scut, and dark brown wool, or sheep's russet, equally mixed, and one single ruddy herl of a peacock, all twisted together; warp with copper-coloured silk: wing, a fieldfare's feather

BROWN ANT-FLY. Body, bright brown bear's hair, much weather-beaten, almost of an orange-colour towards the tail, and therefore a few hairs of a light brown, or flame-coloured calf, or spaniel's hair, to be added in the tail-part; warp with orange-coloured silk: wing, the light feather of a fieldfare or starling.

Note, *The* Black *and the* Brown *Ant Fly have been imitated with other materials, and have been found to succeed very well, made as follows:*

Black Ant. *Brown bear's hair, and a little grey squirrel's hair next the roots; peacock herl: warp with copper-colour or ash.*

Brown Ant. *Light barge-sail, seal's fur and brown bear's hair, peacock herl; warp with orange: wings of this and the former, starling's feather longer than the body.*

Third List.

February.

Prime Dun. Dubbing, of the down of a fox-cub, warped with sad ash-coloured silk; wings, of the feather got from the quill of a starling's wing. This fly is made little, but there is another made of the same dubbing larger by far.

March.

The same flies as are taken in *February* will be taken in *March*, and also those hereafter mentioned.

Moorish Brown. Dubbing of the wool of a black sheep; warped with red silk; wings, of the feather got from a partridge wing.

Palm-Fly. Dubbing, of the hair of a brown spaniel, got on the outside of the ear; and a little sea-green wool mixed; warped with brown cloth-coloured silk: wings, of a starling's quill-feather.

Green-Tail. Dubbing, of the brown hair of a spaniel, got on the outside of the ear, but a little in the end of the tail; must be all of sea-green wool, without mixture: wings, as the last.

April.

Bright Bear. Dubbing, of bright bear's hair: warped with sad cloth-coloured silk: wings, of a Starling's quill-feather: others dub the body with yellow silk, which is better.

Yellow Dun. Dubbing of yellow wool, and ash-coloured fox-cub down mixed together, dubbed with yellow silk: wings, of the feather of a Starling's quill: others dub it with dun bear's hair, and the yellow fur got from a Martern's skin, mixed together, and with yellow silk: wings, of a Starling's quill-feather. Make two other flies, their bodies dubbed as the last; but in the one mingle sanded hog's down, and in the other black hog's down: wings, of a Starling's quill-feather: and there is also taken an excellent fly, made of dun bear's hair, yellow martern's fur, sanded hog's down, and black hog's down, all mixed in an equal proportion together; warped with yellow silk; wings, of the feather of a Starling's quill. These several flies mentioned for *April* are very good, and will be taken all the Spring and Summer.

May.

THORN FLY. Dubbing of black lamb's wool, warped with black silk; wings of a mallard's light grey feather.—Note, *That in all the instances where Mallard's feathers are directed to be used for Wings, they must be those of the Wild, and not the Tame mallard.*

KNOP FLY. Dubbing, of the down of an otter-cub, and the herl of a peacock; warped with black silk: wings, of the light grey feather of a mallard.

FERN-BUD. This fly is got on *Fern*, and the *natural* one is very good to dib with: it has a short thick body, of a very sad greenish colour, and two pair of wings; the uppermost are hard, and sometimes taken off; but the undermost transparent, and it is dubbed with the herl of a peacock, and very sad green silk: wings, of the feather of a fieldfare's quill got out of the wing.

LITTLE DUN. Dubbing, of an otter's fur; warped with ash-coloured silk: wings, of a Starling's quill-feather.

YELLOW MAY FLY. Dubbing, of yellow wool, mixed with yellow fur of a martern; warped with yellow silk: wings, of the lightest-coloured feather of a Throstle.

June.

BLACK MIDGE, or GNAT. Dubbing of the down of a mole; warped with black silk: wings, of a light grey Starling's quill-feather.

GREY MIDGE, or GNAT. Dubbing, of the down of sad grey cat, or sad grey camel's hair; warped with grey silk: wings, of the grey feather of a mallard.

PURPLE-FLY. Dubbing, of purple wool, and a little bear's hair mixed; sometimes no bear's hair at all: wings, of a Starling's quill-feather; warped with purple silk.

SAND-FLY. Dubbing, of the wool gotten off the flank of a black sheep, warped with black silk: wings, of the sad-coloured feather of a throstle-quill: others make the body of the feather of a Heron's neck.

MACKERIL. Dubbing of light brown camel's hair; warped with black silk: wings, of a red Cock's feather.

July.

BLUE DUN. Dubbing, of the down of a water-mouse, and the blueish dun of an old fox mixed together; warped with sad ash-coloured silk: wings, of a Starling's quill-feather.

August.

Buss Brown. Dubbing, of the light brown hair of a cur: the head black: wings, of the feather of a red Hen; warped with orange-coloured silk.

Hearth-Fly. Dubbing, of the wool of an old black sheep, with some grey hairs in it, for the body and head: wings, of a light Starling's quill-feather, warped on with black silk.

Pismire Fly. Dubbing, of bright brown bear's hair, warped with red silk: wings, of the saddest coloured Starling's quill-feather. A *good Fly*.

September.

Little Blue Dun. Dubbing, of the down of a mouse for body and head; warped with sad ash-coloured silk: wings, of a sad-coloured Starling's quill-feather.

Night Flies, or large Moths.

Many are so passionately fond of angling as to be induced to pursue the sport by Night, where success is often more certain than in the Day: the best Flies for the purpose are

1st.—The Mealy White.

To be fished with always as a Stretcher, with no other fly on the line.

The wings, the soft mealy feathers of a *white* Owl; the body, the white fur of a rabbit, with a soft downy white hackle. In making it, take the *feathers*, (for there must be two both alike, broadish at the points, and large enough to form a pair of full wings,) and lap them in, as done in the stripped feather for the wings of other flies, and at the bottom fasten in the point of the hackle; then twisting the fin on the silk, make the body as thick as a very large straw, until near the wings; there lap it thicker, and bringing up the hackle thinly; lap it twice or thrice round at top, and divide the wings so as to have the whole of each feather for the separate wings, and finish as in other flies that have their wings divided. The hooks should be No. 4.

2d.—The Mealy Cream.

There are feathers on a yellow Owl of a deep *cream* colour; of these make the wings; the body, of soft fur of the same colour, and a very pale yellow hackle. It is made on the same sized hook, and finished and fished with the same way, as the former.

3d.—The Mealy Brown.

The wings are the soft *brown* feathers of an *Owl;* the body, (which should be long, and the same thickness of the two *preceding* flies,) the fine lightish brown fur of a Hare or Rabbit, with a light brown *Bittern*'s hackle, twice round under the wings, and is finished and fished with the same way as the *two first*, (which are, however, considered the best.) They are most killing in gloomy Nights, after sultry Days; and when angling in this manner the line ought to be but a little longer than the *rod*. The fish may be heard to rise at the fly as in the day-time, and to be felt when they take it.

Another method successfully used by a Gentleman, is to make the fly in imitation of the large *moth* or *Owl flies*, which come abroad in Evenings; he dressed his to six hairs, with light mottled large wings, sometimes *double*, the body of the whitish stuffing of an old *saddle*, or such *dubbing* as may be got in a *Tanner*'s yard, and over all a large *white* or *yellow* cock's hackle; the body of the fly was at least as thick as a *goose quill*, and rather more than an inch long, with a great rough head; the *line* used was a yard *longer* than the rod; after throwing it out to its full extent he drew it back at several pulls, about a yard at a time, which made it swim as if alive; when a fish was heard to break the water, and the line was felt to stop, he generally struck, though great fish hook themselves by closing their mouths, and turning their heads. When the night was not very dark he had a link with a fly of the same size as the former, but a little *darker*, and when so clear that he could discern his line he used one half the bigness, having a mottled wing, brown body, and a *black* hackle, with *red* points.

In fishing at *night* with a *Minnow*, this Gentleman got them in the Eve, and selected those of a middle size, bright and small bellied; after sprinkling some *Salt* on them, (Walton recommends *Bay-Salt,)* he kept them in a piece of Bladder, baiting and fishing with them as in the Day time.

For laying *Night lines* for *Trout*, he adopted and recommends the following plan: his lines were of *three-twist* twine with loops at each end to fasten them to any weight for sinking; at proper distances he had loops on the twine for receiving the hooks, which were made like those for *Pike*, but *single* and longish in the shank; the loop at the end of every *snood* was *three or four inches* long, strongly wrapped with white *sewing* silk; the *baits* were *Minnows*, which were put on with a baiting *needle*, thrust in at the *mouth*, and out at the extremity of the *tail*, and then drawn on the plait or hook-link until the hook lies in the side of its mouth. Of the *Minnows* he always chose the *brightest*, with the least Spawn in them, and after baiting the hooks, laid them in a dish, and threw some Salt upon them; they were then strung upon a long Stick by the *loops*, and exposed to the *Sun* and *Wind*, to be a little dried; (the benefit of *salting* and *drying* he states to be, that in the Morning when the lines are drawn, the Baits that have not been touched will be fresh, and the fins stand out as if living;) they are then to be replaced in the dish or other convenience to take them to the water, where both ends of the *twine* are to be looped to two Stones, and after *five or six* baited hooks are looped on at *four feet* apart, one stone is to be

dropped a yard or two from the side, and the other stone thrown into the water at its full length. There is, continues this Gentleman, judgment in discovering the proper Spots for this kind of fishing; in a deep part of a pool, that has good *holds*, such as *roots*, *stones*, *hollow banks*, &c. he never laid near, but at the first *shallow*, *sandy*, or *gravelly* place, either above or below them, or on the side opposite to such holds, if sandy and shallow, (for there the *Minnows* and small Fry will resort, to be out of the way of the great fish, who are for that very reason sure to come there, especially at *Night* to hunt for their prey). All *Fords* in floods are very good.

To draw out the Lines, a very small *grapling* will be necessary; after the fish and the baits are taken off the hooks, the lines should be well washed and dried, the hooks wiped, and kept in a piece of Leather or Bladder.

The following directions have been given for laying *Night* lines for *Trout*:—

In a *River* choose that part which is *calm*, when there is any rough Wind; *there* the fish assemble on account of the quietness, and because the wind blows all the food thither which floats upon the *surface*, and also determines the resort of the *small fry*, which they feed upon at the *bottom*. Instead of throwing the Cords to which the hooks are affixed into the middle of the Current, cast them along the Shore, for the fish approach the sides at Night to seek their prey. In a *Lough* (there being no Stream,) they feed in the middle, and the mode of laying the lines varies; a long *cord* is used with a heavy weight at each end, and a Buoy to point out where dropped; at proper distances, links with hooks are fixed to it, *Corks* are put upon the *cord* between *every link*, which when baited are to be left at such a *depth* as to swim at *half* or *three-parts* of it, (by no means to touch the *bottom*, lest they get foul among *weeds*, and the Baits be not perceived by the fish:) when a fish takes a bait, the *cork* next to that hook will play, and not suffer him to entangle the line; and by experience it is known that the *struggles* of one will not prevent in the *Night* another fish from seizing a second bait upon the *cord*; and it is not uncommon, even in Day fishing, for the Angler to have a *second* fly taken, when he is playing a fish that has been before struck.

Natural Fly-Fishing.

The *natural* fly delights in hovering over the Stream, and performs it with that ease and beauty, which cannot be attained with the *artificial*; but the *former* often drowns when tired of making its airy Evolutions, and it is then the *latter* best resembles it: the *artificial* fly is taken as a *drowned*

one by the fish, no Art being able to make *that* play upon the water like the living fly.

This way of angling is chiefly adapted to *warm* Weather, when the water is *low* and *clear;* and is best in small Rivers or Brooks, where the angler can keep more out of sight than near large waters, that are more exposed. He must have a long Rod, as before described for *artificial-fly* fishing; the line fine for nearly the whole length of it, (which is not to exceed *three-fourths* of that of the rod,) with a fine short-shanked hook, in size proportioned to the baits, the principal of which are,

1st.—The Blue-Bottle, and Large House-Fly.

When the former of these is used, put the hook in a little below the head, and let the point and barb come out about the middle of the body, so that it may stand properly on the back of the hook. When the latter is fished with, put two of them on the same way, carrying the first nearly up to the top of the shank, and letting the head of the other lie about the middle of its side. The method of getting these flies must be left to the judgment of the person desirous of procuring them.

2d.—The Wood-Fly.

Of these there are two sorts, the one a darkish gray, and the other black; the former are the best. Bait the hook as before directed, with either one or two of these flies; which are to be found in woods, parks, groves, narrow lanes, &c. and are to be procured by carrying out a piece of *fresh lights* or *liver,* and laying it down in any little open place between trees and bushes where any of these flies haunt. Being provided with a handful of long *fern,* when there are a sufficient number collected about the *lights,* strike them with it smartly several times, which will stun them; before they recover, quickly take, and put them into a Horn with a wooden bottom, with small air-holes bored in it neatly from one end to the other, and a cork to fit the upper end, which should be much smaller than the lower. This is the best thing for keeping all kinds of *natural* flies in, that there may be occasion to use: for by easing the Cork just so much as to allow the Head of the fly to be seen, they may be taken out one at a time without losing any, whereas in a Box there is a chance every time it is open of letting out the greatest part of those that are able to get off.

3d.—The Stone Fly.

This is a large tough bait, found under and about stones in small brooks, and sometimes among gravel by the sides of large waters. The hook must be large, and the bait drawn upon the shank; and it is to be used very early in the Morning and late in the Evening.

The *Grasshopper* and *Beetle* have been noticed in that part where the *baits* are treated upon. Although those already mentioned are perhaps the best *natural flies*, yet the Angler will often kill fish with any largish fly he perceives about the water, and which indeed he may see the fish strike at, who thus *naturally* direct his choice; and it will be no difficult matter to collect some of those that present themselves by the side of the Stream in the greatest numbers, and which the fish point out to him as the most tempting. If they will but bear the *hook* (which should never be beyond the middling size,) the execution is tolerably certain. In putting any *natural* fly upon the hook, the Finger must never be *wet*, or the fly will be spoiled and rendered useless.

A method which kills very large *Trout*, is,

To make a pair of wings with a Land-rail's feather, and point the hook with a *Cadis*; the hook should have a *hog's bristle* under the silk, with the end standing out a straw's breadth at its top, pointing towards the line, by which means the head of the *Cadis* will be kept close to the wings; the end should be fine, and the line *three yards* long. The hook, thus prepared, is to be cast up the *current*, which drives it down beneath the Surface, towards the lower part of the hole; from whence it is to be very gently drawn against the Stream, at the same time shaking the *rod* to give it an irregular motion: if a Trout be there, in a cast or two he will take the bait. Should *two Cadis* be used with the *wings*, run the hook in at the head and out of the neck of the first, and through the other from head to tail.

A second method is, by lapping a fine *Bittern*'s feather round the hook like a *hackle*, near the top of the shank, and putting a *palmer-worm* (of the sort which the Angler deems preferable) or a Cadis on the bend of the hook. This bait is to be used with a short line over *banks*, *bushes*, &c. Other large fish, as well as *Trouts*, are caught in this manner, which in many Countries is termed *Bobbing*.

Somewhat similar to this is the *Dibbing*, with the natural brown Beetle or cockchafer, which in Rivers whose banks are crowded with *alders* and *willows* takes many of the largest fish: the


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Rod must be stiff, and a stronger line is required; (skill and management being here of little use, the dependance must be entirely on the goodness of the Tackle, and the Line is never in the Water, except when a fish is hooked; for the Beetle, or *natural* flies, in this kind of angling, are to be waved *over* the water, and then let fall gently on the Surface, under Bushes, &c.;) the lower part ought to be the *stoutest* silk-worm gut; the hook proportioned to the size of the bait, about No. 3 for the cockchafer, and No. 7 for other flies; of which it will be right to put two upon the hook when they are small, as in this state they frequently drop upon the Stream, and the deception may be better concealed by this natural appearance.

Minnow-Fishing.

THE tackle for *Minnow*-fishing for *Trouts*, should be of the same sort as that mentioned for the *Salmon*, with this difference, that it must be *finer*, with a *single silk-worm gut* at bottom, and the hook No. 2, 3, or 4, according to the bigness of the Trout in the water where angling for: the *middle* sized and *whitest Minnows* are the best, (of which those caught in Streams are far brighter than those procured from ditches or stagnated waters,) and the way of baiting recommended by WALTON, is,

To put the hook in at the mouth, and draw it out through the *gill* about three inches; then again put the hook in at the mouth, and let the point and beard come out at the tail; then tie the hook and the tail about with a fine white thread, which will make it spin *quicker;* pull back that part of the line which was slack when the hook was thrust in the second time, which will fasten the head of the *Minnow*, so as to make it be almost straight on the hook; try if it turns well, which it cannot do *too fast*. Angle with the point of the rod down the stream, drawing the *Minnow* against the Current gradually, and near the Surface: when descried, the Trout will freely come at it; be careful not to snatch it away, nor strike until he has turned with the bait. For this angling, the *winch* and *ringed* rod is to be always used; and there should be two or three *swivels* on the line, which will assist the *spinning* of the *Minnow*.

WALTON'S method may be altered and improved, by first thrusting the hook in at the lower side of the Minnow's under, and also quite through the upper *chap*, drawing it two or three inches on the line, and put the hook in at the mouth as before directed; this will keep the Minnow's mouth closed, which otherwise should be stitched up.

Various hooks are recommended in Minnow-fishing; one much used consists of a large hook, with two very small ones fastened back to back, to a piece of *gut* about two inches long, with a small hook to another *gut* something shorter, to fasten the head of the Minnow; these pieces of

gut are so attached to the link, that the two small hooks may be about the *middle* of the Minnow when baited, and the other reach the head; a small *lead* cap (which renders other weight unnecessary) slides upon the link, keeps the short pieces of *gut* close, and falls upon the head of the Minnow. The advocates for this plan boast of the certainty of *hooking* the *Trout* with the *two small* hooks: this may be true, says an Angler of no inconsiderable Skill, but he asks if these *small* hooks (which seldom exceed No. 12) are sufficient to kill a *Trout* of any bigness? and when a fish is hooked by *these*, the other hooks are entirely useless, from the situation in which they are placed. Another Objection started by the same Gentleman, is, that when the *gut* to which they are tied has been a short time in the water, it will not sustain the weight of the hooks, but they will sink *below* the *Minnow*, and are continually foul of *weeds* and rubbish at the bottom; besides, the *lead cap* falling upon the *Minnow's head*, totally conceals the *Eyes*, parts which add *life* and *attraction* to the bait, and are, on that account, so essential to be seen.

Some use about three feet of stout silk-worm gut for the bottom links, with two or three small swivels, which prevent the line from being entangled, and assist the *twirling* of the *Minnow*. If these hooks are used as directed for Pike, it will be successful: the bottom swivel must be open at one end, that the link on which the hooks are laid may be taken off occasionally to be baited; the proper size of these hooks is No. 7: if the old method of a *large* hook and a *smaller above it* be preferred, the proper sizes are No. 2 and 6, with a *running* line: the Angler can permit the Minnow to be carried by the current under bushes, banks, &c.; this will be effected by his suffering the Stream to gain upon it when he pulls it back, which also prevents its sinking to the bottom, and entangling the hooks: as he draws it gently *against* the Stream, favouring the direction to which he would have the bait driven, it will of course spin round very quick; and this is the moment the *Trout* usually takes it: by holding the Rod firm, he will infallibly hook himself; will then spring out of the water several times, and, by an astonishing strength and agility, endeavour to get quit of the hook. The Angler must not be too hasty, but *lower* his right *hand*, which will raise the *top* of his rod, and keep it *bent;* by this means the Trout may be tired, but he will not readily suffer himself to be got into the *landing-net;* the best way therefore, instead of bringing the fish to the *surface*, (where he will so violently plunge, as to endanger breaking the *rod*, *line*, or *hook*), is to keep him as *deep* in the water as possible.

Artificial Minnows made of mother-of-pearl, &c. fitted to *single*, *two* or *more* hooks, and bent in various *attitudes*, are to be purchased at all the *Tackle*-makers.

The biggest *Trout* known to have been caught in the *South* with a *Minnow*, was by Mr. *Howell*, of Cateaton-Street, at *Hambleton Lock*, (between Maidenhead and Henley,) in 1755, which weighed *sixteen pounds*.

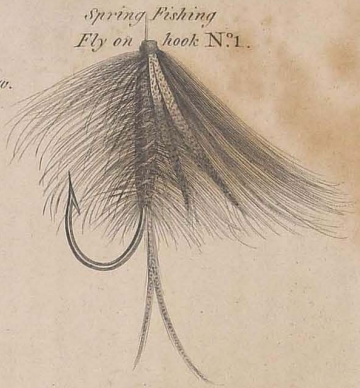
In 1794, the Compiler caught one near *Richmond Bridge*, that weighed ten pounds and a half; and in 1795, Mr. Jons *speared* a Trout near *Cook's Ferry*, in the river *Lea*, which weighed *fifteen pounds*, and was the largest ever remembered to have been taken from that River. A Gentleman angling with a Minnow in the River Cocher, in 1803, had two Trouts took the bait at the same time, both of which he killed.



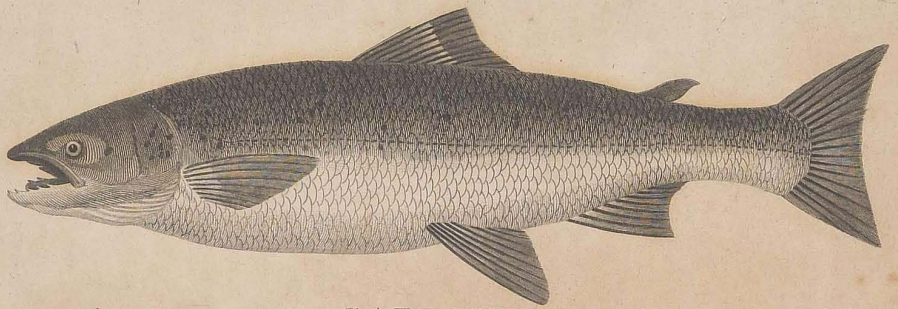
Summer Fly on hook N°3.

N°1. Lob Worm.

N°2. Minnow.



Spring Fishing Fly on hook N°1.



SALMON.

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Trout-fishing with a *Worm* is practised with the greatest success at the Commencement of a *flood*, but the small *lob, red, marsh* worms, and *brandlings, well scoured*, are good baits *all the year*, used without a *float*, with a running line, and the bait carried down by the Stream; for which reason the Worm should be thrown by the Angler towards the head of the Current, and be suffered to swim down with it: the *shot* should be at least a foot from the hook, which must be No. 4 or 5; *one lob-worm* is sufficient; of *brandlings* and red-worms, *two* upon the hook are held preferable. Recollect, in angling for *Trout* with a Worm, *not to strike* until the *second* motion of the fish is felt.

The *neat* Angler will have his *pannier* or basket for carrying the fish large enough to admit their lying at *full length*, where, by strewing a little hay or grass between them, they may be preserved in much of their beauty, and he may exhibit his spoils, not only more favourably to the *Eye*, but also to the *Palate;* for the fish being pressed, bent, and jumbled together, until perhaps *burst*, are not likely to be better in flavour; and those who carry their fish in their *pockets* must surely, after a *sultry* day and *long walk*, be sometimes puzzled to class their Captures with precision.

Having already touched upon those Fish that *do not visit* the *salt* water, the second class, the *Fish* of PASSAGE, remain to be mentioned.

The Salmon

was known to the ROMANS, but not to the GREEKS: PLINY speaks of it as being in the Rivers of *Aquitaine:* AUSONIUS enumerates it among those of the *Mosel.* The Salmon is a northern fish, being unknown in the Mediterranean sea, and other warm climates; it is found in some of the rivers of France, which empty themselves into the ocean as far north as *Greenland;* and is also very common in Newfoundland and the northern parts of *North America:* Salmon are taken in the rivers of *Kamtschatka*, but whether of the *European* species is uncertain *. In several Countries they are a great article of Commerce, being cured by *salting*, *pickling*, and *drying.* There

* In so great abundance do the different Species of Salmon come up the Kamtschatkan Rivers as to force the Water before them, and even to dam up the Streams in such manner as sometimes to make them overflow their Banks. In this case, when the water finds a passage, such multitudes of Salmon are thrown and left upon the dry ground as would, but for the violent Winds so prevalent in that Country, assisted by the Consumption of the Fish by the Bears and Dogs, soon produce a Stench sufficiently powerful to cause a Pestilence.

are stationary fisheries in *Iceland*, *Norway*, and the *Baltic;* but no where greater than those at *Coleraine* in *Ireland*, at *Berwick*, and in some of the rivers of *Scotland.*

The Salmon lives both in the salt and fresh waters, quitting the *Sea* by a wonderful instinct at certain Seasons, to choose a proper situation for depositing its Spawn in security, in the gravelly beds of rivers, remote from their mouths: there are scarcely any difficulties but they will overcome, to arrive at places fit for their purpose, ascending Rivers hundreds of *miles*, forcing themselves against the most rapid Currents, and springing with agility, almost incredible, over Cataracts several feet in height. Salmon are frequently taken in the *Rhine*, as high up as *Basil;* they gain the sources of the *Lapland* rivers, in spite of their Torrents, and pass over the perpendicular falls of *Leixlip* and *Bally-shannon*, in *Ireland;* and of *Kennerth* and *Pont-aberglastyn*, in *Wales.* "Of these last feats," says Mr. PENNANT, "I have been witness, and seen the efforts of many Scores during the time of my stay; some successful, and others driven down by the current, for a more fortunate Exertion: the fish seemed to spring up quite straight, and with a strong tremulous motion, completely refuting the vulgar error of taking their *tails in their mouths* when they make their spring." Mr. P. proceeds to relate other particulars of the Salmon's natural history, aided by the observations of the late Mr. POTTS, of Berwick. At the latter end of the year, and some in November, Salmon begin to press up the rivers as far as they can reach, in order to spawn: when that period approaches, and they have accommodated themselves with a fit place, nature supplies the *males* with a *bony* Excrescence, growing out of the end of the *lower* jaw to the length of half an inch or more; this, it is said, aids him in the removal of the gravel, but both *male* and *female* assist in forming a proper receptacle for the spawn in the sand or gravel about eighteen inches deep. In this the Ova and Milt are deposited, and carefully covered by the parent fish, who afterwards hasten to cleanse and recover themselves; (the Male loses the *gristle* at the jaw;) for, after spawning, they become very poor and lean, and then are called *Kipper.*

At their first Entrance into the *fresh* Water *Salmon* are observed to have abundance of Insects adhering to them, especially above the *gills:* these Animals denote the fish to be in high Season, and die and drop off soon after the Salmon's leaving the *Sea.*

The spawn lies buried until *spring*, and, without any other care, is nourished and brought to perfection, if not disturbed by violent *floods;* or by the depredations of other fish, of which the *Eel*, *Roach*, *Dace*, and *Grayling*, are dangerous neighbours. About the latter end of *March* the young begin to come forth, and gradually increase to *four or five inches* in length, when they are termed *smelts* or *smouts;* about the beginning of *May* the river seems to be alive, and there is no forming an idea of the numbers without seeing them. A seasonable flood, however, hurries them to the *Sea*, very few being left in the river; about the middle of *June* the *earliest* of the fry commence their return *from* the Sea into the river, (at that period from *twelve* to *sixteen inches* long,) and progressively augment in number and size, until about the end of July, which is at *Berwick* termed the height of the *Gilse* time, (the name then given to the fish of that age.) Early in *August* they lessen in number, but advance in bigness, some being from *six* as high as *nine pounds weight:* this increase appears surprisingly quick, yet a gentleman of *Warrington* has given an instance of still more rapid growth: a *Kipper Salmon*, weighing *seven pounds three quarters*, taken on the seventh of *February*, was marked with *scissars* on the *back fin* and tail, and turned into the river; he was again taken on the *seventeenth* of the *following March*, and then weighed *seventeen pounds and a half.* In this case the remark of WALTON seems to have been more than verified, "that the *Samlet* becomes a *Salmon* in as short a time as a *Gosling* becomes a *Goose.*"

All fishermen agree that they never find any food in the *stomach* of the *salmon*, which is certainly a fish of Prey, having *teeth* in his *mouth* as other fish of prey have*, and delighting to pursue and seize small fish:

* ACERBI mentions that a Gentleman of *Uleaborg*, going by Sea to Stockholm, dropped a *Silver Spoon* into the Water, which was swallowed by a *Salmon*, carried in his belly to Uleaborg,

it is, however, very remarkable that, although a *Salmon* be taken in the *very act* of chasing and catching the *small fry*, yet upon being opened nothing of that nature will be found within it, neither has it ever been discovered by *opening* these fish, *what* they do subsist upon. It is likely they may neglect their food *entirely* during the time of *spawning*, as *sea lions* and *sea bears* are known to do for *months* together, during their breeding season; and it may be observed that, like those animals, *Salmons* return to the *Sea* lank and lean, and come from the *salt water* in good condition. It is evident that their food is both *fish* and *worms*, for the Angler uses both with success, and also a large gaudy

where the fish was accidentally bought by the Gentleman's Wife, who immediately concluded that the appearance of the Spoon announced the Shipwreck of her Husband. He returned, however, in time to prevent any ill consequences from the Belief of his Death.

Morning Advertiser, 24th October, 1805.

The Wedding Ring.—On the outside of St. Dunstan's Church, Stepney, is a monument inscribed to the memory of Dame Rebecca Berry, who departed this life, April 26, 1696, and over the inscription is a Coat of Arms, representing a *Fish* with a *Ring* in its mouth. The singularity of the device led the writer to enquire into the History of the deceased, and to obtain, if possible, some intelligence respecting this apparently strange Emblazonment. It appeared that Dame Berry, in the early part of her life, had been cruelly traduced by her enemies, and accused of Incontinence by her husband, who was a Captain in the Royal Navy. On his return to his house, on the Banks of the Severn, his Jealousy having been previously excited, he tore the *wedding Ring* from his Wife's finger, and in his rage cast it into the River, bidding her never to come again into his presence, if she valued her life, without producing that Token of their ill-fated Marriage, a thing he conceived utterly impossible. Mrs. Berry, distressed in the extreme at her Husband's groundless suspicions, yet dreading the violence of his temper, quitted her home, and became a *Domestic* in the house of a Gentleman some miles distant. A short time afterwards, while cleaning the inside of a *Salmon*, she was going to cook for the family dinner, she found a *wedding ring*, and from the Legend round it, knew it to be her own, and the same her Husband had thrown into the river. Overjoyed at her good fortune she flew to her Husband, and again protesting her Innocence, and the malevolence of her accusers, she laid before him the *Ring*, and informed him of the miraculous way in which she had regained it. The Husband supposing the Event to have been the interposition of Providence to prove his Wife's innocence, consented to her immediate return, and the parties retiring to London, and from thence to Stratford, passed the remainder of their lives in peace and happiness. The Wife was the longest liver, and in her will directed, that the Monument and the Device above described should be fixed up, after her death, to commemorate a Fact which her gratitude taught her to believe was not altogether the effect of Chance. The Monument is on the outside the Altar, at the East end of the Church.

artificial fly, which, probably, the *Salmon* mistakes for a *gay libellula*, or dragon fly.

The Season for fishing in the *Tweed begins* the 30th of *November*, but little is done by the fishermen until after Christmas; it *ends* on *Michaelmas Day:* however, the Corporation of *Berwick* (who are Conservators of the river) indulge the fishermen with fourteen days beyond that time, on account of the *Style* being altered. The capture in the *Tweed* about the month of *July* is prodigious; often a *boat* load and sometimes nearly *two*, are in a good fishery taken *in a tide*. At Berwick both *Salmon* and *Gilses* are then salted in pipes and other large vessels, and afterwards *barrelled*, (the *Salmon* barrel holds full forty-two gallons, *wine measure,)* to send abroad, the *London* markets being insufficient to take the quantity. Fresh *Salmon*, in July, has been as low as *eight-pence* the *stone*, of 18lbs. 10½ *ounces;* it now is seldom less than *sixteen*, and from that to *two shillings and sixpence*. Most of the *Salmon* taken before *April*, or the commencement of the hot weather, used to be packed for the *London* markets in baskets; if the ship was detained by contrary winds from sailing immediately, *those* fish were returned on shore to the Cooper's office, where they were boiled, pickled, and *kitted*, and sent to London by the same ship, and fresh Salmon put into the baskets in lieu of the *stale* ones. At the beginning of the season, when a ship is on the point of sailing, a *fresh* clean Salmon will sell from 12 to 18 *pence* a pound, and during most of the time that this part of the trade is carried on, the prices are from *five* to *nine* shillings per *stone;* the value rising and falling according to the plenty of fish, or the prospect of a fair or foul wind. Some fish are sent in this manner to London the latter end of *September*, when the weather grows cool; but they are then full of large *roes*, grow very thin bellied, and are deemed unwholesome and unpalatable*.

* This account was given previously to the plan of packing the *Salmon* in *Ice*, which has consequently altered the System before followed, to forward them to the London markets. How far the *Flesh* of the Salmon is benefited by the operation of the *Ice* admits of much dispute; for although the *Ice* resists putrefaction in the first instance, yet afterwards, by the exposure to the *Air*, the putrefactive process commences with more active powers; and if the wholesome and nourishing Juices be not materially injured, still the Flavour of the fish is totally lost.

Upon the river are *forty-one* considerable fisheries, extending *upwards* about fourteen miles from its mouth, (those above being of no great value,) which are rented at near 5,400*l.* per annum; the Expence attending the servants' wages, nets, boats, &c. amounts to 5,000*l.* more; together 10,400*l.* This expence must be ultimately defrayed from the Produce, which not less than twenty times that numerical quantity of fish can effect. If we add to this the profits of Stock, the Capital employed, which cannot be estimated at a sum less than the *annual rent*, it will be found that, *communibus annis*, 308,000 Salmon must at least be caught, in order to clear the rent, wages of labour, and profits of stock; the three parts into which the whole price of the fish finally resolves itself.

These fisheries lie on each side the river, and are all *private property*, except what belongs to the Dean and Chapter of *Durham*, which in Rent and *Tythe* of fish, (for all the other fisheries are liable to *tythe*,) produced, in 1744, 450*l.* *per annum*. The common Rents are fifty pounds annually, for which Tenants have as much *shore* as serves to launch out, and haul their *nets* to land; the limits of each are staked, "and the fishers," says Mr. P. "never fail drawing as near as possible to those of their Neighbours." A man goes off in a small flat-bottomed boat, square at one end, and taking as large a circle as his net admits, brings it to land at the extremity of his boundary, where others assist in the landing it; and upon the net's coming into shallow water the *Salmon* are knocked on the head with a small bludgeon, not only to prevent their bruising themselves, but it also makes them longer susceptible of the operation called *crimping*: the *fishermen* well know the *Salmon* to be one of the fish that will lose all *signs of life* in less than *half an hour* after being taken out of the water, if suffered to die without farther injury, but if immediately upon being caught it receives a violent blow on the Head the *muscles* will shew *visible irritability* for more than *twelve hours* afterwards; and this holds true of all other fish, whose irritability and sweetness of the *muscles* will be preserved much longer by having the Head crushed than if allowed to die with the *organs* of *sense* entire. This may possibly be a seasonable Hint to some *Epicurean* Gentlemen, who falsely imagine the fish

must be *cut previous* to receiving a Blow, which stuns and deprives it of Sensation.

In the middle of the *Tweed*, not a mile west of the town of Berwick, is a large Stone, on which a man is placed to observe what is called the *Reck* of the Salmon, coming up the River; the best fishery is on the South side.

The *English* Legislature began very soon to pay attention to this important Article, providing for the security of the breed of this fish in the Rivers.

Scotland possesses numbers of fine fisheries on both sides of that Kingdom. The Scotch, in early times, had most severe prohibitions against the killing of the *Salmon;* in the *Regiam Magistatem* are preserved several Laws relating to their Fisheries, couched in terms expressive of the simplicity of the Times. From *Saturday* night until *Monday* morning, they were obliged to leave a free passage for the fish, which is styled the *Saterdayes sloppe.*

ALEXANDER I. enacted "that the streame of the water sal be in all parts swa free, that any Swine of the age of three zeares, well feed, may turn himself within the Streame round about, swa that his snowt nor taill sal not touch the Bank of the water." By a law of JAMES IV. the third offence was made *capital*, (before that the Offender had power to redeem his life.) "Slayers of reide fish, or smoltes of *Salmon*, the third time are punished with Death; and sic like he quha commands the samine to be done." *Salmon* were, in the reign of HENRY VI., thought a present worthy of a crowned head, for in that reign the Queen of *Scotland* sent to the Duchess of *Clarence* ten casks of salted *Salmon*, which HENRY directed to pass duty-free.

The fish are cured in the same manner as at *Berwick*, and a large

quantity is sent to *London* in the *Spring;* after that time the adventurers begin to barrel and export them to *foreign* Countries, although from the general relaxation of the discipline of *abstinence* in the *Romish* Church, *that* Commerce is far less lucrative than formerly.

Ireland (particularly the *North,)* abounds with *Salmon:* the most considerable fishery is at *Cranna,* on the river *Ban* near *Coleraine;* (some account of this fishery is mentioned in the list of the Rivers, &c. of this Country.) The nets used are *eighteen score,* or 360 *yards* long, and are continually drawing night and day the whole Season (nearly four months,) *two* sets of *sixteen* men each, alternately relieving one another; the *best* drawing is when the Tide is *coming in.*

The *Salmon* are cured by being first split, and rubbed with *fine* salt, and after lying in Pickle in great tubs or reservoirs for *six weeks,* are packed up with layers of coarse brown *Spanish salt* in casks, *six* of which make a *ton;* these are exported to *Leghorn* and *Venice. Salmon dried* are also sent to the London as well as Foreign Markets, and are sold (under the Name of *Kippered Salmon),* at the former from *nine* to *fifteen pence* per pound. The Mode of preparing the dried Salmon is as follows: They are split down the Chine, laid open, and salted for many Days; then tied up by the Head, and hung in an airy place, shaded from the Sun, until quite dry. They are dried with the Head upwards, that the essential Oil, and the Juices of the Fish, more abundant in the Jole, and on which its true Flavour depends, are thus preserved in its interior Substance: in a contrary Position it would, from the Head, soon be lost, and much injure its Preservation; if not in warm Weather, even prevent its Cure.

The *Salmon* may justly be termed among *fresh water* fish, the superior of the rivers, both from its size and excellence; it is, however, so universally known, that a brief description will serve: It is handsome in its make, the head small, with a sharp pointed nose; the colour of the back and sides are *grey,* frequently spotted with *black,* sometimes plain, the covers of the gills are subject to the same variety, the belly silvery, (the female

may be distinguished by having a longer snout and the scales being more dull, the flesh is said likewise to be drier, of a paler *red*, to have less flavour, and, according to WALTON, she is of *inferior size;)* the *teeth* are lodged in the *jaws* and on the *tongue*, are slender but very sharp, the body is longish, and the tail a little forked.

The purging of the *salt* water is so essential to the *Salmon*, not only in cleansing them from their impurities after spawning, but from every other, acquired by their feeding all the *Summer* in *fresh* water, that if any are prevented by *weirs*, &c. from reaching the *Sea*, their *heads* augment, their *bodies* waste, and they pine away by degrees, and die for want of it: the *Porpoises* are, however, their great Enemy, and for fear of them they are cautious of entering too far into the *salt* water, therefore keep about the *bays* near the entrance of rivers into the *Sea*, and this may in some measure account for what has been often asserted, "that *Salmons* always *re-enter* the same River in which they had been *bred*."

The largest *Salmon* Mr. PENNANT ever heard of, weighed *seventy-four* pounds. In September 1795, one measuring upwards of *four feet* from nose to tail, and *three* in circumference, weighing within a few ounces of *seventy* pounds, was sold at *Billingsgate*, and was the largest ever brought there: it was bought by a fishmonger in the Minories, and sold by him at one shilling a pound. The *Severn Salmon* are much inferior as to their bulk, for one taken near Shrewsbury in 1757, weighing only *thirty-seven* pounds, is recorded in the *British Chronologist*, as exceeding in length any ever known to be taken in that *River*, and being the heaviest, except *one*, ever remembered in that *Town*. They have in many parts been caught by angling with an *artificial fly*, and other baits, upwards of *forty pounds* weight.

The Salmon delights in large rapid rivers, especially such as have *pebbly*, gravelly, and sometimes *weedy* bottoms, and when feeding, generally prefers the *rough* and *upper* parts of gentle streams, and the tails of large

ones; after their feeding time, they retire to the deep and broad water, and swim very fast, usually in the middle of the river near the ground, and more at night than in the day, resting at convenient places, under *bushes*, *weeds*, *banks*, or *stones*, and then the whole Shoal run again. Salmon bite best from *six* until *eleven* in the Forenoon, and from *three* in the Afternoon until *sun-set*, especially when there is a moderate breeze upon the water; the chief months to angle for them are *March*, *April*, *May*, and *June*, though they will take a *fly* until *October*, but they are *then* out of Season; they are to be fished for with *lob-worms* and *minnows*, but a large *artificial* fly is the most killing.

The *rod* should not be less than *fifteen* feet, longer according to the breadth of the river, limber yet strong, with wire rings, from the top to within three feet where the *Reel* is fixed, with a good *running-line*, without *knots*, made of either *silk* or *hair*, (the former is to be preferred,) and the *reel* must be large enough to contain four score yards, or at least as much as will reach more than *across* the river fished in. Wherever the *running-line* is directed, the *reel* is proper to be used; they are of various sizes, and may be proportioned to the coarseness or fineness of the *line*. The being enabled to give the *Salmon*, when hooked, plenty of line, is of great advantage to the Angler; for the fish will at first run swiftly, and afterwards leap and plunge, so that he must be humoured, and the line slacked and wound up again with great skill, until he is quite subdued, when he may be led to some shallow, where on his belly, touching the bottom, he will turn on his side, and be so jaded, that he may be taken out by the gills*.

* A Brother Fisherman thus describes the Capture of the *Salmon* in Verse:

But when in View the rolling Stream
The Salmon's fav'rite haunts proclaim,
Delighted then, with dext'rous Art,
The whizzing line around I dart:
Now here, now there, with gaudy Fly
Each likely Current's turn I try;

(*Salmon* Anglers however are generally provided with what is called a *gaff*, which is a stick something pliable, with a large *barbed* hook at the end, and which can be thrust into the head or gills of the fish, to lift him from the water; for which purpose a *landing-net* is too small.)

The line from the *Reel*, after being run through the rings, is to be joined to the foot or gut length, which must be looped at each end, the one to fasten it to the *reel line*, the other to the *fly;* this *foot-length* must be made of *three* strong silk-worm guts twisted together, *three* lengths will be sufficient, as only *one* fly is used, the link to which the fly is fixed should be looped on the same way, for the convenience of changing it, if the fish refuse one sort of fly, and another is wished to be tried. It has been said, that the *colour* of the *fly* is of little consequence, provided it be *large*, and ribbed with *gold* or *silver* twist: the following account of Salmon flies, and the manner of making them, is however introduced, as having been successful in the long practice of an experienced *Salmon* Angler.

'Till in yon deep'ning Pool at last,
A Rise!—I strike,—and hook him fast.
Sullen at first he *sinks to* ground,
Or swims in mazy circles round;
Till more inflam'd, he plunging sweeps,
And o'er the Shallows, seeks the deeps;
Then bends the Rod, the Reel then sings,
As down the Stream he headlong springs,
Turn'd by my Skill, he then, with rage,
And all his Wiles does me engage;
Yet vainly tries: his Courage flown,
And all his nervous Vigour gone,
The Reel is turn'd with perfect ease,
The Rod conducts him where I please;
Till quite exhausted now he grows,
And now his silver Body shows;
Nor one faint effort more he tries,
But at my feet a Captive lies.
His tail I grasp with eager hand,
And hurl, with Joy, the prize on Land.

The Flies for the *Spring* season must be framed much *larger*, but not so *splendid* as what are used in *Summer*. The hook should be No. 1.; the feather for the wings, the darkish brown speckled part of a *Bittern's* wing, stripped off from the stem; the head is to be the same colour as the body, which is the reddish brown part of Hare's fur, and deep copper-coloured mohair; the tail forked, with two single strips of the same feather as the wings, and a Bittern's hackle over the body, for legs.

To make the above *fly*, take *three* lengths of good strong *silk-worm gut*, properly twisted, and with *brown* silk well waxed, whip it round the gut a few times near the end, to prevent the shank of the hook from galling it; then take the hook, and put the end of the shank nearly to the top of the silk so whipt, for the gut to be on the inside, and begin to whip the hook to it: after half a dozen rounds, lay a proper quantity of feather for the wings, on the back of the shank (keeping it close and even as possible), with the right side next the hook, and the but-end downwards, leaving the other end, when turned back again, full as long as the hook; then proceed with the silk, and whip it round the feather, hook, and gut, sufficient to make it fast, and cut away what remains of the but-end of the feather, avoiding to hurt the gut, which must be opened and twisted round the shank of the hook: the whipping is to be continued until it comes nearly opposite the point of the hook: but the ends of the gut must be cut off if too long, before they come quite so low down; next put on the strips of feather for the fork at the tail, with the fine points downwards, leaving them both to stand open about an inch and half, and make two laps round with the silk; then take the hackle (which must have the downy part at top stript off, and the feather cut across on each side close to the stem, and near to the point, or by drawing the fibres back prevent any of them from being bound down by the silk), and whip in the point of it two or three times round, leaving the largest end hanging downwards, and the right side uppermost, make one lap *between* it and the fork, and one below all round the *bare* hook close to the fork, and cut off the superfluous ends, if any remain in sight; wax the silk afresh, and having the stuff for the body well mixed, twist it gently round the silk, leaving it fine next the hook, but gradually thickening upwards; make one lap below the fork, and one or two between that and the hackle, working gradually upwards, until close up to the feather for the wings: if any of the fur remains on the silk, after the body is thus formed, take it off, and wind the silk lightly a little upwards to be out of the way; then take the Hackle by the end of the stem, and rib it neatly, lapping it thicker until brought up to the wings, where it is to be closed, and if any of the fibres remain, strip them off from the stem, and, unwinding the silk to its proper place, make two or three laps to fasten the hackle, and cut away what remains of the stem; the feather for the wings, which has hitherto lain back, is to be turned downwards towards the Tail of the fly, and holding it between the finger and thumb, clear from all the parts of the hackle, whip it very tight three or four times round with the silk just over the feather, and then two laps close above it; wax the silk again, and take a small bit of the same stuff used for the body, and twist it round the silk; whip this up to the end of the shank, bringing the silk neatly back again, so as to fasten by noosing it between the head and the wings; the operation thus finishes with completing the Head of the fly, without one fastening throughout the whole, except the last, which renders the flies *neater* than is practicable by any other method.

Though the fly be thus completely made, it remains to be put in *natural* order, first by hold-

ing back the wings, then with a needle stroking the hackle for the legs upwards, and placing them properly, and if any irregular part remains in the body, pick it loose, and draw it away with a pair of Tweezers, or cut it off, as it will leave the appearance most natural; allow no superfluous hairs to be seen among the legs, letting the fork at the tail be as before observed, and placing the wings to stand sloping towards it.

The wings of all LARGE *flies are best undivided, and to stand together on the back, as above described.*

Fly, No. II.

The hook to be the same size as the former; the wings, the mottled feather of a Peacock's wing, intermixed with that of any fine plain dusky red; the mixture for the body, the light brown hair of a Bear next the skin, sable fur, and gold-coloured mohair, gold twist, a large black Cock's hackle, and a red one a little larger; and for the head, a bit of deep red mohair.

To make this fly, proceed as in the first, until opposite the point of the hook; then lay in the ends of the hackles and turn them together, the red one under, and the twist at top; and, after whipping them there, make one lap below them; wax the silk afresh, twist on the dubbing for the body, and go on as in the former; next take the twist, and rib it up to the wings, each lap about two-tenths of an inch from the other; then wrap the Hackle upwards between the laps of the twist, rather lower than the middle of each space, and bring it twice round, close together, at the top of the body, and bringing on the red hackle in the same manner, work it very neatly just above each lap of the black one, and finish it the same way, contriving to leave the twist merely to show itself between the hackles; and then complete the fly as before directed.

This fly may be forked, if thought proper, with two or three hairs of a Squirrel.

No. III.

The hook must be No. 1; the wings, the blue feather of a Hern, intermixed with the spotted reddish part of that of a Mallard; for the body, lead-coloured mohair, small gold twist, a large white hackle, dyed a deepish blue; a bit of the same feather as the wings for the tail; the head the same colour as the body; and the silk a lead colour.

To make this fly, proceed to whip in the point of the hackle a little before it is opposite to the hook's point, and go on a few laps; then taking the twist, and two strips of each feather the same as the wings, whip in the ends of the twist and feathers together, letting the latter be topmost, with the points downwards, and about a quarter of an inch long, cut away the other end of the feather; then twist on the mohair thin, work it up neat, and, having fastened it as before directed, take the twist, make one lap with it close below the feather for the tail (that it may stand together in an oblique form, and the points even); then one above, rib it neatly up, and fasten that; next work the hackle between each lap of the twist, and go on as with the other two until finished.

These *three* flies are sufficient to begin the Season with, though, indeed, they will kill fish at all times; but as the Spring and warm weather advances, they must be dressed more *gaudy*, and

in the height of *Summer*, particularly if the water be *fine*, must be adorned with the most glittering plumage (gold, silver, and silks) that can be procured: as the summer *declines*, reduce the *gaudiness* of the flies gradually until these *three* are returned to again, which continue during the residue of the Salmon fishing.

The Salmon *hooks* for the summer fishing should be about No. 3, and strong made; if the shanks are too long, they must be shortened, according to the length and size of the fly intended to be made; the feathers must be golden and other Pheasant's, Parrot's, Peacock's, and, in short, of all other birds that are fit for the purpose, either foreign or domestic, and others dyed, including hackles of various colours, as well as the mohair and other stuff for the body of different *gaudy* shades. To render these flies more light in clear water, let the body be made quite *thin*, of silk similar in colour; a bit of a shewy feather at the tail, with narrow gold or silver plaiting, according as it matches, instead of twist; and the hackle for legs, the blue spotted feather from a Jay's wing (the other part of it being stript away,) worked up only from about half way below the wings, but pretty thick under them. This Hackle in particular is remarked, because it is *very excellent;* but hackles must always be suited to the Shades of other materials. Further observe, that before beginning the head of the fly, two *gaudy* strips of feather should be laid on each side the shoulders, to stand something longer than the other feathers, whip them there, then finish the head; and the fly, when thus placed in proper order, will appear very beautiful. For the better convenience of making these *large* flies, a very small *vice* should be used for the purpose of holding the Hook, that both Hands may be at liberty to put in the materials, by which the flies will be more neatly, as well as more perfectly, dressed.

The same sort of flies, only smaller (the hooks being No. 4 or 5), are used for *Salmon-Trout*, and other fish of the *Salmon kind;* but *they* will often take the common Trout flies.

In fly-fishing for *Salmon*, there is this difference from taking Trout with the fly, that the fly must be allowed to move *with* the Stream, with a gradual motion of the hand to keep it upon the Surface, and the angler must strike the *moment* the fish rises, for the Salmon will not take the fly *under* water, but when they take, they break the water fairly: in a very rapid River or deep *Lough*, the hooks ought to be *thick* wired, otherwise the violence of the current will prevent the flies keeping any even motion, and thereby the fish will fail in seizing it when he rises; and in a deep *Lough*, the water which the Salmon forces before him when he rises will throw it on *one side*, and by that means the fish will also miss the fly: in moderate streams, and in waters of a middling depth, the *small* wired hooks are best.

A further list of Salmon flies another Gentleman has given, and also recommended that the *two yards* of *gut* or *grass* links, which form the foot-length, should be three-fold; and when the latter is used, the greatest care should be taken that all the parts of each link are of equal length, and be regularly twisted *, or they will not sustain the struggles of a large fish; and that a

* For this purpose choose three *round* and free from *flaws*, and tying the *root* ends together, let *them* soak in cold water some hours; they will then be soft, in working will bed well together, and when care has been observed in not twisting them too *hard*, will appear regular and beautiful: there must be double knots in the loose ends to hang them on the twisting engine. The Angler ought to have several of these links ready twisted for various sized hooks, and to repair accidents.

swivel should be placed between the *line* and *grass* or *gut*, to prevent either from twisting; remarking, that when a *Salmon* is hooked, the efforts he makes to disengage himself, even when *half tired*, are more dangerous to the tackle than when he is *first* entangled. In this Gentleman's opinion, it is a great improvement to make these large flies with *four wings*, instead of *two*; not meaning the quantity of feather to be increased, but that it will be better divided, it being a fault too prevalent in *Trout flies*, their being overloaded with Feather.

The Season varying in different rivers, and the Salmon being so unsteady a fish in his feeding, the dating the Time of using each fly with precision is almost impossible; those which follow are arranged as they make their appearance, noting that the *brown* fly appears in *April*, and affords the most sport until *September*, when the *grey mallard* succeeds as the best fly for the remainder of the Season. The hooks from No. 1 to 3, according to season, state of water, and weight of fish.

The Brown Fly.

Its wings made with the long gold-colour feather near the *cock* pheasant's tail; the body of the fur of a Hare's neck, mixed with one-third of its quantity of the fine hair of a *brown* Cow. In bright weather gold twist is often successfully added, over which wrap a red Cock's hackle.

The Blue Fly.

Wings made of the shaded feather of the *hen* pheasant's tail; body of peacock's *herle*, with a pale red hackle over it.

The King-Fisher.

Wings of the feather of a Heron's tail, or that of a blue Turkey; body of the greenest part of the peacock's herle (that from about the *eye* of the feather is best), over which wrap a Heron's *crest* feather, or a black cock's hackle.

The Prime Dun.

Light Heron's feather for wings, body of *hedge-hog's* fur, with a light *dun* hackle over it.

The Great Palmer.

Wings made with the cock Pheasant's tail feather; the body of peacock's herle; over it a red hackle, which is black at the roots. This fly is often varied with great effect, by *gold* and *silver* twist.

The Golden Pheasant.

Wings, cock pheasant's tail feather; body of *orange*-coloured silk, ribbed with peacock's herle, and over it a *ginger* hackle.

The Grey Mallard.

Wings made of the *grey* feather of a Mallard; the body, which is very slender, of equal quantities of white rabbit and hedge-hog's fur, well mixed, and light grizzle cock's hackle over it.

In *trolling* for *Salmon* with *Minnow* or *Gravling*, the foot-length or links must be about *three yards*, with a *swivel* or *two*, as well to help the bait's playing *freely*, as to prevent the line from twisting and breaking; a large shot or two, about a foot from the bait, will keep it under water when played, and which may either be added to or diminished, according to the strength of the *current*, (for this kind of Angling is chiefly in the streams, and is best when the water is *clearing off* after a *fresh*, or when upon the *rise*, before it becomes too thick.) The rod must have a stiffer top than for *fly*-fishing; the hook large, and long in the shank, with a very small one fixed above, at nearly the distance of the length of the fish baited with; the bait is to be drawn upon the hook like a *worm*, by putting it into the mouth, and bending it round the curve of the hook until it comes out a little above the tail, so as to keep the tail a trifle bent; the small hook (which should be made *blunt* at the point) must then be put through the lips of the fish, to prevent its slipping into the bend of the large one. Some use a *leaded*, and others a *snap-hook*; but the above method is preferable. When thus prepared, the *line* should be let out from the *reel*, about the length of the *rod*; the bait thrown *across* the stream, and the line drawn with a pretty brisk motion *up* it, which causes the bait to spin well, and entices the large fish to take it. Some Anglers strike *Salmon* as they seize the bait; but it is the *surest way* to let them go down with it for a time: those who use themselves to strike immediately, should be careful, when a *Salmon* runs at the bait, not to

snatch it away through surprise before he takes it, as is often done even by tolerable Anglers.

In fishing for *Salmon* with *lob-worms*, the *trolling-tackle* is to be used, and two of these worms *well scoured*, put on the hooks; the first should be drawn quite above the top of the shank of the large hook, and the small one run through its head; the *second* worm is to be run some way above the shank, and drawing the first down, let them hang with their tails one above the other, preventing the *point* of the large hook from appearing through the worm; lay in the worms at the *bottom* of a Stream, holding the rod *still*, and keeping as much as possible out of Sight: if in a short time there is no bite, move the line gently *up the current*, and the worms will play and shew themselves by means of the *swivels*, and thus allure the *Salmon* to take them; if no success follows after a few trials, seek another Stream, and there repeat them. This mode is to be used when either the water is too much *discoloured* for the *artificial fly*, or when the *day* is *bright*, with scarce any *wind* stirring, and the water *so clear*, that the *Salmon* can discover the deception of it; they can be taken by no other method of Angling than *this* and *minnow*-fishing, when the *weather* and *water* are in such a State.

Another way of fishing with lob-worms for *Salmon*, is to run the hook through the middle of a lob-worm well scoured, and pull it above the shank; then take a second, and put the hook in an inch below the tail, drawing it on the hook about three-fourths of the length; the head of the worm being at its point, then draw down the first to the latter worm: a piece of *lead* with a small hole through it, (which is called a plumb,) must be fastened upon the line *two feet* above the hook; by which means the bait can be kept in any certain spot, and pulling the line *tight*, the *plumb* will be felt at the bottom, and the Current will give motion to the bait with the link below it; when the bait has remained a few minutes, gently move it about a yard *up* the stream, and again let the *plumb* rest at the bottom; this will excite the attention of the fish, and frequently tempts them to seize the worms.

A third way, is with four (or more) worms: put the hook through three of their heads, and pull them upon the line; the last should be the largest, and the hook is to be thrust in an inch below the tail, and his head to cover its point; the rest of the worms upon the line are to be slipped down to the shank of the hook, but not *upon* it; the worms will then play around the hook in a way the most alluring to attract the *Salmon*. In *Trout*-fishing, this plan of *fixing the worms* is stated to have been very successful, and when only one worm is used, the same Gentleman directs the hook to be inserted at its *head*, and the tail left to play at the end of the hook.

Salmon Fry,

called in some counties SAMLETS, *Salmon-pinks*, *Salmon-smelts*, &c. are by some said to be found in all rivers frequented by the *Salmon*, and to be the produce of the Spawn left by them. According to Mr. PENNANT, the SAMLET is the least of the *Trout* kind; is frequent in the *Wye*, in the upper part of the *Severn*, and the streams that run into it, in the north of *England*, and in *Wales:* it is by several imagined to be the *Fry* of the *Salmon;* but Mr. P. dissents from that opinion, for the following reasons:

First, it is well known that the *Salmon-fry* never continue in fresh water the *whole year;* but numerous as they appear on their first escape from the Spawn, the first *vernal flood* that happens sweeps them into the *Sea*, and leaves scarcely one behind.

Secondly, the growth of the *Salmon-fry* is so quick, as suddenly to exceed the dimensions of the largest *Samlet;* for example, the *Fry* that have quitted the *fresh water* in the *Spring*, not bigger than *Gudgeons*, return into it again a Foot or more in *length*.

Thirdly, *Salmon* attain a considerable bulk before they begin to breed; the *Samlets*, on the contrary, are found *male* and *female* (distinguished by the *milt* and *roe*, although it has been a vulgar Error to believe that there were no other than *males* of this species,) of their common size.

Fourthly, they are found in the fresh waters in all times of the year, and even at seasons when the *Salmon-fry* have gained a considerable bigness. It is well known, that near *Shrewsbury* (where they are called *Sampsons,)* they are in such quantities in the month of September, that an Angler, in a *Corracle* (the small wicker boat of the Country*,) will take with a fly many dozens in a day.

They *spawn* in *November* and *December;* at which period those of the *Severn* push up towards the head of that river, quitting the lesser brooks, and return into them after they have done. Having a general resemblance to the Trout, they must (says Mr. P.) be described comparatively. The head is proportionally *narrower*, and the mouth *less;* their body is deeper; they seldom exceed *six* or *seven* inches, at most *eight* and a *half;* the *pectoral* fins have generally but one large *black* spot, though sometimes a single small one attends it. Whereas, the *pectoral fins* of the *Trout* are most numerously marked; the *spurious* or *fat* fin on the back is never tipped with *red*, nor is the edge of the *anal* fin *white;* the spots on the body are fewer, and not so bright; it is also marked from the back to the sides with six or seven large blueish bars; but this is not a certain character, as the same is sometimes seen in *young Trouts:* the tail of the *Samlet* is much more forked than that of the *Trout.*

These fish (Mr. P. remarks) are very frequent in the rivers of *Scotland*, where they are called *Pars.* They are also common in the Wye, where they are known by the name of *Skirlings*, or *Lasprings.*

Thus far Mr. PENNANT; and WALTON observes, " There are certain waters that breed *Trouts*, remarkable both for their multitude and small-

* It is a *basket* shaped like the half of a Walnut-shell, but shallower in proportion, and covered on the outside with a Horse's hide; there is a seat in the middle, that will just hold one person, and is so light, that the Countrymen hang it on their heads like a hood. There is much address required in getting into one of these boats, as it flies from the person the instant he touches it with his foot; and even when seated, it requires great steadiness to manage it with tolerable safety to the Navigator.

ness. I know (says he) a little brook in *Kent*, that breeds them to a number incredible, and you may take them forty in an hour, but none greater than about the size of a *Gudgeon*. There are also in rivers near the Sea, as Winchester, or the Thames, about Windsor, a little *Trout*, called a *Samlet* or *Skegger-Trout*, that will bite as fast and freely as *Minnows;* they are by some taken to be *young Salmons*, but in these waters they never grow to be bigger than a *Herring*."

A Gentleman, who has spared no pains to ascertain the Affinity of this fish to the *Salmon*, has supposed them bred from the *Salmon*, for two reasons.

First, its resemblance to that fish; and *secondly*, because there are never any of them *seen*, but where *Salmon* are known to *spawn;* and he proceeds to mention a case in point: that about three or four miles from *Middleham*, in *Teesdale*, there is a fall of water, where the Rock is above twenty yards high, from one side of the river to the other; the pool it falls into has often been tried, but all attempts to know the Depth of it have failed. Below this *Force* (as it is termed) there are abundance of these *Pinks* all the Summer; but above it, there *never* was *one* of them seen.

Three or four miles above this *Force*, there is a *Lough* about a mile in circumference, full of *Trouts;* the neighbouring people call this place the *wheel;* the *Tees* runs through, and is very clear, both above and below it. From this lake to the head of the river, a distance of four miles, as well as below it down to the *Force*, Trouts are in plenty, but no such thing as a *Pink*. He also says he could mention other places where *Salmon* have been precluded from advancing *higher* up a River, when there is plenty of *Pinks below*, but none *above* where the Obstacle presented itself. This Gentleman seems to consider them all *male* fish; but in this Mr. P. speaks confidently to the *contrary* being the Fact.

Another account of these fish states, that they begin to appear in

February, and in *March* and *April* are very numerous; but if a flood rises in the rivers in *April*, they begin to travel, and go lower down every fresh, until they find the water *brackish*, and by the middle of *Summer* they will be grown as large, and some bigger than a *Herring*. As the cold weather comes on, they venture to the mouths of the rivers, but are at first fearful of going too far into the *Sea*. The *Salt water* adds greatly to their Growth; and in the following *Spring* and *Summer* they return and run up the rivers in great quantities, but go down to the *Sea* again before the *Winter*. Upon their second visit to the rivers, they will be amazingly grown, and are then called (according to the Countries where taken) *Morts*, *Peals*, or *Grills*, though some erroneously call them *Salmon Trouts*. In the beginning of the ensuing *Autumn* they spawn for the first time; the latter end of the *February* following after they are spawned, and when not much longer than one's finger, they will take a small *worm*; and in *March* and *April* (when the largest will be *six* or *seven* inches long) they eagerly take a small *red* or *black fly*, if the water be *clear*, if *thick*, a *small worm*; they are likewise caught with *gentles*: the *rod* should be very fine, the *line* not much longer than the rod, and the lower link of *single* hairs; the flies must be very diminutive, and three or four may be used, fixed at about a *foot* distant from each other. As they rise very nimbly, they will deceive the eye, so that it is necessary to draw the flies rather *quick* upon the Surface, and they will hook themselves. *Gentles* may be fished with in the same manner, using very small *hooks*, and putting a *single gentle* on each: the links to which these hooks are tied should not exceed *three* inches, for if longer, they are apt to entangle the *line*. They are universally esteemed as delicate eating, and afford great diversion to a young Angler; yet if they are (as by some they are asserted to be) *Salmons*, it is at this Age shameful to destroy them.

The Salmon Trout

differs from the *Salmon* in so many particulars, that the Fishermen distinguish them at first sight, and all agree that they are a distinct Species.

This Fish is not peculiar to the *northern* Rivers, though perhaps most numerous there, as the Fishermen will take five or six for one *Salmon* or *Gilse*, and do not value them at half the price.

The *Salmon Trout* is handsome in its form, is more richly adorned, and is longer, thicker, and rounder in proportion than a *Salmon;* the Scales are small, beautifully intermixed on both sides of the *lateral line*, and also the covers of the *gills* with spots; the fins are strong, and the tail shorter, but not so much forked as the *Salmon*'s; the flesh is exceedingly rich, and in some Countries better esteemed than any fish of the *Salmon* kind; they are generally from two to six pounds weight, some run larger; they are often taken when angling for *Salmon* or large *Trout*, their haunts being the same. Early in the Spring they enter the Rivers, are in prime season from the end of *April* until *July*, and spawn chiefly in *September;* but that period varies in different waters: the Rod should be as for *Salmon*, the *reel* line strong, and foot-length about three yards, of fine *twisted* silk-worm gut, or the strongest *single*, with the knots well whipped. When the Water is clear enough, the Baits should be large *gaudy* flies; if discoloured, *well-scoured worms*, with which, having a *running* line, angle *in* or near the sides of Streams, with a *shot or* two, fifteen inches from the Hook, which should be No. 3 or 4. This is a strong Fish in its Element, and therefore, when hooked, plenty of Line must be given.

The Bull-trout, Bulger, or Scurf,

migrate like the Salmon, into several of our Rivers; they begin to run up the Rivers in *May*, and are most plentiful in *September* and *October*, although the Flesh is not then so good (on account of their spawning) as in July and August; when boiled, it is of a pale red, and well flavoured, but drier than that of the *Salmon*. Mr. PENNANT has described one taken in June 1769, in the *Tweed* below *Berwick*.

The Shape was thicker than the common *Trout;* the *irides* silver,

the head thick, smooth, and dusky, with a gloss of *blue* and *green;* the back of the same colour, growing fainter towards the lateral line, which is straight; and the sides, as far as this line, are marked with large irregular shaped spots of *black;* the sides *beneath* the line and the Belly are white; the Tail is broad and even at the end: the weight was *three pounds two ounces.*

The *Bull* have the same Haunts as the *Salmon Trout*, and are sometimes met with in gentle shallow Streams, running between and over Rocks and Stones, and are also found about *Weirs*, made across Rivers. The Baits and Tackle should be the same as for the *Salmon Trout.*

The White Trout,

as it is generally called in *England* and *Ireland*, is termed *Whitting* in *Scotland*, and *Sewen* or *Souen* in Wales.

This Species (says Mr. PENNANT) comes from the *Sea* into the River *Esk* in *Cumberland*, from July to September, and is called, from its Colour, the *Whiting*. On their first appearance from the Salt Water, the Lernæ Salmonea, or Salmon-louse, adheres to them; they have both Milt and Spawn, but no Fry has as yet been observed. This is the Fish called, by the *Scots, Phinocs.*

The whole Body is of an elegant form; the lateral line is straight, and placed rather lower than in the generality of Fishes; the Colour between that and the top of the Back, dusky and silvery intermixed; beneath the line of an exquisite silvery whiteness: the first *dorsal* fin is spotted with black, and much forked; they seldom exceed a *foot* in length, and weigh from one to two pounds; when dressed, their flesh is *red*, and of most delicious flavour.

Their Haunts are in rough stony Streams, and at the sides and tails of them, where it is gravelly, and are sometimes to be met with in smooth gliding Currents; they are to be taken with the *black* and *Grouse hackles* (described among the Standard Flies,) and afford great Sport when hooked; they are so strong, that some of them will spring with the line a yard out of the Water, and that several times before they can be landed.

The Grayling,

Last-spring, Shedder, Gravel-Last-Spring, or Sampson,

known by these Names in different Countries, are found in all the Rivers in which the *Salmon* and the three last-mentioned sorts of *Trout* are met with; they are much like the *Salmon-fry*. Various are the opinions respecting them; some contending they are the Offspring of the *sick Salmon*, which cannot leave the *fresh* water, and get to the *Sea;* others, that they are absolutely the produce of the *mixed spawn* of different kinds of *Trouts*. The Baits, and method of Angling for them, are the same as used for the *Salmon-fry*.

The Mullet

is found in great plenty on several of our sandy Coasts, and in particular haunts those small Bays that have influxes of fresh water; they are very cunning, and when surrounded with a Net, the whole Shoal frequently escapes by leaping over it; for when one takes the lead, the others are sure to follow. This circumstance is noticed by Oppian, who had good opportunity of examining these Fish, which swarm, during some Seasons, on the Coasts of the *Mediterranean*.

> The *Mullet*, when encircling Seines enclose,
> The fatal threads and treach'rous bosom knows;

Instant he rallies all his vig'rous powers,
And faithful aid of every Nerve implores;
O'er battlements of *Cork*, up darting flies,
And finds from *Air* th' escape that *Sea* denies.
JONES.

Near *Martegues*, in the South of France, abundance of *Mullets* are taken in *weirs*, made of *reeds* placed in the Shallows; of the *milts* of the Males (which are there called *Alletants,)* and of the *roes* of the females (called *Botar,)* is made *Botargo;* the materials are taken out entire, covered with *salt* for four or five hours, then slightly pressed between two boards or stones, washed, and at last dried in the *Sun* for fourteen days.

They come in great Shoals into the Rivers with the Tide during the Summer, and keep rooting like Hogs, in the sand or mud, leaving their traces in form of large round holes; but return back when the water *ebbs*, never stopping in the Rivers. They are something like the *Dace* in shape, yet much thicker; the head is almost square and flat on the top; the nose blunt, lips thick; they have no teeth, only the upper lip is a little rough, as is also the tongue; between the eyes and mouth is a hard callus: the pupil of the Eye is black, encircled with a small silvery line; the colour of the Back is *dusky*, varied with *blue* and *green;* the sides *silvery*, marked with broad dusky parallel lines, reaching from head to tail, which is much forked; the scales are large and deciduous, and are also upon the *covers* of the *gills* and *head*, and extend as far as the *nostrils*. The largest are nearly *half a yard* long, and the Flesh is excellent.

In January 1805 was the most extraordinary Catch of *Grey Mullet* ever known in *Plymouth* Harbour: nearly *Thirty* boat loads of *Prime* Fish were taken outside and inside the Pier Head. It is supposed they were driven in by the late Gales of Wind at East-South-East.

The same *artificial flies* as for *Trout* are to be used, and they are to be angled for as the Tide comes in, before the water gets thick, with those in

preference to any other Bait; when the water is discoloured, use a small *red-worm* or *gentles*, and fish within *two feet* of the bottom with strong Tackle, as the *Mullet*, when hooked, will struggle vigorously.

When the Luxury of *Rome* was at its height, the *Red* Mullet*, among others, held a conspicuous place in their Entertainments. The capricious Epicures of HORACE's days valued it in proportion to its *size;* not that the *larger* were more delicious, but from the difficulty of procuring them. The price given for one which JUVENAL notices, is a striking evidence of the Extravagance of the Age.

> The lavish slave
> Six thousand pieces † for a Mullet gave,
> A Sesterce for each pound.
>
> DRYDEN.

But ASTURIUS CELER, a Man of Consular Dignity, gave a more unconscionable sum, 64*l.* 11*s.* 8*d.:* according to HORACE, a Mullet of *three pounds* was a great rarity, so that JUVENAL's purchaser had by far the best bargain. SENECA however says, that the Mullet was not worth a *farthing*, except it died in the very *hand* of the Guest. It was not unusual for a *Roman* to say, "In other matters I may confide in you, but in a thing of this moment, it is not consistent with my prudence; I will trust nothing but my own Eyes; bring the Fish hither, let me see him breathe his last." Such was the Luxury of the times, that there were *Stews* even in the Eating-rooms, so that the Fish could at once be brought from beneath the Table, and placed upon it, where the *Mullets* were put in transparent Vases, that when expiring the changes of their rich Colour might entertain the Company, who all agreed that nothing was more beau-

* In July 1804 an immense Number of this delicious Fish was caught at the Mouth of the River *Exe:* the Draught was so great, that they were sold for *sixpence per dozen;* and what is remarkable, for several years not a Fish of this Species had been seen on the Coast.

† £48. 8*s.* 9*d.*

tiful than a *dying Mullet*. APICIUS* had the art of preparing them for the table still more luxuriously, by suffocating them in the exquisite *Carthaginian pickle*, and afterwards procuring a rich sauce from their *livers*.

The Smelt

derives its name from having, in the opinion of some, the Scent of a *Violet;* of others, that of a *Cucumber;* and so strange is the disagreement respecting the Smell of this fish, that the *Germans* (says Mr. PENNANT)

* APICIUS was a Roman of no mean Genius, and born to an immense Fortune, who made the *Art of Cookery* the business of his Life, and wrote a Book on the Pleasures and Incitements of Eating. All kinds of *Birds*, *Beasts*, and *Fishes*, were brought to him from Foreign parts, and he investigated their Tastes, with different *Sauces* and various Modes of Dressing: when he declared his Opinion of a Dish, it was received as decisive, and sacredly followed by all the *polite Eaters* of the AUGUSTAN Age. He had laid up *Ninety Millions* of *Sesterces* or £726,562. 10*s*. 0*d*. for the sole purpose of being sacrificed in his *Kitchen*, besides many great gifts of Princes and a vast Revenue from the Capitol. Being in debt, he at last began to take an Account of his Estate, and found he had yet left *Ten Millions of Sesterces*, or £80,729. 3*s*. 4*d*. to redeem himself from this imaginary Poverty, and to be forced (poor Man) to live in a *starved* Condition, he poisoned himself. The following Anecdote is told of him: FABIUS, the favourite of AUGUSTUS, condescended to dine with APICIUS after he had been CONSUL. A Vase of *Chrystal*, then very rare, happened to fall out of his Hand, when he was viewing it, and was broken. The thoughts of the high price it bore kept him silent and anxious, in spite of all the Ease and Gaiety that APICIUS could assume; when at length, as if in a passion, he exclaimed, "What, FABIUS, will you spoil our Mirth because you have done, against your will, what many of my *slaves*, bought with my money, do, through mere carelessness? Cheer up, and take part in our Joy, which is of more value than an Hundred Vases."

As a Contrast to the foregoing generous Conduct, we shall here relate that of VEDIUS POLLIO under a similar Loss. This Man, who was originally a *Slave*, but afterwards emancipated, and by dint of Money made a *Roman Knight*, carried Luxury to its greatest height: he kept *Lampreys* in a Pond, where he fed them with *Human Flesh*, and the ordinary Punishment inflicted on his *Slaves*, even for trivial faults, was to be thrown with their Legs tied together into that Pond, to feed these voracious Animals; yet this barbarous Wretch was among the Friends of AUGUSTUS. One day that this EMPEROR dined at his House, a Slave happened to break a *Chrystal Bowl*, and was immediately condemned to be thrown to the *Lampreys:* the poor Fellow fell at the feet of AUGUSTUS, not imploring *Life*, but a less shocking *Death;* AUGUSTUS interceded for him, but such was the Insolence of VEDIUS, that he refused the Prince's Request: AUGUSTUS immediately ordered all the *Vases* that were on the Side-board to be brought, and he himself broke every one of them on the Spot.

distinguish it by the very elegant title of the *Stinck-fish;* the name of *Sparling*, which it bears in Wales, and in the north of England, is taken from the French *Eperlan.*

This fish (says Mr. P.) inhabits the Seas of the *northern* parts of *Europe;* but, he believes, is never found so far *south* as the *Mediterranean:* the *Seine* is one of the *French* rivers which receive it; but whether it is found *South* of that there is no authority to decide. If the Observations of Navigators (who have generally too much to engage their Attention to think much of the *minutiæ* of Natural History) can be depended upon, *Smelts* are taken in the Straits of *Magellan*, measuring *twenty inches* in length, and *eight* in Circumference.

They are met with in the Seas that wash our coasts the whole year, and seldom go far from Shore, except when they ascend the rivers, which they do with the Tide; and in certain of which it is remarked that they appear a long time before they spawn, being taken in abundance in the *Thames* and *Dee*, in *November*, and *two* succeeding months; in other rivers not until *February;* and in *March* and *April* they spawn, and are very *prolific;* after which they all return to the *salt water*, and are not seen in the Rivers until the next Season. It has been observed that they never come into the *Mersey*, so long as there is any *Snow water* in its Current; and that in the *Spring*, and beginning of *Summer*, they will run farther up than in the decline of the year: they are also to be met with in the docks that are opened for the reception of Ships. The *Smelt* is of a very beautiful form and colour; the head is transparent, and the Skin in general so thin that with a good *Microscope* the Circulation of its blood may be seen; the *irides* are *silvery*, the pupil of a full *black*, the *under* jaw is rather prominent; in the front of the upper are four large teeth; those in the sides of both are small; in the roof of the mouth are two rows, and on the tongue two others, of large teeth; the colour of the back is whitish, with a cast of *green;* beneath which it is varied with blue, and then succeeds a beautiful gloss of a *silvery* hue; the scales are small, and readily drop off; the tail

BARBEL.



N°. 6.



Gentle.

N°1.

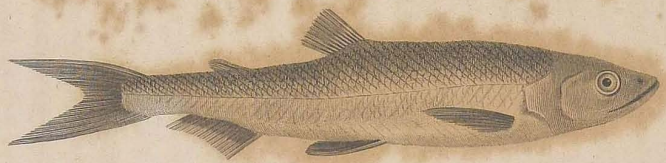


Lob Wôrm.

N°. 6.



Blood Wôrm.
Small Shrimp.
Gentle.



SMELT.

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is forked; the flesh is tender, and of a delicate taste. These fish vary greatly in size: the largest Mr. P. every heard of was *thirteen* inches long, and weighed *half a pound;* they are often sold in the London streets under the name of dried *Sparlings*, being split and dried, and are recommended by the Gentlemen who take their *Gills* of a morning as adding to the Wine a particular relish.

The *Smelt* is to be angled for (when the Tide runs up is preferable) with a *paternoster* line, having *five* or *six* hooks as *many* inches from each other, and baited differently. The best bait is very small *fresh shrimps*, (not *boiled,)* or the tail of a *boiled* one: next to these are *gentles* and *red paste;* also that of *boiled shrimps*, fine white bread, and a little honey, cadis, blood-worms, and they will sometimes take a bit of their own Species; some crumbs of bread steeped in water should be now and then thrown in, to keep them together.

WALTON mentions, that many years since, in the month of *August*, such vast quantities of *Smelts* came up the *Thames* that Women and Children became Anglers for them; and that in one day, between London Bridge and Greenwich, not fewer than *two thousand* persons were thus employed.

The Barbel

is one of the coarsest fishes: and yet PLINY, in mentioning one reported by MUTIANUS to have been caught in the *Red Sea*, that weighed *fourscore* pounds, exclaims, "Oh, what a price would he have borne among our Gluttons here with us!" In England they are deemed the worst of *fresh water* Fish, and seldom eaten but by the poorer sort of people, who sometimes boil them with a piece of *Bacon*, to give them a relish. The *roe* is

very noxious, affecting those unwarily eating it with a vomiting, purging, and a slight swelling *.

The Barbel takes his name from the barbs or wattels at his mouth. They begin to run up the rivers in *March* and in *April;* when they spawn they keep together in Companies, making holes in the Gravel wherein they cast it. Mr. PENNANT states,

The Barbels live in society, rooting, like Swine, with their noses in the soft banks; and that they are so *tame* as to suffer themselves to be taken by the *hand*, and people have caught numbers by diving for them: they frequent *weedy* and deep places, liking to feed on the Gravel against a rising ground, and in *Summer* the strongest currents, under bridges near *weirs*, among piles, hollow places, and under mossy weeds, roving about during the Night in search of food. Before the weather gets too cool they retire down the rivers to the deep brackish water, until the ensuing Spring. Some persons insist that they hide themselves all the Winter in the *mud*, in deep water, but this is erroneous, as the fishermen would take them with Nets at that season, as well as other fish, if they were then in the water; but they always are found in Rivers that have communication with the *Sea*.

* Dame JULIAN BERNERS, speaking of the Barbel, says "The Barbyll is a swete fysshe; but it is a quasy meete, and a perillous for Mannys body; for comynly he geuyth an introduxion to the febres: and yf he be eten RAWE, he may be cause of Mannys dethe, whyche hath oft be seen."

The Reflection on this practice of taking into our Stomachs the flesh of an Animal without any kind of *Culinary* preparation, operated so strongly on the mind of the Honourable ROBERT BOYLE, that he speaks in terms of Abhorrence of the Eating of *raw Oysters*, a Practice now so universal that scarcely a Street in London but presents to the Passenger a Shop for the Sale of this sort of Food. The nearest approach to this imaginary *Cannibal* System is the eating of *Pickled Herrings* or *Anchovies;* but for them it may be said in excuse that *Salt* affords some principle in its operation on certain bodies similar to that of *Fire;* at least that the purposes of *Culinary* Fire are sufficiently answered in the Process of curing the two Species of Fish abovementioned.

The head of the Barbel is smooth; the nostrils are near the eyes; it has a leather mouth, which is placed below; on each corner is a single beard, and another on each side the nose; the shape is long, round, and handsome; the dorsal fin is armed with a remarkably strong *spine*, sharply *serrated*, with which it can inflict a severe wound on the incautious Handler, and do much damage to the Nets. The side line is straight; the *scales* are not large, and of a pale gold colour, edged with *black;* the belly *white;* the tail is a little bifurcated, and of a deep purple. It is sometimes found *three feet* in length, and weighing *eighteen pounds.* According to the account in the Elements of Natural History, it is met with from *two* to *fifteen feet* long, grows quickly, is very tenacious of life, and lives to a great Age.

If there be any difference in the taste of their flesh, they are most in Season the latter end of *Summer;* but in fact they are not worth noticing, except for the Sport the Angler derives from the catching of them, and which, from their being so strong and determined a fish when hooked, is very great.

The Barbel is to be angled for with strong tackle, a *reel* and *silk* line, and the bottom links should be three lengths of *gut* twisted together; and the hook No. 4 to No. 6, a proper number of shot about *six inches* from it, and a *cork* or *swan*-quill float, to carry the bait not more than *half an inch* from the ground. Use *ground-bait* of *malt-grains*, *bran*, *blood*, pieces of *lob-worms*, and *clay*, all worked up together, and two or three small balls of it thrown into the hole; repeat this *cautiously*, for if *ground-baited* so that they glut themselves, they will not be eager at the *hook*-baits; the best of which are *Salmon's-roe* a little boiled, Graves (which are the remains of Tallow-chandler's fat; and to prepare them for use, break some into a vessel of cold water, and putting them over a gentle fire until near boiling, which will make them soft, and turn them almost *white*, fish with the whitest part,) *gentles*, lob-worms, and cheese. The worms must be *well scoured*, and the other baits *sweet* and *clean*, or no sport can be expected. This mode of angling with a float is most proper in deep, gently running water, but when fishing in *Streams* have a small bullet, with a hole through it, on the line, and the shot a foot from the hook, to stop the bullet from slipping down to it: by these means the bullet will lie on the ground, and the Current will play and cause the bait to show itself; the bottom link should be of *fine gimp*. When there is a bite, the *line* or *top* of the rod will be perceived to move, and when the rod is held in the hand, the fish can be felt; after a proper time, strike, and if hooked, play and manage him carefully, or he will break both *rod and line;* for he will run violently towards any hold or bank,

and often attempt to hit the line with his tail to break it. Their biting months commence in *May*, and continue until *September;* the time, from *sun-rise* to *ten* in the *morning*, and from *four* in the *afternoon* to *sun-set* *.

Another plan recommended for taking of this fish is, to bait the place Morn and Eve with *lob-worms* and *new* cheese, cut in small pieces: for this purpose the hole must be deep, when the current is moderately strong, with an even bottom (a quarter of a peck of *worms* and one pound of *cheese* are sufficient for one baiting; and care must be taken to throw them high enough up the stream, that they may rest at the spot intended to be fished at.) Having thus baited the place, if no rise of water happens, good diversion may be expected from *day-break* to *nine* in the morn, and from *six in the eve* until dark. The rod must be very strong; a *running* line of silk is necessary, with a bottom link as directed for Salmon, and a large well-tempered hook; a *plumb* † must be fixed *two feet* above the hook, of sufficient weight to resist the action of the depth of water, a *float* is unnecessary: the baits are to be *lob-worms* well scoured, *new cheese* cut in small squares; for *Barbel*, though free, are nice feeders; having baited the hook, let the *plumb* sink gently to the bottom, about *two yards* from the side, or nearer, if there are no obstacles, draw the line tight until the plumb is felt at the ground; when a *Barbel* bites, it will be known by a sudden jerk, strong enough to be sensibly perceived; this is the time to strike, but not directly *upwards*, but in the direction the line lies in the water: for instance, if the Stream runs from *right to left*, strike to the *right;* and if the contrary, to the *left*, it being impossible from the depth and current of the water, that the plumb should be *perpendicular* under the top of the rod: when hooked, the Barbel will shew ample diversion, and the hook, from his being a leather-mouthed fish, rarely misses its hold; a tight line must be kept to restrain him from stumps and harbours, and also to prevent his throwing himself across the line, which he will endeavour at, and his *back fin*, being indented like a *saw*, will much cut and damage it: the *landing-net* ought to be wide enough to admit the *Barbel* without trouble, and so deep as to secure him in it from the effect of a sudden spring. One Caution in angling for Barbel will bear Repetition; never throw in the bait *further* than enabled by a gentle cast of the rod, letting the plumb fall into the water with the least possible Noise; it is an error to think that *large* fish are in the *middle* of the River; Experience teaches the fallacy of this opinion; they naturally seek their food near the Banks, and agitating the water, by an injudicious management of the *plumb*, will certainly drive them away. The quantities of Barbel sometimes caught by this method are very great; persons of undoubted veracity have asserted, that upwards of *one hundred* weight have been taken in *one* morning.

* Sir JOHN HAWKINS gives a droll Narrative of the perseverance of a fisher for *Barbel* in the Thames, who upon being accosted as to the Sport he had, replied, "he had no Success, yet he liked the Spot, and loved to catch Fish; but that his great Delight was in *going after them:* I'll tell you what, Sir," continued the Angler, "I have been used to the Sea, and meaning to go no more, have bought that small House you see yonder, for the sake of *fishing;* I get into this Boat (which he was then mopping) on a Monday Morning, and fish on till *Saturday Night* for *Barbel*, as I told you, for that is my delight; and this I have sometimes done for a *Month* together, and in all that while have not had *one Bite.*"

† A Bullet is not of sufficient weight to detain the bait in one spot at the bottom; moreover, its *roundness* adds not a little to this inconvenience: the flat plumb is far preferable.

Three of the largest *Barbel* ever caught at *Hampton* by Angling were taken in 1793, by a Gentleman of Burlington-Street, and which weighed thirty-nine pounds.

The Flounder

inhabits every part of the *British* Sea, and is found, although at a great distance, in all the Rivers that communicate with it; numbers of them that are not taken, lose themselves, continuing and breeding with vast Fecundity in the Rivers, and those grow to be the largest and best flavoured: they will likewise live in Ponds, and are a profitable fish to stock them with, as they soon get fat, will live many hours out of their Element, and consequently may be easily and safely removed; but they will *not breed*, nor live above Seven or Eight Years, when confined in Standing Waters.

The colour of the upper part of the body is a pale brown, sometimes marked with a few spots of dirty yellow; the belly is white; it may readily be distinguished from the *Plaise*, or any other fish of this Genus, by a row of sharp small *Spines* that surround its upper sides, and are placed just at the juncture of the fins with the body; another row marks the *side line*, and runs half way down the back. Mr. PENNANT mentions hearing of one that weighed *six pounds;* but a Flounder of half that weight is not common. Flounders spawn in *May* and *June*, and are in Season the rest of the year; they swim in Shoals, and bite freely at all hours of the day, but particularly on the rise of the water by flood or tide, and in warm weather, with a little wind, and are to be fished for with a strong line, and good *gut* at the bottom, as some of them are large, and struggle much: the best places to angle for them are by the sides, and at the tails, of deep streams, where the bottom consists of fine *gravel*, *sand*, or *loam*, or in still places of the same quality near the banks: two or three rods may be used, with a bullet on the lines, to lie on the ground in the Streams; and when in still water a

shot or two on the line, and the hook small. *Brandlings* that are taken from rotten *tan*, well scoured, are the best baits; they will take the *lob-worm*, and even the *Minnow;* a *Flounder* weighing *twenty-three ounces* being caught, in 1799, with the latter.

The Eel

is a most plentiful fish, yet is scarcely ever found in the *Danube*, although very common in the lakes and rivers of *Upper Austria*. The ROMANS held the *Eel* very cheap, probably from its likeness to a *Snake*.

> For you is kept a sink-fed Snake-like Eel.
> JUVENAL.

On the contrary, the luxurious *Sybarites* * were so fond of these fish as to exempt the persons who sold them from every kind of Tribute †.

It is somewhat singular that the Aversion of the *Romans* to the *Eel*

* Of the Luxury of this People, an instance is recorded of SINYNDIRIDES, who once cast himself upon a Bed prepared for him of the Leaves of *Roses*, and having there slept, complained at his rising of having Pustules made upon his Body from its Hardness. He was likewise so addicted to his Belly, that when he went to *Sicyon*, as a suitor to AGARISTA, the Daughter of CLISTHENES, he took along with him a *Thousand Cooks*, a *Thousand Fowlers*, and the same number of *Fishermen*.

† In the early Ages of our History we find the *Eel* considered as a Rarity. WILL. DE AISLEBURY was invested with certain Lands in *Bucks*, by WILLIAM the Conqueror, under the singular Tenure of providing *Straw* * for his Bed and Chamber, and *three Eels*, for his Use in Winter; and in Summer, Straw, Rushes, and two Green Geese; *thrice* every Year, if he should visit *Aylesbury* so often.

BECKET, about the Year 1160, gave *five* pounds (equal nearly to *Fifty* pounds of our present money) for a single Dish of EELS.

* *Straw* was used for the KING's Bed so lately as the Reign of HENRY the *Eighth*, as appears by the fourth Volume of the Archæologia.

did not extend to the *Lamprey**, a fish not very dissimilar in its form. We are told that ANTONIA, the wife of DRUSUS, possessed a *Lamprey* which she decorated with jewels; that HORTENSIUS wept at the loss of one which he had kept and exceedingly loved; and that CRASSUS, the Orator, lamented the decease of another: surely two such men becoming *Mourners* for the death of an *Eel* exhibit striking instances of human Weakness!

MARTIAL, in one of his Epigrams, which has been thus translated, notices the tameness of Fish.

> *Angler!* would'st thou be guiltless, then forbear,
> For these are sacred fishes that swim here;
> Who know their Sovereign, and will lick his hand,
> Than which none's greater in the World's command:
> Nay more, they've Names, and when they called are,
> Do to their several Owners' call repair.

It is unlucky that the faculty of *Speech* was withheld from Fish, as this might have rendered them Companions every way estimable. A whimsical reason has, however, been assigned for their dumbness by a *Bacchanalian* Naturalist, "That fishes are *mute* because they drink nothing but *water*."

The *Eel* (says Mr. PENNANT) is singular in several matters relating to its Natural history, and in some respects borders on the Reptile tribe; the *Eel* is known to quit its Element, and, during the Night, to wander along the Meadows, not merely for change of habitation †, but also for the sake

* The *Muræna* was observed in CÆSAR's Fishponds, to live *Sixty Years*, and by long use were made extremely tame. HORTENSIUS, who was so attached to a *Lamprey*, was very rich, and not less than *Ten Thousand* Casks of Arvisian Wine were found in his Cellars after his Death. One of the same Name was the first that introduced the Eating of *Peacocks* at ROME.

† Mr. ARDERON says, that in June 1746, while he was viewing the Flood-gates belonging to the Water-works of Norwich, he observed a great number of *Eels* sliding up them, and up the adjacent posts, to the height of five or six feet above the surface of the Water. They ascended with the utmost facility, though many of the posts were perfectly dry and smooth.

of prey, feeding on the *snails* in its passage: during *Winter* it beds itself in the *mud*, and continues torpid like the Serpent kind, is very impatient of cold, will eagerly seek shelter in a wisp of *Straw*, flung into a pond in severe weather; and which has sometimes been practised as a method of taking them. ALBERTUS goes so far as to say that he has known *Eels*, for warmth, betake themselves to a Hay-rick; yet even there the excess of Cold has destroyed them.

The following curious fact is recorded by Mr. SWALLOWE, some years since the *British Consul General* in *Russia*:—"Having occasion to go from *Petersburgh* to *Moscow*, where *Eels* are a great Rarity, he ordered some to carry as a present; upon being taken out of the water they were thrown upon the ground to be frozen, and soon appeared quite dead, and almost a piece of *Ice;* they were then packed in *Snow*, and when he arrived at Moscow, which was four days after, the *Eels* being put into cold water, and so thawed, discovered gradually signs of Life, and soon perfectly recovered."

It has been observed that in the river *Nine*, in *Northamptonshire*, there is a small *Eel*, with a lesser *head* and narrower *mouth* than the common, which is found in Clusters at the bottom of the river, and is called the *bed-eel.* (PLINY remarks that the *Eels* of the lake *Benacus* collect together in the same manner in the month of *October*, possibly to retreat from the *winter*'s cold.) These are sometimes roused up by violent floods, but are never found at that time with meat in their stomachs; "this," says Mr. P. "is so analogous to the clustering of *blind-worms* in their quiescent state, that it may be fairly considered a further proof of a partial Agreement in the Nature of the *two Genera.*

They first thrust their heads and about half their bodies out of the Water, and held them against the Wood-work for some time; Mr. A. imagines until they found the Viscidity of their bodies sufficiently thick, by exposure to the Air, to support their Weight. They then began to ascend directly upwards, and with as much apparent Ease as if they had been sliding on level ground: this they continued until they had got into the *Dam* above.

The *Ancients* adopted a most wild opinion about the *Generation* of these fish, believing them to be either created from Mud, or that the Scrapings of their bodies, which they left on the stones, were animated and became young *Eels;* some *Moderns* gave into these opinions, and into others equally extravagant: (one in particular gives instructions for producing them by *Art:* " Cut up *two turfs* covered with *May-dew*, and lay one upon the other, the grassy side *inwards*, and thus expose them to the heat of the Sun; in a few hours there will spring from them an infinite quantity of *Eels;)* not imagining the possibility of waters being supplied with fish, by the Conveyance of the spawn by *aquatic birds* of prey, in a similar way as Vegetation is spread by many *land birds.* As to their immediate generation, it has been amply proved to be effected by the ordinary course of Nature, and that they are Viviparous; many persons have convinced themselves of the fact, by opening and taking from the *Eel* a small soft whitish substance, knotted curiously together: upon being put into Water this has separated, and the young *Eels* were perfect, and, though not bigger than a small thread, have swam about; this Discovery always took place the end of *Summer*, or beginning of *Autumn*, and has been adduced as a confirmation of their going down to the Salt water to spawn: those that remain in the Rivers, or that have been carried by *floods* into Rivulets and Ditches, of which some are to be found at all times, produce their young in the same way. Natural Historians maintain that all fishes having no Scales bring forth their young *alive;* but this seems a mistake, the *Minnow* and *Loach* are mentioned as instances that *spawn;* but they are *erroneously* said to have no Scales, and probably the observation may not be better founded when applied to *Sea* fish*, whose Scales are very minute.

* It had been generally imagined that the *Eel* had no *Scales*, until they were discovered by the Microscope, (perhaps those of the *Minnow* and *Loach*, requiring the same help to discern them, occasioned the latter Fish especially being stated to have none,) when if the Slime be wiped clean away, by the Aid of that Instrument the Skin will be found covered with exceeding small ones, ranged in a very orderly manner. To obtain these from the Skin, take a piece of the skin which grows from the side of the *Eel*, and while moist spread it on a piece of Glass, that it may

A very accurate and ingenious Observer has thus mentioned his remarks upon the *migration*, &c. of *Eels*.

There is (says this Gentleman) one other fish common in this Country that is migratory, when in a situation to admit of it: this is the *Eel*. *Eels* can live and breed in stagnant ponds from which there is no outlet, as Carp, Tench, and several other fishes do; but whether they ever *there* attain the same perfection as under other circumstances may, perhaps, be doubtful. In what place the *Eel* deposits its young in preference to others, when at perfect freedom; or whether the young fry make a progression towards the *Sea*, as the *Salmon* does at a certain period of its growth, I cannot tell. But in one particular case I know, and it has been observed by others, that in the month of *June*, yearly, immense swarms of young Eels make a progress from the *lower* part of the river towards the *higher*, with a quickness and unremitted assiduity that are surprising. This Phenomenon was remarked in the river Dee, in Aberdeenshire. The *Eel* is a fish that seems (unlike the Trout) to dislike *running* streams, and therefore avoids that part of the river where the Current is strong. It had, probably, been this circumstance that induced them, in the rapid Dee, to direct their progress only along the Edges of the river close to the banks.

A Line followed the windings of the River, being often suddenly deflected by Stones or other Interruptions without any breach of its continuity. This line having frequently caught my eye, my Hand was put

dry very smooth: when thus dried it will appear all over dimpled, or pitted by the *Scales*, which lie under a sort of Cuticle, this thin skin may be raised with the sharp point of a pen-knife together with the *Scales*, which will then easily slip out. It has been asserted, from trials of this nature, that very few Fishes, except such as have *Shells*, are destitute of *Scales*.

To prepare Scales of Fishes for Examination with the Microscope, they should be taken off, if possible, with nippers, and be soaked in water for a day or two, and afterwards carefully rubbed to clear them from the Skin and Dirt which may adhere to them; they should then be placed in smooth paper, between the leaves of a Book, to make them dry flat, and prevent their shrivelling up.

into the Water to touch the Line, with a view to examine what it was: the Line became discontinued, when my hand approached; but it united again as soon as my hand was withdrawn. This induced a nearer examination; and I then perceived, with astonishment, that this Line was formed by a series of small Eels, moving forward with great celerity. *These Eels* did not exceed half an inch in length, but were in all respects perfectly formed like the common *Eel.* The line might, perhaps, on an average, consist of from twenty to thirty in *breadth*, and the individuals being in different degrees of forwardness, and close to each other, made the Line uniform. The progress with which they advanced, was not less than *four miles* an hour: and this continued for *eight* Days and Nights together; and there was no apparent diminution of it when I left the place. There was a similar Line on the *opposite* side of the River. The water in which they floated at the place where I observed them was in general about two or three inches deep.

From the above Statement, it may safely be computed that the numbers which must have thus passed amounted to many Myriads. What becomes of such multitudes of Fishes we may conjecture, but never perhaps shall be able to ascertain.

The above Observations (continues this Gentleman) respect the spontaneous movements of Eels *upwards* in rivers; those that follow, indicate their similar progress *downwards* at one Season of the Year. In Scotland, in the neighbourhood of Linlithgow, is a considerable Lake, in which great quantities of *Eels* are caught, by hooks and lines during any of the Summer months; but the principal fishing is in the month of *October*, when it is found that the *Eels*, directed by natural Instinct, discover an irresistible propensity to issue from the *Loch* by the passage through which the water flows from it to the *Sea.* In October the person who rents the Fisheries puts into that passage a kind of Chest, so formed as to allow free passage to the water, while it stops those Eels that exceed a certain size. This Chest is every morning emptied of its fish, which are some-

times in such abundance as to require Carts to carry them away. This fishing continues about a month; *before* or *after* which time few or none can be so taken; the Chest is then removed, and the passage left free.

In *Wiltshire*, about Warminster, where the Rivers are small, and more rapid in their course than in many other parts of England, the Mills placed on the Streams are numerous, and the water is carefully directed into one Channel. The persons possessing these Mills having discovered that numbers of *Eels* go *down* the river during every Flood, happening in October, have devised a Box, which they call an Eel-grate; this is placed in a convenient part of the River, and thus great quantities of Eels are caught. They also find, that *no Eels* worth mentioning can be taken in this way at any other Season of the Year.

Whether the Eels thus caught in descending the River are near the *breeding* time, as the *Salmon* are which ascend the same small Streams, has not been ascertained. Probably they are; if so, they are not, like the *Salmon*, lean, but fat, and in good condition. It is probable that these Eels, after depositing their young near the mouths of the Rivers, ascend the Rivers again at another Season of the year, till they regain their former haunts, although there are not the same facilities for discovering their progress *upward*, were it even certain, as for that in their *descent*. They may have been at first entangled in their *descent* in Baskets or Nets whose Mouths were placed towards the Current. This could not be done in their *Ascent;* and although devices called *Cruives* have been invented for catching *Salmon* in *Ascending* the Rivers, yet the progress of *Eels* in that direction having not been remarked, no Contrivance for *thus* catching *them* has been devised.

It might be possible, by watching the time the large Eels return, to devise contrivances for stopping them in their Ascent somewhat similar to the *Salmon Cruives*, which might be done at a trifling expence, upon those small rills especially that communicate with swamps or lakes; for though

the Banks were overflowed during *floods*, yet if these *Eel-traps* occupied the full width of the rill, when in its usual state, no loss could be sustained during floods, as the strength of the Current would at that time interrupt their progress *upwards*. It is very probable, that if the large *Eels* do return, they may do it more *leisurely* than they descend, especially where the Water runs dead; therefore, in brisk running Streams we shall most likely discover the circumstances that affect these *Migrations*.

It may be proper also to remark, that if the conjecture respecting the general periodical Migrations of this Fish be well founded, it ought to follow, that *fewer Eels* should be found in those Lakes where the Water, issuing from them, falls over a steep Rock, forming a deep Cascade, than in others where the communication with the Sea is more free; because, though the *Eels* might be precipitated over it in their descent, the young fry would be *there* interrupted in their attempts to ascend it. Such is the case with *Loch-schin*, a large fresh water Lake in the Shire of Sutherland, in Scotland. Can any one (asks this Gentleman) inform me whether *Eels* abound in that Lake or not, and whether *those* there found are in any respects distinguishable from others? It is not asked if there be *any* Eels in it, for there will doubtless be *some;* but the question is, are there as *many* as in similar Lakes, *below* which there is no *steep Cascade?*

At the *Eel* Fisheries on the river *Ban*, in *Ireland*, letting for 1000*l. per ann.* (perhaps the most considerable in our Islands, and where the *Eels* are frequently caught from nine to ten pounds weight,) it is known they make periodical Voyages, going to the *Sea* to *spawn*, and the young fry return *against the stream;* and to enable them to do that with greater ease, at *the leap*, *straw ropes* are hung in the water to facilitate their Ascent.

The *Elvers* taken in the *Severn* about *April* are supposed to be the fry of the *Conger Eel;* they quite swarm during their Season, and are taken in a kind of Sieve, made of hair-cloth, fixed to a long pole; the Fisherman

standing on the edge of the water, during the Tide, puts in his Net as far as he can reach, and drawing it out again, takes multitudes at every sweep, and will collect as many during *one* Tide as will fill a Bushel. They are esteemed very delicate.

The *Eel* is placed by LINNÆUS in the genus of *Muræna*, his first of the *Apodal* Fish, or such as want the *ventral* Fins; the Eyes are placed not remote from the end of the nose, the irides are tinged with red; the under jaw is longer than the upper; the teeth are small, sharp, and numerous; beneath each Eye is a minute orifice, at the end of the nose two others. The *Eel* is furnished with a pair of *pectoral* fins, rounded at their extremities; behind which is the orifice to the gills, which are concealed in the skin; another fin on the *back*, uniting with that of the tail, and the *anal* fin joins it beneath in the same manner.

Eels vary much in their colours, from a *sooty* hue, to a light *olive green;* and those which are termed *Silver Eels*, have their *bellies white*, and throughout a remarkable clearness. There is another variety of this Fish, known in the Thames by the name of *Grigs;* and about *Oxford* by that of *Grigs* or *Gluts*. These are scarce ever seen near *Oxford* in the *winter*, but appear in *spring*, and bite readily, which the common *Eels* in that neighbourhood will not: they have a bigger head, a blunter nose, thicker skin, and are less fat than the common sort; are in less estimation, and seldom exceed *three or four pounds* weight. The Eels taken in the Serpentine River in Hyde Park are particularly made about the Head, which is large, and they are under-jawed like the Bull-dog. The *Black Eel* has a large head, a black back, and *yellow* belly; the flesh is reckoned unwholesome, especially when taken out of *mud* in standing waters. The Italians have the following proverb, "Give *Eels* and no Wine to your Enemies."

The common *Eel* will grow to a large size, sometimes to weigh twenty pounds, but that is extremely rare; in 1799 one was taken out of the

Kennet, near *Newbury*, which weighed *fifteen pounds*. WALTON mentions one caught near *Peterborough*, which was a *Yard and three quarters* in Length. As to instances brought by DALE and others, of these Fish increasing to a superior Magnitude, there is much reason to suspect them to have been *Congers**, since the enormous *Eels* they describe have all been taken at the mouth of the *Thames* or *Medway*.

* *Congers* differ from the common *Eel* in the following particulars. Their colour in general is more dark; their *Eyes* much larger in proportion; the Irides of a bright silvery Colour. The lower Jaw is rather shorter than the upper. The Side line is broad, whitish, and marked with a row of small spots, Mr. RAY says a *double* row. The Edges of the dorsal and anal Fins are black. They have more *Bones* than the common *Eel*, especially along the back quite to the Head. As to the Distinction that Mr. RAY and other Writers make of the small Beards at the end of the Nose, it ought not to be depended upon, they being sometimes found in both kinds, and sometimes entirely wanting. They grow to a much greater size. Doctor BORLASE assures us, that they are sometimes taken near *Mounts'-Bay* of one hundred pounds weight. Some taken near *Scarborough* were *Ten feet and a half long*, and *eighteen inches* in Circumference at the thickest part.

Mr. PENNANT believes the *Congers* generate like the *fresh-water* Species: innumerable quantities of what are supposed to be their Fry, come up the *Severn* about the month of *April*, preceding the *Shads*, which it is conjectured migrate into that River to feed on them.

Congers are extremely voracious, preying on other Fish, and on *Crabs* at the time they have lost their Shell, and are in a soft state. They and *Eels* in general are also fond of *Carcasses* of any kind, being frequently found lodged in such that are accidentally taken up.

Congers are an article of Commerce in *Cornwall*, and are exported to *Spain* and *Portugal*, particularly to *Barcelona*. The quantities that were formerly sent from *Mounts'-Bay* for five years were

	cwt.	qr.	lb.
1756	46	0	13
1757	164	0	21
1758	164	1	3
1759	213	0	3
1760	71	3	0

Some are taken by a single hook and line, but (because that mode is tedious and does not answer the expence of time and labour) they are chiefly caught by *Bulters*, which are strong lines five hundred feet long, with *sixty* hooks, each eight feet asunder, baited with *Pilchards* or *Mackerel*: the *Bulters* are sunk to the ground by a Stone fastened to them: sometimes so great a number of

No fish lives so long out of water as the *Eel;* so tenacious of life is it, that the parts will move a considerable time after they are flayed and cut into pieces.

them are tied together as to reach a Mile. The Fishermen are very fearful of a large *Conger*, lest it should endanger their Legs by clinging round them; they therefore kill them as soon as possible by striking them on the *Navel*. They are afterwards cured in this manner: they are slit, and hung on a frame till they dry, having a considerable quantity of Fat which it is necessary should exude before they are fit for use. It is remarkable that a *Conger* of a *hundred weight* will waste by drying to *Twenty-four pounds;* the people therefore prefer the *smallest*, possibly because they are soonest cured. During the process there is a considerable stench; and it is said that in the Fishing Villages the *Poultry* are fed with the *Maggots* that drop from the Fish.

The *Portuguese* and *Spaniards* use those dried *Congers* after they have been ground into a powder, to thicken and give a relish to their Soups. They were sold for about *Forty Shillings* the Quintal, which weighs *one hundred and twenty-six pounds*.

Mr. PENNANT remarks, that a Fishery of *Congers* would be of great advantage to the Inhabitants of the *Hebrides*. Perhaps they would at first undertake it with Repugnancy, from their absurd Aversion to the *Eel* kind.

Mr. BARRY in his History of the *Orkney Islands*, says, the *Congers* which are about six feet long and one in Circumference, frequent the Seas around those Isles, where it is often caught by lines set for other Fishes, but much oftener by the *Otter* which drags it ashore, devours a part, and leaves the remainder to be picked up by Carrion Birds, or carried off by the Country People. The *Common Eel*, continues Mr. B. is to be met with in all our Brooks, Locks, and in the Seas, and at certain Seasons, in great plenty in the Harbour of *Stromness;* the size is never large, seldom exceeding *two feet and a half* in length, and its *thickness* in proportion. The *Skin*, which is of a tenacious nature, is stripped off, and worn to prevent the *Cramp;* but the Fish itself, though excellent Food, is seldom brought to the Table, on account of some Antipathy which the People have to it.

A curious circumstance in the capture of the *Conger* occurred in July last. A Gentleman angling in the *Mersey*, killed two fine *Congers*, one of which weighed twenty-four pounds and a half, and the other twelve pounds. They were taken about an hour before the time of low water, and the bait used was the head and fore part of a small *Codling*. The station where these extraordinary fish were taken, was at a small distance off the *Cheshire* shore, between *Seacombe Point* and the *Black Rock*. So large fish have rarely been taken by angling with the hand-line. The sneads (in *Lancashire*, snoods), used on the occasion, were strengthened with strangs of fine brass wire. This most probably prevented the Fish from escaping. The larger fish took up nearly an hour in landing, and his ferocity was such, that, when hauled into the boat, he made a grasp at the hand of an Artist, who was assisting with an iron gig, in securing him. The *Conger* was esteemed a great delicacy at the tables

They are extremely voracious, and most destructive to the Spawn and small Fry of Fish; and Sir JOHN HAWKINS has spoken *feelingly* of their depredations not being confined to the young of *Fish only*, for his broods of *Ducklings* were all secured under water, by the large Eels with which his Canal abounded.

The haunts of the *Eel* are among the weeds, under roots, stumps of trees, in holes and clefts of the earth, both in the *banks*, and at the bottom in the plain mud, where they lie with only their heads out, watching for their prey; they are also to be found under great stones, old timber, about bridges, flood-gates, weirs, and old mills*, except when the water is rendered *thick* by rains, for then they come out, and will bite eagerly. They are in best Season from *May* until *July:* a *running line* should be used, which must be very strong, and the hook No. 3, or 4, with a plumb or pistol bullet upon it. They are to be angled for on the ground, and two or more rods may be employed: (if ground-bait be thought necessary, it should be the same as for the *Barbel:)* the prime bait is the *lob-worm*, and they bite eagerly all day, in dark cloudy weather, after showers, attended with thunder and lightning, when the water is high and *discoloured;* but those who venture upon Night angling, will have far greater success when the weather is *warm* and the Night *dark;* they are *then* to be angled for upon the *shallows*, where there is a *current*, or by the side or tail of a *stream*, with a sandy or gravelly bottom, with the bait on the ground; they will be felt to tug sharply when they seize the bait; give time (which is necessary both in *day* and *night* angling,) and there will be no doubt of sport from *night-fall* until *day-break*, when they directly flee to their hiding places.

The largest Eels are caught by *night-lines;* it is of little consequence where they are laid, as they will succeed in streams (where the Eels rove in search of prey) as well as in the still, deep holes of Rivers; and they will take frogs, black snails, worms, roach, dace, *gudgeons*, *minnows*,

* Eels frequently get into the Pipes laid for the Conveyance of Water, and there grow until the Current is stopped by their Bulk. An instance happened, November 1804, in Hanover Street, Long Acre, where several very large Eels were taken out of the Pipes, and the spot where these Fish were found is some miles distant from the Reservoir, where the Gratings through which the Water runs are made extremely close to prevent the Eels from passing. A second instance occurred in January 1805, when several of the Inhabitants of London Wall having made complaint to the New River Company that they had no water for several Days; the Turncock was sent to examine the Cause, and upon the Plug-hole being opened, there issued forth above Thirty large *Eels*, some weighing near five pounds; and a *Carp* was obliged to be cut before it could be got out of the Plug-hole. In June 1806, an Eel weighing *seven pounds* was taken from the Pipes in Ray Street, Clerkenwell.

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tables of the *English* Epicures of former days, and was generally cooked, as we learn from SHAKSPEARE and other Authors, with *Fennel sauce*. Of late years, it has yielded the palm to *Turtle*, *Turbot*, and the *Dory*. The *oil*, however, of the *Conger* is still much prized, as well as the oil of *Ray*'s *liver*, for dubbing the *boots* of fishermen, which are thereby rendered *water-proof*. What is also remarkable, the above Gentleman, about three years since, killed a *Cod-fish*, with the hand-line, in the same River, which weighed twenty-two pounds and a half.

which two last are the best,) loaches, bleaks, and miller's-thumbs. A sufficient quantity of links of *twelve* hairs should be doubled, and a hook tied to each link; these are to be noosed at proper distances to pieces of Cord of *fifteen feet* long; bait the hooks by making an incision with the *baiting-needle* under the shoulder, and thrusting it out at the middle of the tail, drawing the link after it; the point of the hook should lie upright towards the back of the *bait-fish;* fasten one end to the *bank* or a *stub*, and cast the other into the water, but not to the extent of the line, (as Eels will run a little before they gorge:) the lines should be taken up *early* in the morning; such of the lines as have Eels at them will be drawn very tight. *Dark nights* in *July*, *August*, and *September*, are the best for this kind of fishing. *Trimmers* baited with a *live Gudgeon* are sure to be taken by Eels. The *Wire* to which the hooks are fixed should be strong and well *nealed*, as the Eel struggles hard to free himself. Lines, with from twelve to twenty hooks looped on at different distances, will do well in *Streams;* but for *Standing Waters*, *Trimmers* are greatly to be preferred.

Another method of taking *Eels* when the water is clear and low, is called *Sniggling*, and is performed with a stick about a *yard* long, with a cleft at each end, and a strong needle well whipped to a small whipcord line, from the eye down to the middle. In baiting, run the head of the needle quite up into the head of a *lob-worm*, letting the point come out about the middle; then put the point of the needle into the *cleft* at either end of the stick, and taking both stick and line together in one hand (some of the line being wrapped round the hand,) put the bait softly into holes under walls, stones, &c. where *Eels* hide themselves; if there be an *Eel* there, he will take the *worm and needle* out of the *cleft;* draw back the stick gently, (having slackened the line,) and give time for his swallowing the bait; then strike, and the *needle* will stick across his throat; let him tire himself with tugging, previous to any attempt to pull him out, for he lies folded in his Den, and will fasten his tail round any thing for his defence. The largest *Eels* are generally taken about the hollow *stone-work* of old Bridges, (the Angler being in a boat,) and are sometimes caught in considerable numbers.

A third plan for taking *Eels*, is by what is termed *bobbing*, which is best managed in a Boat. This is done by taking a quantity of *well scoured lob-worms;* have a long needle, with three lengths of worsted *slightly* twisted together; put the needle lengthways through the worms, and draw them down on the worsted; when there are two yards thus prepared, then fold them up in links, and tie them to about two yards of good twine, and make a knot on it *eight* inches from the worms; and slipping a piece of Lead, with a hole in it, (weighing from a quarter to three quarters of a pound, according to the Current fished in,) down the line to the knot; fasten the line to a manageable pole, and let the lead lie on the bottom in thick muddy water, when the Tide runs up strong, or near the mouth of some river; when the *Eels* nibble at the bait, they can be felt; give some little time before it is pulled up, which must be *gently*, until near the Surface, and then hoist out *quickly:* the worsted sticking in the *Eels* teeth, prevents their loosening themselves until the line is slackened by throwing them into the boat, or on the ground; so soon as they are disentangled, throw the bait in again: frequently great quantities are thus caught, especially of *Grigs*. *Eels* are also to be *snared* in the same way as the Pike; and in the Fens numbers are *speared* by an instrument with three or four forks, or jagged teeth, which is struck at random into the Mud.

Terms used by Anglers explained.

Bawk, a knot in a hair or link.

Bed: hairs bed well when they twist kindly.

Bedding, the body of an artificial fly.

Break, a knot in the joint of a rod.

Chine a Salmon, cut him up.

Cock: a float cocks when it swims perpendicularly in the water.

Drag, an instrument to disentangle the line.

Drift, is a term when four or more Anglers are in company together; they are then called a *drift*.

Fin a Chub, cut him up.

Frush a Chub, dress him.

Gildard, the link of a line.

Gobbet a Trout, cut him up.

Grabble: fishing on the grabble is when the line is sunk with a running plummet fast to the bottom, so that the hook-link plays in the water.

Hang a fish: the Angler is said to hang a fish when he has fastened the hook in him.

Kink: a line kinks in trowling, when it is twisted between the top of the rod and the ring.

Leash of fish, three.

Pouch: a Pike pouches when he swallows the bait.

Prime: fish are said to prime when they leap out of the water.

Shoal, any great number of fish together.

Solay a Bream, cut him up.

Splate a Pike, cut him up.

Thrash, any thing which swims down the water and incommodes the Angler.

Trouncheon an Eel, cut him up.
Tusk a Barbel, cut him up.
Veer your line, let it off the reel after striking.

Having thus amply stated the various Modes of taking Fish with the *Angle,* it remains to say a few words respecting Ponds for breeding and preserving them; and to briefly describe those Nets best adapted to catch Fish, both in *stagnant* and *running* waters.



GROUP of FISH.

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Fish-Ponds.

ONE material point in the management of *Fish* is, to be able to have them immediately when wanted; a Second is, to have Supplies to recruit the Stock as it is diminished: this can never be effected without a certain order and method; and with *that*, nothing is more practicable*.

The *ancients* were so particular about their *fish*, and the *ponds* in which they were kept, that their value was astonishing. The fish in the ponds of LUCULLUS† sold, after his decease, for *three Millions* of *Sesterces*,

* The means of supplying Life with this Article of Food was, we are told, very imperfectly understood in this Country, or at least in part of it, since the poor Pagans in Sussex, though starving, knew not how to catch any fish except *Eels*, until Bishop WILFRED (who A. D. 678 took shelter in that District) instructed them in the use of *Nets*. He took three hundred fish at a draught, and by thus supplying the bodily wants of his Catechumens, he easily converted them to his Doctrines.

Mr. MACPHERSON remarks, that a *Century and half* preceding the above Date, the Natives of IRELAND and the *North-west* Coast of BRITAIN, and the adjacent Islands, caught *Salmon* and other Fish with *Nets*, but they knew nothing of the vast advantage to be derived from an extensive *Fishery*, and only caught Fish for their own Use.

Mr. PENNANT mentions that in 1382, a Ceremony was dropped, by which a Fisherman (supposed to be descended from EDRIC, one who used that Trade, A. D. 618) had a Right one Day in the Year to sit at Table with the PRIOR of *Westminster*, and to demand Ale and Bread of his Cellarer. The Founder of the Family had, it seems, in a stormy Night, conveyed St. PETER across the *Thames*, that he might consecrate the new-built ABBEY of *Westminster*.

† LUCULLUS, who presided as CONSUL, A. U. C. 680, was celebrated for his Military Talents and for his fondness of Luxury: the Expences of his Meals were immoderate, his *Halls* were

(£.24,218 : 15 : 0 sterling.) CAIUS HIRTIUS first introduced the keeping of *Lampreys* in Stews, and lent CÆSAR, during the time of his Triumph, *six hundred* of these fish, for which he would receive no Equivalent in *money*, nor any other *commodity*; but conditioned the Repayment to be by the same number and weight of *Lampreys:* his ponds and fish about his House, which was itself extremely small, were sold for *one Million* more than the above sum, (£.32,291 : 13 : 4.) To return to more modern Times, and when an Heir does not find such a resource from his Ancestor's fish, yet in populous Countries like *China* or *Holland*, where every Article of food is in request, and every spot of Ground is turned to the best account, great attention is paid to the structure and management of *Fish-ponds;* there Experience has taught men to ascertain the quantity of every kind of fish which any given Space can support; in the *former*, it is supposed that *ninety* brace of well-sized *Carp*, and forty of *Tench*, are a full stock for an *Acre of water*, and that a more numerous store would languish and die; in the *latter*, a far greater number will thrive in a similar situation. In some parts of *Germany*, where the domestication of fish is practised, a Suit of ponds are so constructed, that they can empty the water and fish of one pond into another; the empty one is then ploughed and sown with *Barley;* when the grain is in Ear, the water and its inhabitants are again admitted, and, by feeding on the Corn, are more expeditiously fattened than by any other management. For all their ponds

distinguished by the different Names of the GODS; and when CICERO and POMPEY attempted to surprise him, they were astonished at the Costliness of a *Supper* which had been prepared on the word of LUCULLUS, who had merely said to his Servant, that he would sup in the Hall of APOLLO. The Preparation however depended upon the word APOLLO, for his Rooms having all names, their Provision and Charge was allotted to each, by which means his Steward and Cook, so soon as the Room was mentioned, knew exactly what to provide. The Sum fixed for that of APOLLO was, according to PLUTARCH, *Fifty thousand Drachmæ*, or about £.1,250. In point of Expence, this is far behind the Supper given by ÆLIUS VERUS, who, at one Entertainment where there were no more than *Twelve Guests*, spent *Six Millions* of *Sesterces*, or about £.48,439. But it is to be noticed, that whatever was most rare and costly was provided. The Guest never drank *twice* out of the *same Cup*, and whatever Vessels they had touched (which were *Silver*, *Gold*, *Chrystal* and *Myrhine* Vessels), they received from the EMPEROR when they left the Palace. He also gave each of them a *Mule* adorned with richest Trappings, to carry them home to their several Houses.

the *Milters* are thought preferable, as they become sooner fat than the *Spawners*.

In this Country many Acres of swampy, moorish grounds, producing little feed for Cattle, and, in their present state, a trifling rent, might be profitably converted into *fish-ponds*, particularly within *thirty* or *forty* miles of the Metropolis. An *Acre* of water (after being two years stocked) will *annually* yield *two hundred Carp*, and *one hundred Tench*, that will sell upon the spot to the *London* fishmongers at a *shilling* each; an Income to be obtained from no other *produce* to which such sort of Land can be appropriated *.

* The Produce or Profit to be derived from Fish-ponds has not yet, perhaps, been sufficiently attended to in various situations, so as to afford correct conclusions; nor is it well ascertained what is the Annual Increase in Weight of specific kinds of Fish in different periods of their Growth, and under different circumstances of Soil and Water.

Sir HARRY FETHERSTONHAUGH, in a Pond of *twenty* Acres, but which the *Mud* has reduced to fifteen or sixteen acres of clear Water, generally has a Stock of twelve hundred *Carp*, and an equal number of *Tench:* this is at the rate of seventy-five brace per Acre; and in this proportion they thrive well. Suppose this water adds half a pound per annum to each of the 2400 fish which it feeds, it is 1200 lbs. weight; this, at *sixpence* per pound, is 30*l.* and for *fifteen acres*, *forty shillings* per Acre, at *ninepence* per pound, three pounds per Acre.

Mr. LOVEDEN, in 1803, gave the following account of the value of the Stock of Fish-ponds in different situations. He describes one in his own Park at BUSCOT in *Berkshire*, which has no supply of Water, except by Rains; but receives all the Drains of the House and Stables, from which in December 1802, he let off the water, and took 386 *Carp*, eight *Pike*, (which had been put in by mistake,) and seven *Perch*. Ninety-four Carp were from 3 to 3½ and 4*lb.* each. The *Eels* were from three to four pounds: the biggest *Pike* only four pounds. It was fished, and nearly the like quantity of Carp taken six years before: the Carp were then nearly equal in size, from two to three pounds each: this time there were several of one pound, none under; and Mr. L. was persuaded if the Stock put in had been all of similar Size and Age, at the last fishing very little or no difference would have been found in the Appearance or Weight of any. The Eels from this Pond were manifestly distinct breeds: one proceeding from the *Silver Eel* of the Thames, which the Game-keeper had put in; the other of a much browner colour, and a toad-like head, which must have originated in the Pond, which produces great quantities of *Muscles* *. Mr. L.

* Surely this must be erroneous, for it does not strike the Compiler that the abundance of *Muscles* in the Pond could in the least affect the form or colour of the *Eels* bred in it.

In forming a piece of Water of large dimension, some competent person will doubtless be employed to inspect and insure that the Bank is made *durable*, and will likewise so guard against Floods, that it be endangered by no sudden pressure against it. A common *tumbling bay* at each extremity of the *head*, fixed at the usual level of the water, with *iron*

proceeds to state that in the upper parts of Berkshire, the Lords of Manors have many Ponds on the *Commons*, from which they take *Carp* and *Tench* at stated Periods, and sell them to the Innkeepers at Reading, Henley, Maidenhead, Salt-hill, Windsor, &c. who keep them in Stews for a regular supply to their Customers. These Ponds are stocked with one hundred *Carp* or *Tench* to an Acre, and usually continue five years before they are drawn. The price of the Fish when sold by the *pound*, (and which is the best way of selling them,) is *One Shilling* for the Tench and *Ten-pence* for the Carp; when sold by *number*, they are measured from Eye to Tail, and sold as under:

	£.	s.	d.	
Tench under 12 *Inches* . . .	3	0	0	per hundred.
Measuring 12 ditto . . .	5	10	0	
Ditto . . 14 ditto . . .	7	0	0	
Carp . . 12 ditto . . .	5	0	0	
Ditto . . 14 ditto . . .	6	10	0	
Ditto . . 16 ditto . . .	8	0	0	

In 1800, Mr. L. (says Mr. PALMER of Holme-Park, near *Reading*) drew a Pond of 3¼ Acres, which had been stocked only three years, but the fish were one year old when put into it. The produce was,

195 pounds weight of *Carp*.
230 ditto of *Tench*.

425 pounds.

Which sold for 20*l*. 10*s*. or near 1*l*. 19*s*. 6*d*. Annually per Acre.

He drew the same Pond in April 1803, when stocked with *Tench* only. The produce 26*l*. or about two pounds ten shillings per acre. Besides the fish fit to kill, Mr. L. had stores innumerable. Having found the Ponds upon the Waste liable to be poached, and particularly with regard to *Carp*, he now stocks them with Tench, and finds they grow fastest where there is plenty of Mud.

Lord BRAYBROOK's ponds produced in 1803 Eighty *Carp*, weighing 240*lbs.*; and sixty *Tench*, weighing 64*lbs*. The fish were sold to Mr. DICKSON of Henley; were three years old; and were weighed in lots of *Ten* fish each: the largest Carp 37 and the smallest 26*lbs*. the lot. The two parcels of Tench weighed 33 and 31*lbs*.

grating a foot or *eighteen inches* above that *level*, will allow a proper Vent for the superfluous water, and also stop any Fish from escaping through, if disposed to move in consequence of any rapid influx. The width of the Grating must be according to the quantity of water, which sudden Rains can occasion to flow through the Pool, and if made to present the point of a *Triangle* towards the pond, it will perhaps yield a quicker passage to the Stream than if the Grating was set straight, and only to cover the breadth of the Tumbling bay.

The *Sluice-pipe* should be laid low enough to draw off all the water, and be extraordinarily well rammed with *clay* at the bottom; the *plug* must be heart of Oak, as indeed should all the timberwork; the *planks* which surround the *plug* should be so perforated, as to allow the water, but the holes be too *small* to admit any Fish to pass; and the whole should be surrounded with a Frame, to prevent its being strained by a *boat's* running against it, which might cause it to be leaky.

All ponds should have a Rivulet or Brook running *through* them, or considerable *fresh* springs arising *in* them, so that there is a *Current*, although ever so diminutive, passing through them. One or other is indispensable, not only as it assists the feed and comfort of the Fish during the *heats* of Summer; but as it operates against the effects of *Frost*, which, without a Current of water (that always conveys Air,) will frequently be fatal to a whole Pond of valuable Fish. The *Tench* is the only Fish that is *Frost-proof*; amongst the other sorts there is little difference; when one complains, they are all in imminent danger, but the *smallest* Current of water will avert it; and Fish are never known to suffer by *Frost* in ponds so supplied, and where the water is so deep as not to be wholly congealed down to the *mud*. In ponds that have *Sluices*, the starting the plug so as to lower the water slowly a few inches will afford that current of Air as to revive the Fish.

Many persons break holes in the *ice*, putting in *straw*, *dung*, *wood-*

faggots, &c. and do not suffer the holes to be frozen over by frequently moving them; but all these Expedients are ineffectual, and the only way of saving fish in waters shut out from all natural supply of *Air* by *Frost*, is to remove them quickly as possible after shewing themselves under the Ice, (for fish naturally, in cold weather, lie as *deep* as they can, and nothing but the pangs of death make them move,) into other waters supplied by a Current.

After a pond has been shut up by *ten* Days freezing, if any suspicion concerning the state of the fish arises, by cutting a Hole in the middle, and two or three at the sides, their Condition may be known: if *unwell* they will *appear*, and there is no Alternative but with all the hands that can be mustered to take out every fish that comes to the Holes: those taken out *may* be preserved; all that are left behind will most probably be lost. Fish thus rescued, when other waters are not immediately at hand, have been put into large Tubs in some outhouse, not far from a fire, until they appear recovered, (which will be plainly perceived by the numbness being removed;) when, by freshening the water every *twelve* hours, they may be kept until there is opportunity to convey them to other waters.

The following fact is credibly asserted, which shews that the Flesh of fishes may be relieved from the effects of violent Cold, by a different process to that used with most other Creatures:—"That fish frozen with a shell of *Ice* upon them have been put into a tub with water *warmed* to its *Midsummer* heat, and in *six or seven hours* the *Ice* has dissolved, and the fish were *brisk* and *well*."

Another circumstance *essential* in the formation of pieces of water, is that if the place admit, there should be one or more *Islands* in the *middle:* but the *water* round these Islands should be at least *five feet deep:* they will then be what they ought, a Shelter to the fish. As these Islands are generally made, the water round them is *shallow;* an experienced *Poacher* has nothing to do but to disturb the water, (and by even

drawing a small Rope along the bottom he can effectually do it,) and away fly the fish (especially *Carp)* to those Retreats, where he very coolly walks after them, and there takes out with *his hands* as many as suits his own, or the party's, strength to carry off; and this without any trace of *mud* or *weeds* being drawn to the shore, to cause suspicion, and prevent his *future* Visits.

If an Island surrounded with *deep* water cannot be had, a space *nine feet* long, and *five* broad, should be encircled with Oak piles, to which Elm boards should be nailed, three feet or more up from the bottom (the tops of the piles may be left a foot longer;) this should be made where the water stands *six or seven* feet; the fish, upon any alarm, will retire thither, and remain out of reach of *Nets*, or of the *Poacher*'s *fingers*, by *groping*.

Weeds in ponds, however unseemly to the Eye, preserve them from the ravages of the *Poacher;* they afford Shelter for fish to *spawn* in, and form to them an agreeable Shade in sultry weather, especially the *Water lilies* and *flags* for Pike and Perch; they likewise serve to restrain the Current, and thereby in Summer assist in keeping up a greater body of water. Their growth, as well as all *sub-aqueous* plants, is known to have an increase proportionate to that of Vegetation in the *open air*, after a shower of *rain*. If Water (from their foul appearance) must be cleared from *Weeds*, SWANS will effectually do it. Two pair of *Swans* kept a large piece of Water, at *Burghley*, the Marquis of EXETER's, free from Weeds, which used to employ *three* Men for *Six Months* in the Year to preserve it tolerably clean.

In stocking ponds with *Carp* the utmost caution should be observed to procure the Stock from *large* fish. In *Sussex*, where, perhaps, this Fish is more numerous, and more attention paid to its improvement, than in any other County, persons who are concerned with waters, and who consider their produce as an article of Commerce, keep *Carp* to breed

from whose weight is from *eighteen* to *twenty pounds* each. The Young of such fish attain a Growth almost incredibly more rapid than those derived from *stunted Carp*. Store *Tench* ought also to be selected from *large* and *healthy* fish, or they will never answer their Owners wishes or Expectations.

Ponds should not be overstocked; nor, in the Opinion of many, be suffered to remain *unfinished* longer than *three* Years, by which it will appear what fish thrive best; and by lying dry some Months, the bottom may be sown with Oats, which will when green be good food. In ponds so situated as to have *Communication* with each other, *never* put into the *upper* of them either a *Pike*, a *Bream*, or a *Roach;* the *Spawn* will get through the Gratings, and by that means all the *lower* ponds will unexpectedly swarm with them. The *Pike* will destroy the *fry* of the *Carp* and *Tench*, and the *two latter* will consume all the food which should be the subsistence of both *parents* and *progeny; Pike*, *Bream*, and *Roach* should, therefore, on no account be ever put into the *first* or *highest* of a Succession of Ponds*.

* Some have recommended in raising Carp to have *three* ponds. *One* wherein the fish are to Spawn, (which is mostly from May to July,) and in which they should continue during the Summer and ensuing Winter. A *Second* for the Convenience of nursing up the young fry; into which they should be put the end of March, or early in April following, choosing a calm but not Sunny day for their removal, and being careful to prevent their being destroyed when coming to the Sides of their new habitation. In this Pond they may remain two Years, and become four, five, or six inches long. The *third* or Main pond is for the Reception of those that are so grown as to measure a foot or more in length, including their heads and tails.

The proportions advised for the Stocking these different Ponds are—For the *first* Sort, per Acre, "three or four *Male*, and six or eight *Female* Carps, those of *five*, *six*, or *seven* Years old, in good health, with full Scale, and fine full Eyes, and a long body, without any blemish or Wound," are to be preferred. The pond must be previously cleaned of all sorts of Voracious Fishes, and other Animals, as "Perch, Pike, Eels, and Trout; the Water Beetle, and also the Frogs, the Newts or Lizards," have a warm and open exposure with Soft Water, and all kinds of Water-Fowl kept from it. For the *Nursing pond* a *thousand* or *twelve hundred* Carp may be not more than sufficient for an *Acre;* and for the *Main* pond one to every square of fifteen feet is the allowed Space, as their growth depends greatly on the room and quantity of Food.

The Ova of fish are wonderfully numerous; their prolific powers are detailed in Mr. HARMER's *Tables*, and the vast increase both of the *Carp* and *Tench* removes all apprehensions of a Scarcity where a very limited number indeed of *milters* and *spawners* are kept for breeding: the pond best adapted for this purpose is one having Rushes growing about it, and where there are *gravelly* Shoals, upon which some cast Bavins, to protect the spawn and fry: Experience has shewn that the *first Season* after a pond has lain dry during the *Summer*, Carp, Tench, and Perch, will breed most plentifully in it: and they will do the same in a Pond fresh made. The Compiler turned the Current of a brook into a very large *gravel pit*, (after furnishing it with a *sluice*, and conveyance for the *waste* water) that had not been worked for years, and was swarded at most parts of its bottom; he put into it about *thirty* brace of *Carp*, of which none weighed less than *eight*, and some as much as *eleven*, pounds each Carp: the produce was, the next year, astonishing; he caught at one throw, with a *Minnow* Casting-net, upon the shallow at the mouth of the pond, 1025 Carp, from

Some advise the stock to consist of Carp and Tench, *three* to a square Perch; and in first stocking large Waters, where they extend to three or four acres or upwards, *Carp three hundred* to the Acre: and in restocking, after two or three Years, *four* hundred. For *Tench* the first should be more numerous than the Carp, and the restocking may be so high as Seven or Eight hundred to the Acre. *Perch* being such great breeders, six hundred of them to the Acre will be sufficient.

Water that is rich and *white* suits Carp best; that which has a thicker Appearance, and a greater deposition of muddy water, is preferable for *Tench*. *Perch* are capable of being raised in almost any Water. *Eels* succeed best where the ponds are fed with Springs, and there is a large portion of rich Sediment. *Pike* should never be kept but in separate *breeding* Ponds, where the supplies of small fry are very considerable, and are not wanted for Stores. *Carps*, *Tench*, and *Perch*, and a few *Eels* occasionally, are the fish principally cultivated with a view to profit; but *Perch* and *Eels* should not be admitted where the Waters are but thinly stocked, as they are great devourers of young fish. Carp and Tench answer best together, when the Ponds are extensive; in others, the former being the most powerful fish, beats and deprives the latter of his Food. Carp seldom are productive to their Owners in less ponds than half an Acre, whilst *Tench* thrive in those of any Size. *Perch* and *Eels*, also *Tench* and *Eels*, succeed well together; and it more frequently happens that *Carp* injure themselves by *Breeding* than *Tench*.

one to *two inches long:* a considerable number of these were given to the Gentleman who lived at Little Waltham Hall, who had some very good pieces of Water, and into one of which, of about two Acres, they were put: *five years* after the pond was fished, and the same *Carp* weighed, many of them, upwards of four pounds each; an instance decidedly in favour of the Stock of *large Carp.*

In taking fish out of Ponds to be put into others one caution is, to *bruise* and *handle* them as little as may be: when the water is drawn low, and Nets are employed, the fish (which will probably be numerous at a haul) should not be drawn directly to shore, but taken out of the Net whilst in about *eighteen inches* of water, they will be clearer from *mud*, and less liable to *bruises: Hoop-nets* should be fixed upon poles, to hand them ashore, and not too many fish put into one Net; if this sort of *machine* is not to be had, *flag-baskets* may be a substitute; but when a pond is designed to have all the water let off, and the fish shifted, these *Hoop-nets* should always be in readiness; in them they can be placed clear, or afterwards cleansed from the *mud* with little trouble, and still less damage to the fish.

All fish bear carriage best in *Winter;* that is, from *November* until *March* is over: should there be a necessity for their being removed during Summer, the *Night* is the only time for doing it with any chance of safety: large *Carp* and *Tench* will move best upon *clean*, *dry*, *wheat Straw;* the fish to be laid flat upon it at the bottom of a Carriage, or in flat-bottomed Baskets; but large fish will not bear to lie one Tier over another for any considerable distance, nor is it worth the risk; those who know the *Value* of full-grown fish will bear willingly the Expence of a *second* Journey to convey them safely, rather than by packing them too close, destroy one half of what they carry. The *sooner* fish that are to be moved are stowed in the Carriage or Baskets, after being taken from the pond, the better; they will be more able to bear the deprivation of their Element when just taken from it, than when exhausted by their gasping and struggles

on the Grass. For very *small* fish *Water carts* may answer, and preserve them well, but the mere jolting of the water in the Cask must drive *large* fish either against the sides of it, or against each other, with such Violence as to be extremely injurious, and generally fatal to more than one half of the Cargo: the Cask must be replenished in its progress, wherever *fresh, clean* Water can be had; and in taking the fish out, *Hoop-nets* should be held underneath the Stream, from the opening whence the fish are to issue, and after receiving a few, empty them into the water for which they are destined.

Nets.

Of these there are great Varieties; and almost every Individual believes he has a peculiar plan of forming them superior to his Neighbour: no set of Men are more bigotted to their own Opinions upon this subject than the *London Net-makers*, some of whom, however neat their work, and apparently well disposed for the intended purpose, are so far from being competent Judges, as scarcely ever to have seen many of the kinds of Net they deal in, ever set in Water during their lives; it is not extremely probable that under such disadvantages, they can know more than their Customer's order tells them, which generally consists in desiring a Net such a number of *Yards* long, and so many *Feet* in depth; respecting the *hanging* of the Net, both parties are usually silent, and perhaps from the same Cause. As a *practical net*-fisher, the Compiler (than whom few Men have seen, or *in the water* assisted more) ventures to give a few hints, which his brother Sportsmen may not find unworthy of Trial.

In the making a *Drag-net*, the size of the *mesh* should never be less than *one inch and a quarter;* there should be an extent of *three times in length*, and *twice in depth*, of the *plain net*, before it is hung upon the *Cork, and Lead lines*, (that is, if the *drag* is meant to be *twenty yards long*, and

twelve feet deep, there must be sixty yards of Net in *length*, and twenty-four feet in *depth*, for a *sheet drag;* if made with a *Cod*, it must be let in with great care as to the *widenings*, so that in fishing it keeps a proper open Centre.) As Drag-nets are usually *hung*, any one who is *in the water* when they are used, will feel, when the lines are hauled, the *lead line* above the *calf of his leg*, and frequently above his *knee*, and that continued to very near the *bosom* of the Net. There is no occasion to remark upon the chance of Success such an Implement affords.

Always use *two*, if not *three*, *Flews* with the Drag; one or two flews can then be kept *forward*, for the drag to force to; and in fishing *every hole*, *back the drag* with a *flew*, that is, after the Drag approaches close to the *first flew*, of course *that* will be pulled on one or other side of the River; if any fish are in it they should be taken out, and so soon as the Drag-net has passed let the *flew* be drawn back into its *former* Station; the fish that are disturbed by the Drag (from the deficient manner in which their *lead lines* have been shewn to keep a regular Sweep at the *bottom)* soon perceive an Opening to escape beneath it, and in striking rapidly to their old Harbours, run headlong into the *back Flew;* the Discolouring of the Water from the trampling of the people in, together with the motion of some part of the Drag upon the Mud, all contribute to the Success of this Expedient, by which the best fish will always be captured.

A Drag-net should always be used *up the stream;* however low the water in a River may be drained for the convenience of those fishing in it, there will still be a *Current* sufficient to preserve the Water clear enough for *stumps* and *hangs* of various descriptions to be avoided; besides, the drain of the water keeps the *meshes* of the Net extended, and enables it to fish with every advantage: on the contrary, when drawing *down the stream*, the *mudding* of the Water *progressively* prevents the discovery of Stubs, &c. that would injure the Net, and aids the Escape of the fish, and more-

over drives the Net into *folds*, which the leaves of the *Weeds* turning the same way not a little assist.

Never allow the *fish* that a *drag-net* brings to land to be *indiscriminately* destroyed: the *largest* of the inferior kinds, such as *Roach*, *Dace*, &c. may be distributed to the Assistants, and to the Poor, who always most gladly receive them: the *smaller of all sorts* should be returned into the River for future draughts. This precaution is superfluous to the real Sportsman if *present*, but it is an essential *Order* to be delivered to, and strictly obeyed by, his Servants, in his Absence.

Flews

may be described as of *two* kinds; the one for *drawing*, the other to be placed either as a Stop to a *drag net*, or to be set and left quietly standing in a Pond or River to intercept the Fish. Those for *drawing* should be made of *stouter* materials, and the *Lint* of all should be silk: the expence is greater at the first; but the Compiler has had *silk flews* of both sorts, where the *lint* has outlasted *three* sets of *walling*, and still remained perfectly good; it must however be understood that great care was observed in the *washing* and *drying* his Nets, for Silk has no peculiar power any more than *Hemp*, to defend itself against the *Heat*, which a few hours will generate, when thrown together full of *mud* and *weeds*, and both, by such slovenly Inattention, are as quickly spoiled: yet carefully managed, a *silk net* will endure to the utmost wishes of the Proprietor; and such is the quality of *silk* when wet, that the Fish which touches it is sure to be entangled, the Texture is so pliant, that a Fish is enveloped before being sensible of it, and the more he struggles the faster he is confined.

For a *dragging Flew*, the *lint*, two inches and a quarter *mesh*, *seventy* meshes *deep*, and *fifty-two* yards in length, (to be hung *twenty yards* long, and *eight feet* deep;) it will take *four pounds and a half of silk*.

For a *Setting* Flew, of a similar *mesh*, and *ninety* deep, with the same length of *lint*, and depth of hanging, *five pounds and a quarter of silk;* from these may be calculated any larger or smaller size. Never *tan* or colour Flews; it renders them easier to be discerned by the Fish.

The *Walls* or *trammels* of Flews should be at least *eighteen* inches square (but two feet is preferable;) those of *nine* or *twelve* inches, hung *diamond* fashion, are only calculated to receive a Fish that strikes *point blank;* it is impossible for a good-sized Fish to get in *sideways* (whereby they are more entangled than by touching the Flew in any other direction,) besides these small *wallings* render a Net more cumbersome, and are for the most part useless. Flews should be very lightly *leaded*, the Floats or corks nicely adjusted, and both *Leads* and *Corks* of a *length* and *size* that will prevent their getting through the *Meshes of the Lint* in any Direction, and entangling it. Where the Fish run very large, the *mesh* of the *lint* may be extended, always recollecting that in *Thread nets* the materials for the *lint* must be three twisted, and cannot be too *strong* or too *fine*.

In *Carp* fishing, drawing with *Flews* is the most killing mode yet devised; they slide so lightly over the Mud, and hamper the Fish in their progress through the Water, which the *drag-net* does not. The quantities of *Carp* which the Compiler has taken by this plan out of the Fobbing Fleets were prodigious; at one draught a Flew of twenty yards was so loaded that nine persons could scarcely so ease it up the Bank as to prevent its being broken to pieces from the number of *Carp*, of which the smallest did not weigh less than *seven*, and many of them as much as *eleven* pounds each Fish; and it was supposed that the Bulk together was upwards of *seven hundred weight*.

In Waters where *Carp* have been much used to Nets, they become so *shy*, that the instant they find a Net behind them, they endeavour to leap over the *cork* line. By drawing a second Flew about *three* yards behind the first, they drive headlong into it, after escaping from the first. *Mullets*

might perhaps be more numerously taken by this Plan than any other, as they constantly leap the Nets.

When fishing with *Flews*, either in Rivers or Ponds, it is most ridiculous to be plunging in and beating the Water. (Some employ a rope tied to a *Horse's skull*, others have poles for the purpose, with *old shoe* soles nailed to the end.) *Pike*, *Tench*, and *Perch*, will more readily strike the *Flew* when the Water is *undisturbed* and at rest, than from all the Violence that can be exerted, and *Carp* flee to and keep in their Harbours at the least Noise. *Flews* do more execution at *night* than in the Day, for two reasons, that the Fish are *then* roving about upon their Feed, and, that there is no Uproar in the Water to make them conceal themselves from expected danger*.

The Casting-Net

may be successfully employed in a certain depth of water, viz. Gudgeon-Net at *four*, and large meshed Casting-net from *six* to *eight* feet: in the making, great attention must be paid to putting in the *Widenings*, or the Net will never open *freely*, however skilful the person that throws it. In

* At Hudson's Bay, the Indians have a Mode of setting their Nets under the Ice, by which they supply themselves with great quantities of Fish. They first ascertain its exact length by stretching it out, a number of holes are then cut in the Ice at ten or twelve feet distance from each other, and sufficiently numerous to extend the Net its full length; a Line is then passed under the Ice, by means of a light Pole, which is first introduced at one of the end Holes, and with the aid of two forked Sticks this Pole is easily conducted or shoved from one hole to another, under the Ice, till it arrives at the last. The Pole is then taken out, and both ends of the Line being properly secured, is always ready for use. The Net is made fast to one end of the Line and hauled beneath the Ice, a large Stone is tied to each of the lower Corners, which keeps the Net expanded, and prevents its rising from the bottom. In order to search a Net thus set, the two holes at the extremities are opened, the Line is veered away by one person, and the Net hauled from under the Ice by another; after the Fish are taken out, the Net is easily drawn back to its former Station, and there secured as before for future Examinations.

preparing it for Casting, it is not to be taken upon the shoulders so *short* as to prevent the *Leads* having their proper Swing, which is to be aided by the corresponding Turn of the *Caster*'s body, at the *exact* moment of delivering it from his Arm; and the first object is, to let the Leads all break the Surface at *once*. Many persons jerk one part of the Net high in the Air (which assists the *spreading,)* whilst the other part of the *lead-line* drops close to the Caster's foot, making a variation of *some seconds* in the fall of the different *leads* into the water: Fish must be very crowded, or extremely sleepy, if they remain within the *curtailed range* and *slow sinking* of a Net so cast. The nicety of the Art is, to be able to cover any particular Spot, and to shape the Net accordingly; and no one can be deemed a Proficient unless he is an *Ambidexter*, and throws from either Shoulder, as the turning and holes in a River may require.

For *Carp*, or large Fish, the *mesh* should be an *inch and three quarters*, and the *circumference* of the *lead-line* not less than *twenty-four* yards, and from that to *twenty-eight:* if made of *Silk* it will sink more *speedily*, and of course will admit to be thrown with success in *deeper water* and over *weeds*. By baiting a place in Ponds with grains, worms, or greaves, the Fish may be collected, and the *Casting-net* thrown over them: should there be much *Mud*, let the Net remain quiet some minutes, and the Fish will rise from the Mud, into which they may have sunk themselves at the noise of the Net.—N. B. A piece of *crumb* of *bread* put into the Stomach of either Carp or Tench suspected to be tainted with the Mud will absorb all the disagreeable Taste, and which should be taken out before they are sent to Table.

The Hoop-Net

is a very destructive Engine. For large and deep Waters, the *mesh* should be *inch* and *three quarters*, the length full *nine feet*, and the *hoops* (of which

that in the *Centre* should be iron, rounded like a *Curtain rod*, and painted *red*, to prevent its rusting) should be strong, and three feet high. In laying *Hoop-nets*, place them where the Water gets tolerably deep from a *gravelly Scour*. All the infallible Attraction of *brass Candlesticks*, *yellow Ribbands*, *flowers*, and *looking-glasses*, are superseded by the Arcanum of encircling a *live fish* brought from *other waters* in each Hoop-net: whether the old Inhabitants approach the Stranger out of *Vengeance* or *Curiosity* remains a mystery, but that they *will run into the Hoop-net to get at him* the Compiler positively insists. It was a Secret, which a Game-keeper would not impart, until after being in his Service for many years. *Old Jonathan* always requested to have the Management of the Hoop-nets left to himself, and would allow of no Assistant, and his Plan (the above) always proved successful.

Stub-Nets

are very useful in catching *Carp* or *Trout*, when they flee to the Banks. They should be made of very strong Twine, *inch and quarter mesh*, be *nine feet long*, with *cork* and *lead*-line; upon which there should be plenty of each: a few *widenings* should be thrown into the middle, so that there may be a little appearance of a *bag*; the Net is then to be firmly fastened (so that it stands from lead to cork, three or four feet deep) to two *Ash* pitch-fork handles, shod with Iron spikes at one end. In surrounding a Stub, one *spike* is to remain fixed in the ground, whilst the other is thrust underneath the Stub: the Fish thus annoyed, try to regain the deep water, and strike into the bosom of the Net, which is then hoisted up, the Fish taken out, and the Net put down for other trials. If the Stubs are very *jagged*, both Spikes are to be stuck in the ground as close as possible to the Harbour, and the parties grope with their Hands, and those fish which escape their fingers are caught in the *stub* net.

We may be excused for here introducing a Song written by Mr. PRATT.

Mankind are all *Fish*, and I'll lay you a Bet
I prove that they all will come into the *Net*.
The Lawyer's a *Shark;* and they who in shoals
Run into his Jaws, must be *Flats* or poor *Soles*.
The Lobster's a Turncoat, the Sluggard a Snail;
The Curate a Shrimp, and the Vicar a Whale;
The Soldier's a Sword-fish; the Critic a *Carp*,
That delights in the Mud, and though wary, bites sharp:
The Heir is a *Gold-fish*, but turns to a Gull,
True Lovers are *Oysters*, both silent and dull;
The Poets are *Spawn*, but are scarce worth a drag,
Young Misses are *Mackerel*, all caught by *Red Rag;*
Their Swains, altho' *sly fish*, do frequently feel
That a fair and fresh *Mackerel* will turn to an *Eel*.
A Rake's a *Dorado*, persisting and rude;
A Beauty's a *Flying Fish*, always pursued.
Thus by *Hook* or by *Crook* they are all to be caught;
Nay, some wise ones have said they are all to be *bought;*
Some at high, some at low, some at fair Market Price,
From a Farthing per pound to a Guinea a *Slice*.

Laws relating to Fish.

By the Statute 3 *Ed.* I. c. 1. none without License shall fish in another's Vivary, (a place where fish are kept, 2 *Inst.* 162,) on pain of imprisonment, ransom, and double damages to the party, if he will sue; if not, the KING shall have the suit as against the Peace; and persons indicted shall be attached and distrained to appear within a month; then a second *distringas* to appear in six weeks; and, on default, shall be convicted and fined. And misfeasors in fish-ponds shall make amends, &c. c. 20.

By the Stat. 13 *Ed.* I. c. 47. and 13 *Rich.* II. 19. none shall take Salmon between 8*th September* and 11*th November;* nor young Salmon with engines at Mill-pools, between the middle of *April* and 24*th June;* nor with nets or engines destroy the fry of fish, on pain of having the Nets burned for the *first* offence, of imprisonment for a quarter of a year for the *second*, and of a whole year for the *third.*

By the Stat. 17 *Rich.* II. c. 9. Justices of Peace shall be conservators of the above statutes, and may appoint under conservators, and at *Sessions* inquire of defaulters, &c.

By the Stat. 1 *Eliz.* 17. none shall take the young fry or spawn of fish; nor kill Pike under *ten*, Salmon under *sixteen*, Trout under *eight*, or Barbel under *twelve* inches; nor fish, unless for smelts, loaches, minnows, gudgeons, or eels, but with an *angle*, or a *net* of a mesh of *two inches and a half*, on pain of 20*l.* of which Justices of Peace may inquire if no presentment in the Leet within a year.

By 22 and 23 *Car.* II. c. 25. a person convicted by confession of one witness, within a month after the offence, before any Justice of Peace, of taking fish in a river, pond, &c. or assisting thereto, *without consent of the Lord, or the Owner*, shall pay to the party not exceeding treble damage, and to the poor not exceeding ten shillings, what the Justice thinks meet, to be levied by distress and sale, &c. and in default to be committed, not exceeding a month, unless he give Bond, with surety, not above *ten pounds*, not to offend more.

By the Stat. 4 and 5 *Will.* and *Mar.* 23. none shall keep any Net, &c. for taking fish, other than the Owner or Occupier of a river or fishery: and the owner or occupier of a river or fishery, or any *authorised by them*, may seize them from persons using the same without Consent.

By Stat. 5 *Geo.* III. c. 14. persons stealing fish from any river or pond, in a park or paddock, *fenced in* and *inclosed;* or from a garden, orchard, or yard adjoining or belonging to a dwelling house, or aiding or receiving, to be transported for seven years, on conviction at Gaol-delivery.

For stealing fish in *other inclosed ground*, private property, forfeiture 5*l.* to the Owner, or commitment for six months by one Justice.

By the *Black act* (9 *Geo.* I. c. 22.) it is made *felony*, under some special circumstances, to steal in a fish-pond. If any person shall unlawfully and maliciously break down the Head or Mound of any fish-pond, whereby the fish shall be lost or destroyed, or shall *rescue* any person *in custody* for such Offence, or procure any other to join him therein, he shall be guilty of *felony*, *without benefit of clergy*.

CONVICTION.

A conviction on this act (5 *Geo.* II. c. 14.) must shew that the fishing, &c. was without Consent of the Owner; and it must appear upon Oath who was the Owner. 4 *Burr.* 2279.

If a man is convicted of taking fish, without saying of *another person*, or in another *person's pond*, or without the *consent of the owner*, (or *stealing Qu.)* it is bad. *Rex* v. *Mallison*, *M.* 32 G. II. 2 *Burr.* 679.

ADJUDGED CASES.

In Rivers *not* navigable Land-owners have the right of fishing on each side, commonly to the middle of the Stream; in *navigable* rivers it is *prima facie* in the KING, and is public; but a private person may have an exclusive right by Grant or prescription. *Carter* v. *Murcot*, *H.* 8 *Geo.* III. 4 *Burr.* 2162.

It is said those are Trespassers in ponds who endeavour to take fish therein, though *none are actually taken.* 2 *Inst.* 200.

It has been held that where the Lord of the Manor hath the Soil on *both sides* of the River, it is good evidence that he hath the *right* of fishing, and it puts the proof upon him who claims a free fishery; but where a River ebbs and flows, and is an arm of the Sea, there it is *common to all;* and he who claims a privilege to himself must prove it: for if trespass is brought for fishing there, the Defendant may justify that the *place where* is an arm of the Sea, in which all the KING's subjects hath, and ought to have, *free Fishery*.

In the *Severn* the Soil belongs to the Owners of the Land on each side; and the soil of the *River Thames* is in the KING, but the *fishing* is common to all. 1 *Mod.* 105.

He who is Owner of the Soil of a *private* River, hath a separate or several Fishery, and he that hath *free fishery* hath a property in the Fish, and may bring a possessory action for them; but *communis piscaria* is like all other common. 2 *Salk.* 637.

There needs no privilege to make a *fish-pond*, as there doth in the case of a *warren*. 6 *Mod.* 183.

In taking fish *in a trunk or net*, Larceny may be committed of them. 1 *Hale*, 511. But of fish in a *River or Pond* Larceny cannot be committed. *Ibid.*

A person claiming a free fishery, a several fishery, or a common of fishery, must shew the Foundation of his Claim; for the right is *prima facia* in all the KING's subjects, or in the Owner of the Soil. 1 *Mod.* 106.

The Owner of a several fishery may lawfully detain Nets, or other Engines, doing damage; but if he *cut* or *destroy* them, an Action of Trespass will lie. *Cro. Car.* 228.

The Owner of a *several fishery* hath a privileged property in fish therein, and Trespass will lie for taking them. *Ibid.* 553.

An action of Trespass was brought for *cutting* the plaintiff's Oars and Nets. The defendant justifies, for that he was seized of a several piscary, and the plaintiff, with others, endeavoured with their Oars to row upon his water, and with the Nets to catch his fish; and for the safeguard of his fishing he took and *cut* the Nets and Oars, &c. This was adjudged to be no good Justification, because he may have taken the Nets and Oars, and detained them as *damage feasant*, and so have stopped their further fishing. *Cro. Car.* 228.

An action does not lie for fishing in a river where the Tide ebbs and flows; for the property of the Soil of all such rivers is in the KING, and all persons have *prima facia* a right to fish therein. 1 *Mod.* 105.

A person who fishes in the fishery of another, for the avowed *purpose* of giving rise to an Action to try the Right, is not liable to a *penalty* under 5 *Geo.* III. c. 14. 2 *Dougl.* 517.

Fisheries are of three sorts; namely, *several, free, common.* To constitute a *several* fishery, it is requisite that the party claiming it should *so far* have the right of fishing, independent of all others, as that no person should have a *co-extensive* right with him in the subject claimed, (for where any other person has such co-extensive right, then it is only a *free fishery:*) but a *partial*, independent right in another person, or a *limited* liberty, does *not* derogate from the right of the general Owner. 4 *Burr.* 2817, 8.

But the Court did not determine the question, "Whether a person can claim a *several* fishery without being *owner of the soil.*" *Ibid.*

The Water-bailiff has no right to seize the Nets or Fish in a person's own fishery, as prohibited by 1 *Eliz.* c. 17, without previous Presentment or Conviction. 3 *Burr.* 1770.

The Violation of this public law (of 1 *Eliz.* c. 17.) is not within the idea of a *nuisance;* the method prescribed by it must be pursued. *Ibid.*

There may be a prescriptive right in the subject to a several Fishery in an arm of the Sea. *Mayor, &c. of Orford* v. *Richardson*, 4 *T. R.* 439.

The right of fishing in the Sea is a right common to all the KING'S subjects. *Ward* v. *Creswell*, *Willis's Rep.* 268.

Every subject, of common right, may fish with lawful Nets in a Navigable river, as well as in the Sea. *Warren* v. *Matthews*, 6 *Mod.* 73. The Crown has only a right to Royal-Fish. *Ibid.*

An *Indictment* lies for fishing in the *private Pond* of another. 6 *Mod.* 183.

Parlet v. *Gray*.—Trespass.—The case was, that a Man having fishes in his pond, made his Executors and died. The *defendant being his Executor*, takes the fishes, and the *plaintiff as heir* brings trespass; and upon this matter disclosed it was demurred in Law. Adjudged without argument for the *plaintiff*; for although it be *felony* to steal out of a Dam or *pond* *, or trunk (18 *Edw.* IV. *Pl.* 8.), yet the Owner dying and leaving them in the Pond, they are as profits of the Freehold, which the *Executor shall not have*, but the *Heir*, or he who hath the Water. *Cro. Eliz.* 372.

In July 1757, *John Hanson* being indicted at the Old Bailey for stealing twenty-five live fish, called Carp, value 10*s.* three Tench, value 3*s.* and three Perch, value 12*d.* the property of the Right Honourable Lord VERE BEAUCLERK, &c. pleaded guilty, and being ordered to be Branded, the same was immediately done.

And *John Graham* was indicted, for that he, before the felony was committed by *Hanson*, on the 14th of April, feloniously did incite, move, procure, and abet the said *Hanson*; to wit, on the 17th of April, the said Fish so stolen did receive and have, well knowing them to have been stolen; and of this Offence the said *John Graham* was brought in guilty, and sentenced to be transported for *fourteen years*.

William Hetherington and *John Sorrel* were indicted for stealing out of a pond in a garden adjoining to the dwelling house of *Ann Talk*, Widow, twenty gold fish, value 20*s.* and twenty silver fish, value 20*s.* the property of the said *Ann Talk*; and being convicted, were sent to work on the River Thames.—*Vide Trials at the Old Bailey in December* 1780.

An Indictment against *John Hunsdon* on the Statute 5 *Geo.* III. c. 14. charged him with unlawfully entering a Garden of *A. T.* adjoining, and belonging to her Dwelling House, in which

* The better Opinion seems to be, that stealing Fish from a *Pond* is *not* Felony. See to this point *Forster's Crown Law*, p. 366, *Owen* 20, and 9 *Geo.* I. c. 22. which makes it Felony *under some special circumstances*, to steal Fish in a Pond.

was a certain Pond used for keeping Fish; and without *A. T.*'s consent, with a certain Net, stealing and taking out of the said Pond a certain quantity of live Gold and Silver Fish, of *the goods and chattels* of the said *A. T.* against the form of the Statute. On Evidence it appeared that the Pond out of which the Fish were taken adjoined to the House, and was about twenty yards in length, and ten yards in breadth; that Gold Fish and other Fish were kept in it, which were usually fished for with a hook and line. It was objected, that Fish in an open Pond were *ferœ naturæ*, unreclaimed, and not the property of any particular person, as they were laid to be in the Indictment. In answer to which a distinction was taken on the part of the Crown, that this was not an Indictment for Felony, but only for a Misdemeanor on the Statute*, though the punishment directed was Transportation. In *Easter* Term 1781, all the Judges held the Indictment good, the Case being fully brought within the Statute 5 *Geo.* III. without the Allegation that the Fish were the Goods and Chattels of any person; and therefore that part of the Indictment was Surplusage. But if the Indictment had been at *common law* for felony, it was the opinion of some that it should have described what sort of a Pond it was, that it might appear on the face of the Indictment that taking Fish out of such a Pond was Felony.

Fishing in inclosed ponds, &c. with intent to steal, or buying stolen fish, is Felony, but within Clergy.

Fish taken in a *pond*, or in any *inclosed rivers*, are liable to pay Tythe. 1 *Roll. Abr.* 626. *pl.* 4, 6, 7. But no Tythe is due, except by Custom, of Fish taken in the Sea, or in any open River, although they are taken by a person who has a several Fishery, because such Fish are *ferœ naturæ*. *Noy.* 108, *Cro. Car.* 332.

A Lease of a fishery of a pond, with the spear-sedge, flags, and rushes, in and about the same, is such a constructive Demise of *the soil*, that it is a sufficient Tenement, within the 13 & 14 *Car.* II. c. 12. to confer a Settlement. *Bott's Poor Laws*, v. 2. p. 102.

A conviction on the Statute 5 *Geo.* III. c. 14. for fishing without Consent of the Owner, "in a part of a certain Stream, which runneth between B. in the parish of A. in the county of W. and C. in the same parish and county," Quashed, because it did not appear that *the intermediate course of the stream between the two termini*, in which the Offence was alleged to be committed, was in the county of W. and within the Jurisdiction of the convicting Magistrate. *King* v. *Edwards*, 1 *East's T. Rep.* 278.

ROY *versus* THE DUKE OF BEAUFORT, *June* 5, 1741.

The bill was brought to be relieved against a Judgment obtained at Law on a Bond in the penalty of 100*l.* and likewise excessive damages of forty pounds, and for a perpetual Injunction.

* It is observable, however, that the Statute uses the word *Steal*.

The plaintiff was jointly bound with his Son in a Bond in the penalty of 100*l.* that the Son should not commit any trespass in the Duke's royalty, by shooting, hunting, fishing, &c. unless with the licence of the Game-keeper, or in company with a qualified person.

The Son afterwards having catched *two flounders* with an angling rod, in the Duke's royalty, the Bond was put in suit against the plaintiff, and judgment for the Penalty.

Two of the Duke's servants, one of them brother-in-law to MARKS, the game-keeper, asked the Son of the plaintiff to go with them, and divert himself with fishing; they angled about two hours, in a Navigable river, and catched two Flounders.

The Verdict was found by the Jury merely upon the Evidence of these two Servants.

The plaintiff (his son being dead) has been obliged to pay the 100*l.* the 40*l.* costs of suit, though the value of the *flounders* was proved to be *twopence only*.

The Bond was given in 1729, while the plaintiff was under a prosecution, and in custody before a Justice of Peace, at the information of *Marks*, the game-keeper, for carrying a gun in the Duke's Manor, and for killing a Dog belonging to the Duke.

It was not pretended that the plaintiff's Son killed any game, but that he carried a Gun only.

Marks took him before a Justice of peace that lived fifteen miles from the place, when there were several neighbouring Justices within three miles.

When the plaintiff's Son was before the Justice of peace, they threatened him with being entirely ruined by the Duke, if he would not agree to give this Bond.

From the year 1729 till 1732, it does not appear that he ever was guilty of any Trespass; and even after the Flounders were catched, which was in 1732, no manner of notice was taken of it till 1734, when an information for a Riot having been tried at Winchester (in which these very Servants that decoyed the Son into this fishing were convicted, on the Evidence of the Plaintiff in this cause,) immediately after the Trial, the Suit was commenced upon the Bond.

LORD CHANCELLOR:—

The first general question is, Whether the Bond was obtained by Oppression, and by the Imposition of the Duke of BEAUFORT's Servants?

Secondly, Supposing there is an Evidence of such Imposition, whether the Bond will be considered only as a Security that the Son should not poach for the future?

Thirdly, Whether an ill use has been made of this Bond?

As to the first head of relief, *oppression and imposition*, I am of opinion there is no Evidence of either which ought to induce the Court to relieve.

The plaintiff's Son appears to have been a person who made a practice of carrying a Gun, and likewise was warned several times by *Marks*, the game-keeper, not to come into the Duke's manor: afterwards *Marks*, being upon his lawful business, finds this young man, with a Gun in his hand, and might have justified seizing the Dog, and though he shot him, it does not make any great alteration, because if any body has suffered, the Duke has, who lost the *benefit* of the Dog, which should have been secured to his *own use*. The carrying a Gun and shooting the *keeper's dog*, in return for his own being killed, was a sufficient justification of *Marks* for taking the plaintiff's Son before a Justice of peace.

As to the point of taking him before a Justice of peace who lived at the distance of *fifteen miles*, it is not a thing to be commended; but, however, that does not prevent his having equal Jurisdiction as if he had lived in the Neighbourhood: it appears, besides, that the plaintiff's Son had more assistance at Winchester than he would have had in any other part of the Country; for he had the Recorder for his Counsel, and it is very probable the Game-keeper had an eye to having Counsel himself, or he would not have thought of carrying him so far.

No evidence has been attempted to be given of the Justice of peace misbehaving in the affair; on the contrary, he was so favourable as not to levy the penalty of *five pounds*, which the statute gives against a person carrying a Gun being *unqualified;* nor was there any notice taken of killing the Duke's Dog; and, however trifling it may be called, if such a thing had come before me at *nisi prius*, on the insolent behaviour of the person at the time he shot the Dog, and other circumstances, I should have made no scruple of directing very *considerable Damages*.

As Counsel appear to have been present the whole time before the justice of peace, though it is not said they advised the Bond, yet I must presume they did, as nothing is shewn to the contrary.

Bonds taken for the preservation of the Game, and to prevent Poaching, are not only for the Benefit of Lords of manors, but even of the *young persons* who enter into them, as this sort of Idleness generally leads them to worse consequences.

As to Oppression, if there had been any illegal advantage taken whilst he was in Custody before the Justice of peace, he might have been relieved at Law, and there was no occasion for a suit in Equity.

Though there is no Act of parliament which directs taking Bonds in this particular case, yet there are Statutes which approve of it in similar cases; as for instance, the Acts that relate to the Customs expressly direct and command such Bonds to be taken to prevent and guard against offences for the future. The Act likewise against Deer-stealing commands such Bonds to be

taken. *Vide* 5 *G.* I. c. 15. sect. 4. and though there is no Authority in the present case, yet it shews the doing of it is not *malum in se.*

The Counsel for the plaintiff have insisted it is an excessive Penalty, and to be sure it is a large one; but I do not know that Courts of Equity, where a Bond is entered into *Voluntarily*, have gone so far as to take into their Consideration the greatness or smallness of the Penalty. I shall be extremely cautious how I give an opinion that will set aside such Bonds, which, if rightly used, may be of great Service in the preservation of the Game, and an equal Benefit to the Obligors themselves, in taking them out of an idle course of Life, which Poaching naturally leads them into.

As to the head of Security; it is most absurd to think that Bonds of this kind were intended merely as a Security, and that *nothing is to be recovered upon them.*

I am of opinion, when these sort of Bonds are given by way of stated damages between the Parties, it is unreasonable to imagine they could only be intended as a *bare Security* that the Obligor should not offend for the future; was this the case, in what respect is a Gentleman in a *better condition*, who has such a Bond, than he was *before*, if, after he has obtained Judgment at Law, a court of Equity will give him no other satisfaction than the bare value of the *price* of the Game that is killed?

These two heads of Relief may therefore be laid out of the Case.

The third is the most material Consideration, and that is the *ill use* which has been made of the Bond.

No evidence has been offered to shew that ever the plaintiff's Son has been guilty of shooting, fishing, hunting, &c. from the time of giving the Bond in 1729, till May 1732; after this fact of catching the *two flounders*, which must be admitted to be a breach, it rests for two years, and no Action was brought upon the Bond; then it appears that the plaintiff here was a witness in an information for a Riot tried at Winchester assizes in Trinity Term 1734, where the Duke's two Servants were convicted, and chiefly on the plaintiff's Evidence.

It is a very material circumstance that the plaintiff's Son had a licence, or at least an encouragement to fish, by being in company with two of the Duke's servants, one of which was brother-in-law to *Marks* the game-keeper.

It appears by the evidence that *Marks*, who was the game-keeper, who had the authority of the Duke, and who has been a witness to the transaction of the Bond, gave a licence, or at least an encouragement to this fishing, which, as it was with an *angling rod only*, could not be called *poaching*, nor was it so esteemed.

Besides, in such a tract of time as two years, it is impossible to suppose *Marks*, the

game-keeper, could be ignorant of this fishing, especially as his own *Brother-in-law* was in company.

According to the Condition of this Bond, the plaintiff could not be relieved at Law, because his Son could not fish without express leave from the Game-keeper, or in presence of a qualified person; so that if the Duke of BEAUFORT himself had given leave, there must at Law have been a Verdict, because it is not within the *express terms* of the Condition of the Bond. Now when a Man has made this moderate use of his liberty of Fishing, and manifestly appears to have had Leave, it would be hard not to relieve against the Judgment and Penalty recovered upon his Bond at Law.

Lord HARDWICKE decreed the Plaintiff should be relieved against the Verdict, and that the Duke should refund the 100*l.* recovered on the Bond, and the 40*l.* Damages.

END OF THE SECOND VOLUME.

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