



Monthly Journal of Commerce, Trade, Industry, Finance and Agriculture

TRICHINOPOLY, MAY 1940

திருச்சிணுப்பள்ளி, மே-மீ 1940

CONTENTS.

| | PAGE |
|---|------|
| Fostering Village Industries in Bombay ... | 194 |
| Industrial & Economic Development ... | 195 |
| Mr. Muirhead and Labour ... | 196 |
| India's Exports to Ceylon in 1939 ... | 197 |
| South African Industries and the War ... | 198 |
| Performance Test of Floor Coverings ... | 198 |
| Rural Uplift Work in Mysore ... | 199 |
| The Secret of Japan's Home Industries ... | 202 |
| Trade with S. Europe, Setback for India ... | 203 |
| Earthing up of Sugar Canes ... | 208 |
| உலகத்தில் ஏற்பட்டிருக்கும் விளைவுகள் ... | 209 |
| Jottings ... | 210 |

EDITOR: T. V. K. NAIDU.

“VARTHAGA OOLIAN”

Annual Subscription.

| | |
|-----------|-------|
| Merchants | Re. 1 |
| Others | Rs. 3 |
| Foreign | Sh. 5 |

Advt. Tariff per Insertion.

| | |
|--------------|---------|
| One inch. | Re. 1-8 |
| Half Page | Rs. 10 |
| One Page | „ 15 |
| Wrapper Page | „ 25 |

Advertisement without prepayment will not be considered.

For further particulars write to the Manager.

RECEIPT OF A COPY
OF
“VARTHAGA OOLIAN”

IS AN INVITATION TO
SUBSCRIBE OR TO ADVERTISE

All Correspondences, Money Orders etc. should be addressed to

THE MANAGER,

“VARTHAGA OOLIAN”, TRICHINOPOLY, (South India.)

“வர்த்தக ஊழியன்”

வருட சந்தா.

| | |
|------------------|-------|
| வர்த்தகர்களுக்கு | ரூ. 1 |
| மற்றவர்களுக்கு | „ 3 |
| வெளி நாட்டிற்கு | ஷி. 5 |

மாதம் 1க்கு விளம்பர விலை.

| | |
|----------------------|---------|
| அங்குலம் ஒன்றுக்கு | ரூ. 1-8 |
| அரை பக்கத்திற்கு | „ 10 |
| பக்கம் ஒன்றுக்கு | „ 15 |
| ராப்பர் பக்கத்திற்கு | „ 25 |

முன்பணமில்லாத விளம்பரங்கள் பிரசுரிக்க முடியாது. நீடித்த கால விளம்பரங்கள் ஏற்கு மாணேஜருக்கு எழுதவும்.

Fostering Village Industries in Bombay.

The fostering of village industries figures prominently in the Bombay Government's rural development programme for 1940-41. These cottage industries, inter-connected with the agricultural activities of the village might and should furnish a very valuable addition to the cultivator's income. The Bombay Government is continuing the handloom weaving institute at Poona and the various travelling demonstration parties and weaving schools and the Government of India have agreed to finance the scheme for the development of marketing facilities for cotton handloom products for another two years. A grant of Rs. 10,000 is being made to the All-India Spinners Association mainly for experimental work in connection with the improvement of appliances for spinning and weaving. Particular attention will be devoted to wool weaving improvements. It is hoped to manufacture on handlooms in the districts a very large number of woollen blankets for the Government of India's military requirements.

Attention is also being paid to the development of the coir industry in the Konkan. The Industrial Department has a coir school and a further demonstration party will be employed in order to give systematic training in rope-making and the manufacture of coir mats, coir brushes and similar articles. Experiments are being made towards the introduction of new industries in various places in the hope that local conditions may make them successful.

Minor industries which can be employed in villages are the manufacture of boot laces, tapes, newars and carpets which need little apparatus but for which there should be a local demand. An experimental school is being started to provide training in villages in these manufactures.

It is proposed to start a silk farm at Belgaum and to conduct experiments to determine whether silk rearing industry can be carried on with commercial success in Bombay Province.

The Government propose to start a Cottage Industries Workshop at Poona for the testing and improvement of appliances connected with cottage industries in particular in adapting improved processes and machinery so that these can be employed, manufactured and repaired by the village artisan. Facilities will be given in this workshop for persons to try out new ideas relating to cottage industries.

Perhaps the chief problem in connection with all cottage industries—certainly so in the case of weaving—is the marketing of the finished products.

The local demand in the villages is confined to a comparatively few articles of simple manufacture and to reap the benefit of any extension of cottage industries a market in the towns and cities must be tapped. This means an organisation for the sale of finished products and for advice to the village artisan as to what products he should concentrate on or when a change of design is needed. At present, there is no such organisation and little, if any, liaison between village industry and the city's requirements.

The Government proposes, therefore, to open in Bombay in conjunction with the Bombay Co-operative Swadeshi Stores a sales depot for the products of cottage and small sale industry. It is hoped by this means to gain definite information as to what articles can be sold easily and at a profit in Bombay and elsewhere and to develop the manufacture of such articles in the districts for a definite market.

Such marketing research appears to be an essential part of any attempt to improve cottage industries, for it is obviously of no advantage to teach the villager to produce an article which he cannot use or sell.

Birth of a New Industry.

Imported cellular cloth, used for undergarments, has now been displaced by an Indian substitute "Mock Leno", which has been manufactured through the joint efforts of the Department of Supply and the Indian cotton textile industry.

So popular is the substitute that orders up to Rs. 24,00,000 have already been received. The present demand indicates that this new industry has good prospects, when peace is re-established, of holding its own not only on the internal market but also on export markets.

Cellular cloth for under-clothing has never been manufactured in this country in any appreciable quantity before. When the first enquiry was received great difficulty was felt in obtaining a sample of the required quality, and it seemed as though India could not produce in bulk the true leno material.

However, experiments were immediately taken in hand and a substitute was evolved samples of which, when sent abroad by air, secured acceptance ahead of other competitors. Within two months of the war the manufacture of the substitute had begun.

The new product has the approval of the British War Office.

VARTHAGA OOLIAN

MAY 1940

Industrial and Economic Development.

THE twenty-nine sub-committees appointed by the National Planning Committee have prepared and submitted their reports and many of them have been considered and decisions on them arrived at. The National Planning Committee would arrange for a comprehensive report to be submitted to the Working Committee of the Indian National Congress which appointed the National Planning Committee. With the completion of the work of this committee the National Planning Commission will come into operation.

Now that the Congress is non-cooperating with the Government, the question arises whether the work of the National Planning Commission would be allowed to continue or be suspended till the internal political situation improves to the satisfaction of the Congress. We are led to raise this question because of the present attitude of the leaders of the Congress party and because of certain remarks in Pandit Jawaharlal Nehru's note to the members of the Committee. The Congress boycotted the legislatures at a critical time when very important legislative measures were being considered, specially important in view of the present great war. Pandit Nehru says in his note that final decisions regarding national planning will have to be taken by the State when it has the power to do so. According to Pandit Nehru, India was aiming at becoming a free democratic state which would have full political and economic freedom. Does this mean that India would not have the benefits of economic planning till it became completely free, economically and politically? We fear so. The Congress lays much unnecessary emphasis on the political aspect of the question even to the extent of giving the go by to the economic aspects. Industrial and other economic questions have to be treated as purely national, considerations of these questions have to be continued whichever party might be in power or influence for the

time being. The fact that national planning was originated by the Congress does not imply that the Commission should be subordinated to the Congress party's dictates and that its activities be continued or suspended as the party leaders like. Such an attitude would lead the non-congress provinces, administrations and states to view the Commission with disfavour and the useful work done hitherto would be undone. We trust those in charge of national planning would see that the Commission is placed on a sound non-party basis and that its work is continued at all costs.

There is yet another question which has to be considered now. While we agree that some of the far-reaching recommendations of the Planning Committee could be given effect to only in a politically free India, there is much work that could and ought to be done in the meanwhile to place this country on a sound economic basis. Much of this work would have to be accomplished not by means of legislative compulsion but by means of influence and powers of persuasion. We are sure that no State or Administration would stand against any reasonable proposal for economic advancement provided due considerations are given to the needs of the various units of this great sub continent.

For instance, location and development of industries might be considered even now and suitable arrangements arrived at. Proposals for the maintenance of industrial peace ought to be given continued consideration till the desired results are obtained. Certain kinds of industries have to be started now and should not wait till the war or the internal dispute is over. Delays would mean either economic setback or the creation of new and very difficult problems solution of which would require further considerable time and trouble.

Dewan Bahadur C. S. Ratnasabapathi Mudaliar, speaking at the annual meeting of the Malabar Chamber of Commerce recently, stated that he was not a little discomfited at the rather topsided emphasis laid on political progress to the neglect of economic question which was of vital inter-

est and was the pivot of political progress. His is a timely warning. We are presented with very good opportunities for industrial and economic advancement and every effort should be made to see that the opportunities are availed of. Political considerations should not stand in the way. The National Planning Commission would be fulfilling part of its duty if it takes upon itself the task of helping people to avail themselves of these opportunities. To enable the Commission to do its work satisfactorily and to let no political situation hinder its task it is necessary that the Commission is freed from party control and is placed on a national basis as the Spinners' Association claims to be. Such a nationally based commission would have much prestige and influence and would not be viewed with any distrust and it could play an effective part in the economic regeneration of India.

Mr. Muirhead and Labour.

THE procedure adopted by Mr. C. A. Muirhead, Agent and General Manager, South Indian Railway, in calling for a special meeting between himself and the representatives of the S.I.Ry. Labour Union in order to arrive at definite decisions in regard to the demands put forward by the Union will be commended by all interested in the establishment of peaceful relations between capital and labour as creating a good precedent. The Labour Union had made certain demands relating to service conditions and facilities to labourers. The points under consideration were discussed by the Agent and the Union representatives and satisfactory decisions were arrived at. With regard to the much discussed Marks System of discipline, Mr. Muirhead was sympathetic enough to have the circular relating to it considered by a committee consisting of three Railway officers and three representatives of the Labour Union. The move is a bold one and shows that the Agent has trust in the generality of his labour force. We hope the labourers would justify the Agent's sympathetic attitude by running their Labour Union on sound trade union lines free from the machinations of the revolutionary minded political agitators.

Additional Facilities by S.I.Ry.

The rapid strides made in the growth and development of industries in various parts of South India in recent years have resulted in an increasing volume of commercial transactions, the utility and success of which depend entirely upon a cheap, reliable and quick mode of transport. Although railway transport offers this facility in an abundant measure the absence of door to door service was considered a handicap to the quick transaction of business. As public utility concerns the Railways were not slow to respond to the public demand in this respect. The system of delivery of parcels at the consignees' residence came to be gradually introduced at all important commercial centres, much to the advantage of the trading public.

The booking of parcels had, however, to be effected only at stations. To remedy this, the opening of Town Booking Offices in the interior of important towns, was taken advantage of to provide the additional facility of booking parcels as well, wherever it was considered practicable.

Coimbatore, which of late, has been much in the public eye as an important junction station, was recently provided with a Town Booking Office. In response to an increasing demand from the trading public to open that office for the booking of parcels this facility has been introduced to take effect from 1st May, 1940 in local booking and from 1st June, 1940 in through booking with Foreign Railways. With the system of Street Delivery of parcels already in force, the introduction of this new facility is bound to react favourably on the mercantile transactions of this busy centre.

—Press Communiqué.

Cotton Jute Fabric.

Fears of a shortage of supplies of flax due to war conditions led to trials and tests being made for producing a new material—"cotton-jute union fabric" as a substitute for materials made of flax. This new material will provide another outlet for two of India's principal agricultural commodities if the preliminary successful tests are confirmed generally. The preliminary tests with this cotton-jute union fabric have given excellent results, it is stated, and the first trial shipment, for big scale tests under actual service conditions, has already been made. A definite indication has been given by His Majesty's Government that in the event of these large scale tests proving successful as the preliminary ones, there are prospects of early orders to the value of about Rs. 90 lakhs. This material is likely to prove eminently suitable for civil purposes also, which holds out prospects of a wider peace time use for both cotton and jute. This should be particularly welcome in view of the contraction that has taken place during recent years in certain foreign markets for these raw products of India.

INDIA'S EXPORTS TO CEYLON IN 1939

The declaration of war in the beginning of September, 1939, has helped India to retain her pride of place among supplying countries to Ceylon, says Mr. M. H. Kantawala, Ceylon Trade Commissioner for India in the *Ceylon Trade Journal*. The total exports from India to Ceylon valued at over Rs. 52 million compare very unfavourably with the total imports into India from Ceylon valued at under Rs. 11 millions. India's share in the import trade of Ceylon is 21.57 per cent but she has only taken in return 3.51 per cent of the Island's exports. There is thus a vast balance of trade in favour of India. From 29 million rupees plus in 1936, it became 39 plus in 1937 and is now 42 plus for the last two years.

India continued to be the principal supplier to Ceylon of the prime necessities of life like food and clothing. Of over half a million tons of rice imported by the Island India's share in 1939 was a little over 87 thousands, (12 million rupees) the rest being shared between Burma and Thailand. This was 10 thousand tons less than in 1938.

As regards other grains there was an improvement in the intake and prices of pulses. There was a slight increase as regards paddy. There was a shortfall in gram of which the Island has taken only 3598 tons valued at half a million tons against 6752 tons in '38 and 3733 in '37.

The quantity of salted or dried fish also decreased to 9102 tons valued at 4½ million rupees as against 11485 tons valued at over Rs. 5½ millions. The number of imported eggs has decreased from over a lakh to 18,705. This decrease is traceable to the heavy import duty but continues to cost the Island more than Rs. 30,000 annually in the shape of loss on duty. There was a decrease in the number of goats for slaughter from 28,454 to 23,398, so also in the case of sheep.

There was a brisk trade with Ceylon 1939 in feeding stuffs for animals. 13655 tons of gingelly poonac valued at Rs. 1½ millions were exported to Ceylon. There was an increase both in quantity and value of bran and pollard of which the Island has taken 10928 tons valued at Rs. 7½ lakhs.

The exports of Indian made biscuits which were falling off in recent years have shown a big jump from 16659 lbs. to 32644 lbs. In the last four war months of the year, India exported over 12,000 lbs. as compared to only 5000 lbs. in the same period of the previous year.

A Hint to India.

Ceylon imports coffee to the value of nearly a million rupees, but of this India's share is only Rs. 12,000 as against Rs. 29,260 in the previous year. Java has increased her trade with Ceylon in coffee by half a million lbs. If India and especially Mysore wishes to capture this market, the price factor will have to be seriously considered as Java lands 4½ lbs. of coffee per rupee as against India's 3½ lbs. only.

There was an increase in the export of chillies by nearly 50 per cent, but the export of coriander was reduced by half and cumin seed by 30 per cent.

India is the only country supplying onions to Ceylon and she is bidding fair to become the only potato supply-

ing country, her share of this commodity being a little over a half of the total consumption. Seeing that this share was less than one-fifth in the previous year and that the continental custom was being taken over by her even before the declaration of war, the prospects are not unsatisfactory from her point of view.

The exportation of gingelly seeds from India is yearly falling due probably to an increased exportation of gingelly oil. The Island consumes over 70,000 tons of sugar annually the bulk of which comes from Java. India has not been able to compete with this country in spite of the alleged over-production at home.

In the narcotic group India has increased the quantity of beedies but decreased the total value. Most of the other varieties shows decreases. India's share of the coal imports into Ceylon increased from 65 per cent to 77 per cent, the actual quantity being 361,530 tons as against 250,071 tons in 1938. India does good business with the Island in fertilisers. She shares with Australia the trade in bloodmeal but has few rivals in bonemeal of which she has increased the quantity from thirteen thousand to fourteen thousand tons and in fish manure of which the quantity has been increased from 4834 tons to 5886 tons. There were increases in fish guano and specially in groundnut poonac the export of which has increased by nearly 150 per cent. This phenomenal increase is noticeable only in the last four war months of the year.

The declaration of war has given a fillip to the Indian cement industry. Ceylon was drawing her requirements of about 80000 tons principally from Japan and the United Kingdom and a few European countries. She has not taken one lb. of Indian cement so far. The first 50 tons entered the Island in September and by the end of December 1212 tons valued at Rs. 57,107 had gone there. The indications are that India will now enter this market as a keen competitor.

Seeing that the total requirements of Ceylon of iron and steel manufactures are worth over 10 million rupees, India's share is but negligible and she could make an endeavour to capture a larger part of this market.

Ceylon offers a very fertile market for the surplus cloth and yarns manufactured in the Indian mills. Although the total value of these has come down from Rs. 62 lakhs to Rs. 46 lakhs her percentage share has only fallen slightly from 32.1 to 30.7. India has a lion's share in the dyed piece-goods where out of 23¾ million yards imported by Ceylon in 1939, she has supplied as many as 17 million yards, valued at Rs. 40 lakhs. Like the dyed cloth, India has the monopoly for dyed yarn and twist. She is also a major supplier of other kinds of yarn, bleached grey etc. Similarly in mixed piece-goods of cotton (mixed with less than 50 per cent by weight of other material), India is the foremost supplier. In rayon piece-goods India's advance continues.

Concluding his article Mr. Kantawala says: "Ceylon while offering a lucrative market to the neighbouring continent for her surplus products looks forward to a more sympathetic consideration of the yearly increasing adverse balance, a healthier give and take and a more friendly trade atmosphere."

South African Industries and the War.

The Union's declaration of hostilities immediately set in motion schemes, formulated by more than one Government Department, to put this country into a state of security, and as trade and its parent industry, are the very life-blood of a community's economic structure, attention was immediately given to the question of the maintenance, unimpaired, of the Union's mining, industrial, commercial and agricultural activities under emergency conditions, as that was a matter of vital interest to Government. Those Departments whose concern these industries are, were consequently directed to make a cursory survey of the position as it affected their particular spheres, in order that the Government might be able to judge what steps should be taken to ensure that the country's three major sources of wealth would not suffer an avoidable set-back as a result of the outbreak of war.

That survey was correlated by the Department of Commerce and Industries—the Department of Agriculture and Forestry and of Mines having contributed a survey of the position touching their respective spheres—and it was as a result of the first-mentioned Department's recommendation to the Minister of Commerce and Industries, that Government decided to appoint a Commission, whose Terms of Reference are set out in another paragraph below.

While the Union is to some extent industrially independent of overseas countries, it is vitally concerned in the maintenance of shipping connections with European and American countries, since it imports almost £40,000,000 worth of foreign materials upon which local secondary industries are dependent for their manufacturing activities.

It follows, therefore, that if the war is prolonged, and if the position should arise that the Union's requirements from overseas countries could no longer be readily secured, the Union would find itself in a very serious position.

The Industrial and Agricultural Requirements Commission has therefore been charged with the task of undertaking a comprehensive survey of the Union's industrial and agricultural requirements, with the object of determining—

(a) to what extent those requirements can be met from the Union's own resources; (b) the steps that require to be taken—

(i) to increase the output and utilization of local raw materials; (ii) to increase the Union's productive capacity generally, in order to meet, as far as possible, the essential requirements of the agricultural, manufacturing and mining industries, so as to ensure that a higher degree of self-sufficiency may be attained; and (iii) to provide the materials that are essential to the requirements of those industries and which, under existing conditions, cannot be produced locally and are not otherwise provided for.

Performance Test of Floor Coverings.

In an effort to determine within a comparatively short time the relative ability of various types of floor coverings and various methods of installation to withstand hard and prolonged service, a performance test, necessarily somewhat severe, has been conducted by the National Bureau of Standard, U. S. A. in the Bureau's floor-testing chamber. This work formed part of the research program on building materials suitable for low-cost house construction. As explained in the complete account of these experiments, uncontrolled variations in many important factors, such as quality of materials used, condition of subfloors, methods of installation, and extent of abuses, make direct comparisons of floor coverings in service a difficult matter.

The floor coverings tested included several kinds of linoleum feltbase floor coverings having various wearing surfaces, pressed fiberboard, and three strip wood floors. The bonding agents used included lignin pastes, resinous cements, casein-latex cement, asphaltic cements, and nails.

The results of the performance test have been judged principally by the general appearance of the installations at the end of the test, after 48,000 cycles of the testing equipment.

In the selection of a floor covering and bonding agent, the nature of the service to which they will be subjected and their cost should be considered along with the desires of the user with respect to specific properties. Some of the lower cost floor coverings and methods of bonding, even though less durable, may render economical and satisfactory service, provided they are not subjected to abuse, and only moderate length of service is required, or where frequent replacements may be desirable, such as in rental dwellings. When durable floor coverings are used over wood subfloors under severe traffic conditions, an underlay of asphalt-saturated lining felt is recommended from the standpoint of indentation and durability. Where less durable floor coverings are used and occasional reinstallations are probable, dry lining felt in conjunction with lignin paste over wood subfloors is desirable, unless other adequate means are provided for removal.

Silver-Lined Barrels and Cans.

Methods suitable for producing silver-lined barrels and cans are outlined in a paper to be published in the Journal of the American Electrochemical Society. This describes the results of research work at the Bureau of Standard, U. S. A. by the American Silver Producers' Research Project staff. The paper, entitled "Research on Industrial Silver Plating," by A. J. Dornblatt, A. C. Simon, A. M. Setapen, G. J. LeBrasse, and J. T. Lumley, discusses the production of pore-free silver deposits, the application of commercial forming operations to the manufacture of silver lined containers by deep drawing operations, and the assembly of silver-lined barrels and fittings by silver brazing.

RURAL UPLIFT WORK IN MYSORE

A number of Government departments in Mysore are co-operating to make rural welfare work in Closepet area in Mysore State successful. The agricultural industrial, sericultural, forest and co-operative credit departments are engaged in this planned work among the villages. During the quarter ended February 15, the agricultural department continued their work as regards ploughing demonstrations and development of demonstration plots and distribution of seeds.

Apiary and Poultry.

Apiary and poultry as additional sources of revenue have caught the rural imagination. As the villager finds it hard to purchase a hive, the department is considering the prospect of sparing a hive in the beginning to a raiyat and adjust the cost by taking the honey during the five years of extraction. The poultry farm has been a financial success. In three months, a sum of Rs. 319-9-2 has been earned as net profit, which shows that such a small farm is capable of maintaining a staff consisting of a Poultry Inspector on Rs. 35 a month and a labourer on Rs. 10.

Sheep Rearing.

Bulls and sheep are taking their honoured place in the agricultural household. A fieldman has been appointed to inspect and improve sheep rearing. Demonstration in shearing is proving educative and the people are keen in taking his services. A great demand for halfbred merino rams has sprung up in the area and already the Department has to consider if a subvention of Rs. 5 per ram may not be given out of the Centre grants, so that 20 rams may be introduced in the area during the next quarter.

Village Smithy.

The Village Smithy is being restored to its original importance. Manufacture of ploughs on an extensive scale has become a normal feature. Slight initial defects noticed during the last quarter have been rectified and the ploughs now manufactured are much better. According to the balance sheet for six months ending October 1939, the total sales were Rs. 2,568-9-10.

Pottery.

Pottery, under the warmth of rural welfare work, means more than the ragi ball for the potter—it has come to provide him with decent clothes and shelter. Besides manufacturing the common articles such as village utensils, toys, jugs, etc., 500 drainage pipes were manufactured to order. The village potters are now well trained in the preparation of clay in the proper form and with the use of the mould and wheels, they are in a position to manufacture improved pottery. And a ready market awaits their finished goods. Articles will soon be manufactured on a commercial scale when the question of marketing them outside has to be considered.

Sericulture.

Sericulture has felt the impact of the new spirit of intensive work. Improvement of rearings is becoming marked yields ranging from 60 lb. to 75 lb. of cocoons for 100 disease-free layings. The Closepet cocoon market has begun to attract a large number of people, —the total number of visitors being 1,159 as against 955 in the previous quarter. The quantity of cocoons sold was 30,389 lb. which fetched a value of Rs. 6,355 as against 22,974 lb. fetching a value of Rs. 5,233 during the previous quarter. The rise in the prices has considerably encouraged the sericulturists and if these prices prevail, it will not be surprising to see a very large area under mulberry cultivation.

Forest Nursery.

The Forest Nursery acts as a perpetual urge to the villagers to take to fruit culture. In fact, the Central Forest Nursery at Closepet is specially maintained for the purpose of raising fruit and economic plants for supplying to the villages. Seeds of eucalyptus, lime, orange, pappoi, cashewnut were sown in several beds. The plantations of casuarina and other trees of economic value are coming up well. Villagers are being trained to rear them.

Co-operation.

In the field of co-operation, it is of interest to note that the Closepet Town Co-operative Society is already trying to undertake house building activities besides banking. The introduction of non-credit activities has been taken up in two villages and necessary arrangements are made for financing them. The proposal to extend the land mortgage bank to the rural welfare centre villages has been investigated in selected villages and the work is nearing completion.

New Market for Molasses.

A new market for molasses has been opened as a result of the research work carried on recently by the Industrial Research Bureau of the Government of India to determine the effect of molasses on the strength of lime-surkhi and lime-cement mortars.

The research has revealed that by using molasses for building purposes, the setting time of the mortars is decreased considerably and the tensile strength is generally increased, this being more pronounced during the early periods. It has also been revealed that there exists an optimum percentage of molasses, at which the strength increases uniformly with time, this lying between 10 to 15 per cent. The addition of molasses beyond this optimum point, of course, leads to cracking and consequently erratic results.

Making Wool "Unshrinkable."

The Council for Scientific and Industrial Research will shortly publish a full account of a new and relatively simple process for rendering wool "unshrinkable." This is the outcome of an investigation carried out by Mr. M.R. Freney, B.Sc. and Mr. M. Lipson, B.Sc. of the Council's McMaster Laboratory in Sydney, who have discovered that certain concentrations of alkali, when properly applied, will reduce the capacity of wool to shrink and felt. The results they have obtained compare favourably with those given by the processes which have already come into commercial use.

The new process has the great advantage of simplicity, says the *Industrial Australian and Mining Standard*. The wool can be treated in top form by passing the sliver through a bath of alkali, then through rollers into a neutralising bath of acid, and finally through a water wash.

Garments such as socks and undervests made from wool treated in this way have been subjected to vigorous washing and wearing tests, and have shown a remarkable ability to retain their size and shape when compared with garments of untreated wool which were washed and worn in the same manner.

The process is undergoing a very thorough test under factory conditions at a well known woollen mill in Sydney, where over a ton of wool has now been treated.

The original work leading up to this discovery was partly financed by the Australian Wool Board.

Refugees Start New Industries in Britain.

Many technical experts, exiles from Austria and Czecho-Slovakia, have brought to Britain secret manufacturing processes which are now helping the Allies to victory on the vitally important industrial side of the war. A London firm which makes plastic goods of the synthetic resin type has secured the services of an Austrian scientist, who has brought to this British industry a newly patented process for making a plastic material into articles and shapes hitherto not possible which can replace steel or wood for many constructional purposes.

Hundreds of different articles for export, including lightweight luggage for the Tropics or the Arctic, proof against insects and climate, can now be made in Britain for the many overseas countries where everything must be impervious to heat, cold, fumes and rust and at the same time sell at competitive prices. Another example of the enterprise of exiles comes from County Down in Northern Ireland where a Czech firm 150 years old set up a tannery in a disused mill just before war broke out. They are now employing over 100 British workpeople, and have an order to supply £60,000 worth of leather equipment for the Army of Holland as well as export orders for Britain's ally, Egypt.

Economic Development in Afghanistan.

Afghanistan has a plan to take advantage of war conditions and develop her agriculture, industry and transport, and it is officially stated from Kabul that an important part of the plan is expansion of trade with India.

The Chamber of Commerce, Kabul, it is stated, has concentrated attention on the situation arising from the war in Europe and its inevitable effect on Afghanistan's trade. The Chamber has taken into special consideration the question of developing her trade with India. India has developed her industries considerably and can meet a large portion of Afghanistan's requirements and similarly India can obtain her entire imports of fresh and dried fruits from Afghanistan. The raw cotton of Afghanistan has been found to be of sufficiently good quality to meet India's requirements of imported long staple cotton to a certain extent.

It is announced that the Ministry of National Economy has had under consideration for some time the question of improving the economic conditions of the country and has drawn up a five-year plan of road building and agricultural and industrial expansion which has been approved by the Cabinet and assented to by the King. A new department called the Department of Agriculture and Transport has been set up under the Ministry to carry out the scheme.

It is reported that the ministry of National Economy recently sanctioned a scheme for the formation of a joint stock company to take over cotton pressing, spinning and weaving factories in the country. It is also stated that land for the cultivation of sugar beet has been selected and a committee appointed to give necessary information to the cultivators.

Labels "Made in England" on Indian Shirts.

The London Chamber of Commerce has received a letter from the Calcutta Trades Association complaining that many of the bazaar shops in India are selling cheap country-made shirts with labels attached. "Made in England." It appears to be customary for certain shirt-making manufacturers in England to supply labels for attaching to the shirts giving the brand of the material from which the shirt is made, and many of these labels bear the words, "Made in England," the intention apparently being to emphasize that the material is made in England. These labels are distributed to buyers of shirt-making materials, and it is easy to see how they come to be misused. The Calcutta Trades Association suggests that to avoid trouble either the issuing of loose labels by shirt-making manufacturers be discontinued, or the labels be re-worded "Material Woven in England."

**ADVERTISE
IN THE**

"Varthaga Oolian."

ENCOURAGE the habit of thrift
early in life and make suitable provision for your boy.

**TAKE OUT A POLICY UNDER
CHILDREN'S DEFERRED ASSURANCE**

WITH THE

“ORIENTAL”

**THE STRONGEST and MOST POPULAR
INDIAN LIFE ASSURANCE COMPANY.**

CHILDREN'S DEFERRED ASSURANCE
is a new scheme designed to enable a parent
to provide for his child by payment of a very
low rate of premium a Limited Payment Whole
Life or Endowment Assurance Policy, the risk
under which will commence at a selected age not
earlier than age 22

Write for particulars to:—The Branch Secretary

ORIENTAL

GOVT. SECURITY LIFE ASSURANCE Co., Ltd.

MCDONALD'S ROAD, CANTONMENT, TRICHINOPOLY.

Estd. 1874.

Head Office: BOMBAY.

The Secret of Japan's Home Industries.

There remain today, rubbing elbows with Japan's modern mass-production factories, industrial activities employing hundreds of thousands of Japanese workers, which are still essentially feudal in character, says a writer in the *Eastern Economist*. These industrial activities are not carried on in highly-organized factories but in the homes of the workers. Consequently, they are called home industries.

Many of the workers are apprentices working for room, board, and sometimes pocket money, who live and learn with a master whose "industry" is located in the front room of his home or in a adjoining shed. By far the greatest proportion of those employed in these microcosmic manufacturing units, however, are members of one family, the owner's.

Japan's home industries make not only the majority of goods for purely home consumption but, as in the case of pottery for example, for export as well. Some of the necessities of Japanese life thus made include geta, zori and tabi (foot-wear), tatami (mats of straw used as floor coverings), kimono cloth, fans, lanterns, umbrellas, pottery, bamboo and lacquer ware, cabinet work, such staple food products as kamaboko (fish-bread), noodles, tofu (beancurd), rope, charcoal, nails, toys, casks and bathtubs, sports equipment and, last but not least, tombstones.

As has been indicated, a home industry is usually a one family affair. The head of the family, father or first son, is head of the enterprise that furnishes a livelihood for all. Employees include wife, sometimes grandparents, daughters and sons, and if there aren't enough offspring to keep the wheels of industry turning, one or two apprentices.

Owner's capital behind the industry is often non-existent, the necessary raw materials being furnished by an entrepreneur or jobber. "Factory overhead," because of the very small unit of production, is at an absolute minimum. For example, necessary mechanical equipment for cloth and tatami weavers consists of a loom or two. A one-quarter horsepower motor and several inexpensive accessories is all that the kamaboko-maker needs. Geta, umbrella, lantern, charcoal and tombstone makers need even less. Human labor, as in feudal times, remains the prime mover in home industries.

Working quarters for home industries, located in villages, face the street, being synonymous with the front room of the owner's home. In the case of such house-hold establishment as tatami-making and cloth-weaving, activities carried on almost exclusively by farmers and their families to augment

agricultural incomes, bulky looms often dominate much of the house.

A vestige of feudal times immediately apparent in any of these home industries is the extremely high division of labor. In other words, one family usually restricts itself to the making of only one part of a product as, for example, in the making of geta, traditional Japanese footwear.

These getas or wooden clogs are extremely simple devices requiring only raw cotton, cord, cloth and wood as raw materials. On the under side of the flat foot-shaped piece of wood are fastened a pair of two-inch wooden stilts (these are of varying heights). Two straps which pass between the big toe and its nearest neighbor, are fastened at the front and anchored about midway on each side. The wooden parts are cut in rough form in country districts from the light but strong wood of the paulownia tree.

About four different groups of families participate in the making only of the strap (hanao) from cloth, cord and raw cotton. The first family sews cloth into tubes about a foot in length and one-half inch in diameter. A second family wraps the cord in raw cotton (to prevent the cord cutting the instep) and inserts this in the cloth tube. A third household makes the short strap that passes between the toes. Still another home industry fastens the short and long straps together. Finally, the retailer fastens the straps to the geta completing the "clog".

The same "specialization" is noted in umbrella making, an important home industry carried on in most corners of Japan but especially in Gifu Prefecture. The Gifu Prefecture Umbrella Trade Association several years ago said that in and near the city of Gifu there were more than 3,000 families engaged in the manufacture of this important articles both for home consumption and for shipment abroad.

A wholesaler or jobber is the hub or heart of the umbrella-making craft. It is he who furnishes and sends the necessary raw materials, in this case, bamboo, paper, string, paste, dye, lacquer and oil, to the various families. To the first family he sends bamboo rods one-half inch diameter. These are cut into three foot lengths and the irregularities smoothed off with a primitive plane held between the worker's feet. The smoothed shafts are gathered in by the jobber who in the meantime has sent wood to another family which specializes in the making of the circular pieces that slide on the shaft and to which are fastened the ribs.

Still another family is employed making ribs of bamboo strips. The jobber collects these parts and relays them all to still another family which consolidates the shaft, circular knobs and ribs and inserts a metal spring. Yet another family group covers the naked ribs with rice paper. Another dyes the paper. A seventh and eighth home industry applies lacquer, polishes and oils the paper. The resulting umbrellas are essentially no different than those used in Japan for centuries.

Employee *personnel* of one of several home industries visited specialized in assembling and papering consisted of three, father, mother and son. The work is done in the front room of their home. A paper-covered latticed door separates the workshop from the living quarters. Each member of the family sits cross-legged on a zabuton (cushion) which rests on tatami. Each has an individual set of tools consisting of a bamboo tripod on which partially completed umbrellas are swivelled, a paste box and brush, needle and thread, and knife.

The jobber, the oil in the home industry machinery, collects the finished product and sells it to wholesalers or, if the batch is destined for foreign shores, to an exporter.

In the endless umbrella-making chain one witnesses a high degree of handicraft skill. One sees also methods and tools indetical with those of feudal times, for the umbrella industry remains untouched by Western influences. Many families, according to one jobber, have done nothing else to earn a living for several generations. According to this jobber 40 families of Gifu and vicinity are engaged in fashioning the central shaft; 80 make the wooden knobs in which the ribs are fastened; 150 consolidate knob and shaft and insert a spring; 800 families make only ribs; an unknown number of families consolidate all parts; 50 households dye the paper; 1,300 homes paste paper on the ribs; 300 families apply water-proofing lacquer and oil.

Each family is paid on a piece-rate basis (100 usually) and derives therefrom a satisfactory living, the fundamental purpose of home industries. Compensation is low when compared to incomes of industrial workers of other countries. However, Mr. Umbrellamaker's household expenses are proportionately lower. Instead of the expensive milk and meat diet which the American worker, for instance, demands, he is perfectly content with rice, fish and a few vegetables. His food costs are low because the food comes directly from the soil and the sea.

Cost of labor, the most important single factor in industrial budgets, is kept very low in home industries and small scale factories. This factor, plus others such as the division of labor through division of establishment, the one-family employee

Trade with S. Europe, Setback for India

An outstanding feature of international trade was a quick recovery from the low level to which general business activity had fallen immediately after the outbreak of war, says the Indian Government Trade Commissioner at Milan in his quarterly report for the last quarter of 1939.

In many neutral countries the confusion initially brought about by the war was rapidly overcome. In Italy particularly, the uncertainty prevailing in the last week of August soon gave place to a spell of business optimism which improved with the apparent growth of confidence in the policy of non-belligerency.

There were certain notable exceptions in other countries of Southern Europe, such as the Balkans, where political uncertainty continued to paralyse trade, thus weakening the national economy of the countries concerned. Even then, however, their export trade received a marked stimulus from the increasing demand from abroad for their raw materials.

The inflow of a steadily increasing volume of foreign orders gave a marked stimulus to industrial production in Italy. Progress was hampered to some extent by a lack of raw materials, stocks of which were believed to have become insufficient even for the current needs of export trade, the shortage being apparently more acute in the cotton and woollen industries.

Imports into Yugoslavia from India in 1939 showed a decline of about 16.7 million *dinars*, while exports showed an increase of about 2.2 million *dinars* as compared with the corresponding figures for the preceding year. The balance of trade, however, was still favourable to India though it dropped from 70,882,000 *dinars* in 1938 to 51,978,000 *dinars* last year.

India's trade with Hungary and Bulgaria also registered a fall. Imports from India amounted to 577,000 *pengo* and Hungarian exports to India to 1,001,000 *pengo*, as against 703,000 and 2,459,000 *pengo* respectively during the last quarter of 1938.

Imports in the last quarter of 1939 were made up mostly of raw cotton and raw jute. The previous year's unfavourable balance of 1,066,000 *pengo* was, however, converted into a favourable balance of 838,000 *pengo* last year. India's favourable balance of trade with Bulgaria fell from 26,704,000 *levas* in 1938 to 4,531,000 *levas*.

No statistics are available relating to India's trade with Italy, Portugal, Rumania and Greece.

unit, the elimination of factory overhead and other characteristics of home industries to be mentioned later, results in a low selling price. These factors are largely responsible for the paradox that exists in connection with Japanese pottery for instance, a product made almost exclusively in home industries, which can be sold to foreign buyers for less than they are able to buy from home manufacturers situated across the street.

Export Advisory Council.

The Government of India are setting up an Export Advisory Council of 20 members in the first instance exclusive of Chairman and Vice-Chairman. Of these, thirteen will be selected by the principal commercial and export trade organisations.

The others will be nominated by the Government of India. These nominated members will include two gentlemen to represent the principal international exporting houses and five appointed on behalf of interests not otherwise represented on the Council, including agricultural interests. The Commerce Member will be the Chairman and a prominent Indian businessman will be the Vice-Chairman.

The proposed functions of the Council can be summed up under four heads: firstly, to take up the discussion of export difficulties arising out of the war; secondly to make suggestions relating to the expansion of the exports of staples and the discovery of alternative markets; thirdly, to promote the expansion of exports of Indian manufactures; lastly to discuss facilities which can be afforded to unofficial trade delegations from India to countries overseas.

In order to facilitate the discussion and the solution of local difficulties arising out of the regulations issued in connection with the war, it is proposed that local members of the Council resident at the ports shall be constituted into Port Sub-Committees to be presided over by the local Government of India official in charge of export regulations.

A Common Seal for Indian Soaps.

At the conference of Indian soap makers held at Bombay in March last, attention was mainly focussed on two issues of vital importance. The members of the All-India Soap Makers Association seemed to realise the great potentialities in the use of the common seal of the Association to solve many insuperable difficulties of the soap industry. A resolution moved by Mr. P. A. Narielwala of Tomco, elected president for the current year, for the use of the seal by all the members on all cartons of their standard soaps and for popularising the seal by wide publicity was unanimously adopted. Publicity will be postponed for three months in order that the soaps already placed in the market without the seals may be disposed of.

The next item of importance was the consideration by the conference of the development of the essential oil industry. Mr. C. S. Patel of the Swastik Oil Mills suggested the floatation of a company both for cultivation of perfume yielding plants and distillation of essential oils. The Agricultural Departments of the Provincial Governments and the Imperial Council of Agricultural Research have been requested to supply data regarding suitable sites and also yield per acre of land etc. so that capital may become interested in the production of essential oils.

India's Trade with East Africa.

The report on the work of the Indian Government Trade Commissioner in East Africa, Mombasa, for 1938-39, shows that India's percentage share in the trade of cotton textiles, which form an important item of the import trade of the East African Territories, has steadily improved within the last two years. Of all the varieties of cotton piecegoods, India's strength as a competitor is most noticeable in the case of coloured category. India practically holds a monopoly of the East African trade in jute bags and sacks. She has also a preponderating share of the East African trade in dressed leather and other manufactures of leather.

Market for Datura Leaves.

The Plants *Datura Stramonium* and *Datura Tatula* grow freely in a wild state in many parts of South Africa. The leaves of both these species, the former a white-flowered, and the latter a blue-flowered variety, of a slightly better quality are acceptable in the trade. They are used in the manufacture of *stramonium* cigarettes and asthma remedies, alkaloids, hyoscyne, hyoscyamine and atropine.

Manufacturers in the United Kingdom normally draw supplies of the leaves from the Continent, principally Hungary. It is thought that under present conditions suppliers in the Union will be afforded useful opportunities of gaining a footing in the market says the *Official Journal* of the Department of Commerce and Industries of South Africa.

Prices obtained in the United Kingdom and the United States of America vary from 20s. to 40s. per cwt. according to quality. Factors which effect prices favourably are the absence of a large percentage of stalks and other foreign matter and the attractive appearance of the leaves, which should be of a uniform bright green colour and not much broken.

Both *Dathura Stramonium* and *Datura Tatula* grow wild on various types of soil, but under cultivation flourish best on rich and well limed soils. The plants are annuals and can readily be raised from seed.

The leaves should be collected late in the summer when the plants are flowering. Curing consists merely in careful drying, which should be effected as quickly as possible either by exposing the leaves to the air in a shady place or, preferably, by placing them in an artificially heated drying room at about 100° to 110° F. The leaves should be dried just sufficiently to prevent their becoming mouldy during transit.

Stramonium leaves for export are generally packed in hessian bags or bales of 56 lbs. or 1 cwt., and not in boxes. They are admitted into the United Kingdom duty free from South Africa and Southern Rhodesia.

Two importing firms in London are stated to be prepared to dispose of a 4 to 5 cwt. trial parcel on consignment.

SIGNIFICANCE OF REWARDS

EVERY institution, big or small, public or private, has a system of rewarding its most distinguished servants. In every case the emphasis is invariably on the Record of Service says *Batanagar News*. It is always the extra interest, the specially meritorious service, that entitle a person to the distinction of reward.

In our own case of a business house, rewards are given to those employees only who have shown this extra interest, this special concern for the welfare and prosperity of the Company. These rewards are paid irrespective of the amount of profits the Company earns. Rewards may be given even if the Company has not made any profits. Profit sharing and rewards are thus completely different things and should not be confused.

The employee who merely does his ordinary duty, comes in with the siren and goes out with it, carries out the orders that may be given to him, is not one who deserves a reward. On the contrary, reward will certainly go to the employee who takes initiative in effecting improvements in the existing systems in connection with his departmental work, or in effecting inventions likely to result in benefits for the Company or any other innovation which might be of benefit to the general body of employees and so on. The employee who does not wait for a responsibility to be given to him for doing a necessary work but asks for it and does the work, is certainly one who does more than his ordinary duty. The employee who does not leave his work unfinished because the siren has blown, does something which deserves recognition.

Initiative in making improvements, in doing an urgent work even without being asked to do it, eagerness to undertake responsibilities and showing through dutiful work, an intelligent concern for the welfare of the institution, are some of the most prominent virtues in an employee which are sure to be rewarded.

ഉഷ്ണ കാലം
തിരഞ്ഞെടുക്കുക

-13-

2/15

3/8

3/15

Batla

Industrial Disputes in India.

The number of labour disputes in the last quarter of 1939 was 110 involving 1,69,000 workers; nearly 8,24,000 working days were lost. The only important strike was that in the Cawnpore mills, Cawnpore, involving 30,000 workers and causing a loss of 2,15,000 working

days. Textile and Jute mills account for 45.5 per cent of the disputes, 80.4 per cent of the workers involved and 77.1 per cent of the working days lost. In 84 of the disputes or in 76.4 per cent the chief demand related to wages or bonuses. Of the disputes, 13 were successful, and 60 unsuccessful while 14 were still in progress at the end of the quarter.

Indo-Japanese Trade in 1939.

A considerable improvement in the position of Indian raw cotton, oil-yielding materials and vegetable fibres in 1939, as compared with 1938, is reported by the Indian Government Trade Commissioner in Japan in his quarterly report for October-December 1939.

Japan's purchases from India, according to the published records of the Japanese Finance Office, amounted to 182,000,000 yen and her exports to India to 211,000,000 yen. In 1938 the figures were 172,000,000 yen and 188,000,000 yen, respectively.

In 1939, India's share of Japan's total imports was 6.27 per cent, against 6.49 per cent in 1938. Her share of Japan's total exports was 5.92 per cent in 1939, as against 7.02 per cent in 1938.

Japan's imports of raw cotton from India amounted to 3,300,000 piculs valued at 121,000,000 yen, against 3,000,000 piculs valued at 113,300,000 yen in 1938.

Imports of Indian oil-yielding materials amounted to 1,200,000 yen in value, against 161,000 yen in 1938. Imports of vegetable fibres others than raw cotton, totalled 5,700,000 yen in 1939, against 3,700,000 yen in the preceding year.

Although India's exports of hides and skins to Japan showed an improvement over the preceding year in respect of quantity, the price paid by Japan was much lower. Trade with Japan, in leather, which is usually satisfactory, showed an abnormal drop in 1939.

Crop Reports COTTON.

The area under cotton in the Madras Province in 1939—40 is estimated at 2,206,200 acres as against 1,957,600 acres last year and 2,102,900 acres according to the forecast report issued in February. The present estimate for the Province represents an increase of 13.1 per cent as compared with the finally recorded area of 1,950,224 acres in 1938—39. The final estimate of last year exceeded the actuals by 0.4 per cent.

GROUNDNUT.

The area sown with summer or irrigated crop of groundnut during the three months January to March 1940 is estimated at 42,800 acres. When compared with the estimated area of 46,400 acres for the corresponding period of last year, there is a decrease of 7.8 per cent.

GINGELLY.

The area sown with gingelly in 1939—40 is estimated at 803,900 acres. When compared with the area of 821,000 acres estimated for the corresponding period of last year, it reveals a decrease of about 2.1 per cent. The present estimate also reveals a decrease of about 8.3 per cent as compared with the finally recorded area of 876,397 acres last year. The area in an average year is estimated at 764,060 acres.

Substitutes for Jute.

Owing to the wide disparity between the price of jute and the prices of competitive fibres like sisal and cotton, American manufacturers of jute twine who consume by far the largest portion of jute imported into America are keeping off the market. If this position continues, there will be a definite change over on quite a large scale to java sisal and cotton for the manufacture of twine.

The U. S. A. Department of Agriculture have been subsidising the manufacture of cotton bagging from last year for the purpose of covering raw cotton bales for which jute baggings were generally used.

Italian experts claim to have discovered a jute substitute in the lupin plant which is planted on a large scale in middle Italy as fodder. The gradual decline in the imports of jute from India is said to reflect the efforts of the Government to increase the use of domestic substitutes in the jute manufacturing industry in Italy.

The Brazilian Federal Ministry of Agriculture have requested and received authorisation to expand about 1,000,000 milreis for the purpose of encouraging the cultivation of fibres which might be used as a substitute for jute in the manufacture of coffee bags.

An experimental factory where a system of newly invented looms will be used to manufacture seamless bags from cotton fibre is to be installed on a co-operative basis in the Regional Agronomist of Salta in the Argentine. The present prospects for a large crop of maize and the activity in meat packing industry and the building trade account for an active demand for jute bags and cloth.

Cotton Canvas Orders for India.

Supplies of flax from the world's chief producer having been cut off, the enormous demand in the United Kingdom for materials for water-proof coverings of all types could not be met from the usual sources. A call, therefore, went out to Empire countries for an effective substitute for flax canvas. The Indian cotton textile industry promptly responded with offers of Indian canvas materials that had already passed local tests. Some of these were accepted by the United Kingdom authorities.

In order to comply with demand, the Indian cotton textile industry found it necessary to expand their capacity for manufacturing this line either by various expedients or by adapting and using idle looms.

Ahead of other competing countries India has now secured orders for war supplies to the value of Rs. 46,00,000 for cotton canvas, with further large orders in prospect, following frequent use of the air mail for heavy parcels of samples by the Supply Department.

Indian Customs and Central Excise Revenue.

The total gross Indian Sea Customs Revenue, including Land Customs but excluding Salt Revenue, collected in British India in the twelve months ended March, 1940, was Rs. 57,26 lakhs as compared with Rs. 53,23 lakhs during the same period last year. Of this amount, import duties accounted for Rs. 45,65 lakhs, export duties for Rs. 4,07 lakhs, Land Customs and miscellaneous for Rs. 91 lakhs and central Excise duties for Rs. 6,64 lakhs. Comparing the figures for the year ending March, 1940, with those for the preceding year, there were increases under import duties on sugar, silver bullion, coin, sheets, plates and other manufactures, motor spirit, kerosene oil, artificial silk yarn and thread, motor vehicles, raw cotton, tobacco, artificial silk fabrics, spices, wireless reception instruments and apparatus, broken rice, matches, batching, fuel and lubricating oils, pneumatic rubber tyres and tubes, tin (block) cinematograph films and raw silk, the export duty on jute, manufactured, and Land Customs receipts and the excise duties on matches and steel ingots. On the other hand, import duties on machinery, silk fabrics, metals other than iron and steel, cotton fabrics, paper and stationery, silk yarn and thread, iron and steel, railway plant and rolling stock, tea, fabrics of artificial silk mixed with other materials, betelnuts, liquors, cotton hosiery, silver wire, thread and other manufactures, toys, games and sports goods, boots and shoes, Portland cement and woodpulp, the export duty on jute, raw and the excise duties on sugar, kerosene and motor spirit showed decreases.

Production of Sugar Refined from Gur.

It has been estimated that the production of sugar, by refining *gur* during the calendar year 1940 will be more than double the production in 1939. Between 1933 and 1939 the production of *gur* sugar in India steadily declined. The production in 1939 was only 14,200 tons. On the basis of the forecast returns received from refineries, the production in 1940 is estimated to be 31,800 tons. The increase in production in 1940, over the production in 1939, is mainly due to the higher estimated output of refineries in the United Provinces. They are estimated to produce 16,700 tons in 1940 against only 2,600 tons in 1939. The average recovery of sugar, on the other hand is estimated to be over 4 percent less than in the previous year. It is 56.88 per cent in 1940 against 60.94 per cent in 1939. The decrease in the average recovery is solely due to the lower estimated recoveries of refineries in the United Provinces.

PUBLICATIONS RECEIVED

London Chamber of Commerce Journal
 Statistical Bulletin of the International Tin Research
 The Pudukkottai Gazette [and Development Council
 The Industrial Australian and Mining Standard
 Mysore Chamber of Commerce Bulletin
 South Africa Standard Bank Review
 Mysore Information Bulletin
 Official Journal (Union of South Africa)
 Indian Jute Committee Bulletin.
 Monthly Survey of Business Conditions in India.
 Statistical Bulletin of the International Rubber Regula-
 The Cochin Government Gazette [tion Committee
 Monthly Summary of the National Bank of Australasia
 The Madras Wholesale Market Rates
 Market Information Bulletin (Ceylon)
 Madras Market Price Current (Patterson)
 Share Market Report (Maconochie)
 Indian Information. Norwegian Trade Review
 Southern India Commerce The Ceylon Trade Journal
 Indian Soap Journal Railway Herald
 Circulaire Commerciale Gram Udyog Patrika
 Bombay Information Economic News
 Anglo-American News Journal Officiel
 Monthly Record Industry
 The Whip Guardian
 Indian Listener Indian Trade
 Commercial News Batanagar News
 The Prince Indian Sugar
 Advertiser Ceylon and the War
 The Commercial Opinion Sugar Bulletin
 Ceylon Radio Times Investment Guide
 Sunday Observer Eastern Economist
 Indian Concrete Journal The Indian Trade Journal
 Technical News Bulletin Journal of Research
 Indian Farming

Post War Protection to Industries.

The Government of India have under consideration the need for assuring certain specified industries, the starting of which Government consider essential under conditions created by the war, of a measure of protection which may be necessary after the war to enable such industries to continue their existence. Such specified industries which have been promoted with the direct encouragement of Government may feel assured, says a Press Note, that if they are conducted on sound business lines, they will by such measures as Government may devise, be protected against unfair competition from outside India. In view of the fact that war conditions have shown that the indigenous production of bichromates required for the textile and tanning industries are vital to the security of two of India's major industries, the Government of India are prepared to give an assurance on the lines indicated above to any concern which undertakes the production of bichromates.

Baroda in 1938—39.

Movement in money and property is an indication of the prosperity of the people. The year 1938—39, judged from this point of view, may be regarded as a fairly prosperous year for the people both in the urban as well as rural areas in the Baroda State.

The aggregate value of property that passed through the registrars in 1938—39 by way of mortgages, sales, wills etc., was Rs. 2,64,45,578 as against Rs. 2,52,96,653 last year. The people's savings in the Bank of Baroda amounted to Rs. 4,32,59,392 besides Rs. 2,61,12,273 in fixed deposits. Deposits and loans to the extent of Rs. 22,62,594 from non-members Rs. 16,93,827 from societies and banks and Rs. 25,23,094 from members were made in various Co-operative Societies. The total working capital of these Societies stood at Rs. 95,31,730. Thus the total deposits in Banks as well as in Co-operative Societies amounted to Rs. 7.6 crores.

The quantity of import and export trade of Baroda State by rail as well as by sea, amounted to 39.5 million mds. the imports being 23.3 million mds. and the exports 16.2 million mds.

The total income of the municipalities for the year 1938—39 excluding Government grants and local cess contributions, came to Rs. 18,11,005 of which the income from the municipal rates and taxes was Rs. 15,56,920.

The Village Panchayat demand amounted to Rs. 3,91,107. The Government gave a subsidy of Rs. 59,879 equal in amount to what the Panchayats raised by way of taxation and contribution. It means Rs. 29,879 more than what was paid last year, and the tendency to raise money by taxation and contribution seems to be strengthened.

The Government gave increased attention to the betterment and development of agriculture. There were seven major experimental and seed producing farms established throughout the State. Areas comprising 400 villages were being developed for intensive agricultural work, and a large portion of the remaining villages was reached by means of itinerant propaganda carts. A small fleet of modern tractors was also made available for ploughing to agriculturists.

For power consumed the people paid to the State Electrical Department as well as to the other private concerns an amount of over Rs. 9,31,351. The sale of electrical energy rose from 43,85,858 units to 47,78,156 units, during the year.

Cost of Living in Madras.

The cost of living index number for the working classes in Madras city works out to 106 for April 1940 and is higher by one point than the index for the previous month.

As compared with the previous month, the index number for the food group rose by two points to 106 owing mainly to an increase in the price of rice.

The index numbers for the fuel and lighting, clothing, housing and miscellaneous groups remained unchanged at 121, 117, 100 and 103 respectively.

Earthing up of Sugar Canes.

As the result of experiments on the earthing up of canes made in Bombay, Bihar, the United Provinces and Assam, extensive local trials are recommended by the Imperial Council of Agricultural Research says "*Indian Farming*."

Earthing up of canes is a common practice employed in many important sugarcane tracts throughout India. It is done either early in the season when the plants are small and are susceptible to borer attack or later in the growth period when the plants are well above ground level and have formed a few internodes. In the former stage earthing has proved valuable at a few centres in lessening the attack by borers; while at the latter stage when it is more commonly practised, it has proved useful in a variety of ways, the most important being prevention or lessening of 'lodging' (i.e. the cane falling or bending by its own weight).

Such beneficial results are more marked in lands of high fertility where crop yields are heavy and also with varieties which have a natural tendency to 'lodge'. On poorer fields it is often more economical to leave the crop unearthed especially when the variety is of an erect 'non-lodging' habit.

In the experiments at Padegaon in the Bombay Presidency, however, it has been established that earthing in the conditions of that tract is useful only as a mechanical support in areas of intensive cultivation and not as a stimulant of fresh root production and consequent growth of the cane.

Chemical studies have indicated that the practice of earthing is not always associated with higher percentage of sucrose and purity. At Shahjahanpur in the United Provinces the non-earthed crop showed a higher percentage of sucrose and purity while at Jorhat (Assam), opposite results were achieved. At Pusa (Bihar) the sucrose content has been found to be high in the earthed area but only near harvest. Earlier in the season canes from non-earthed plots showed higher sucrose values.

These apparently conflicting results indicate clearly that local soil and climatic conditions and the nature of the variety may make a great difference in the applicability or otherwise of even one item in a cultivation system and stress the need for extensive local trials.

உலகத்தில் ஏற்பட்டிருக்கும் வினோதங்கள்.

எரிமலைக்கு முடி.

அநேக தேசங்களில் வசிக்கும் ஆபிரக்கணக்கான ஜனங்கள் யுத்தகாலத்தில் விஷவாயுப் பிரயோகத்தை தடுக்கும் பொருட்டு அநேக முகமுடிகளை அணிந்து கொள்ளுகிறார்கள். இவ்வித முகமுடிகள் ஜனங்களுக்கு மட்டும் உபயோகப்படுவதோடில்லாமல் எரிமலைக்கும் கூட உபயோகப்படுகிறது. எரிமலைக்கு அவ்விதம் ஏன் உபயோகிக்க வேண்டும் என்பதைப் பற்றி உருக்கமான ஒரு சம்பவம் கீழே தரப்பட்டுள்ளது.

மத்திய குடியரசு அமெரிக்காவில் நிக்கராகுவா என்ற பிரதேசத்தில் உள்ள குடியானவர்களால் மேற் சொன்ன முறை கையாளப் படுகிறது. ஏனென்றால் அவ்விடமுள்ள ஒரு எரிமலையால் அவர்களுக்குச் சொந்தமான நிலங்களெல்லாம் அடிக்கடி பாழ்பட்டுப் போகின்றன.

அந்த எரிமலை எரியும்பொழுது அதிலிருந்து ஒரு வித விஷப்புகை வெளிக்கிளம்பி பக்கத்திலுள்ள நிலங்களை அடியோடு அழித்துவிடுகிறது. இவ்வாபத்தைத் தடுக்கும்பொருட்டு அங்குள்ள விஞ்ஞானிகள் ஒரு நூதன கருவியைக் கண்டுபிடித்திருக்கிறார்கள். அக்கருவிக்குப்பெயர் “விஷப்புகை வடிக்கடி” என்பது.

ஒரு பெரிய உலோகத்தினால் ஆகிய (எரிமலையின் வாய் அளவுக்கு) முடி ஒன்று செய்து, அதில் ஒருவித ரஸாயன பொருளை செலுத்துகிறார்கள். இதன் பயனாக எரிமலையின் விஷப்புகையோ அல்லது விஷ வாயுவையோ வெளிக்கிளம்பாமல் தடுத்து, நல்ல கார்பை கொடுப்பதோடல்லாமல், நிலங்களுக்கு செழிப்பையும் உண்டிபண்ணுகிறது.

பூகம்பச் செடி.

பூகம்பம் வரப்போகிறதென்று முன்னதாகவே அறிவிப்பதற்கு ஒரு செடியொன்றிருக்கிறது. இச்செடிக்கு அப்ரஸ் பிராக்கடோரியல் றோபில்ஸ் என்பது லத்தீன் பெயர். இதனைக் கண்டுபிடித்தவர் ஆஸ்திரியா விஞ்ஞானியான J. F. றோவாக் என்பவராவார்.

இப்பூகம்பச்செடி, பூமியில் இயற்கைக் கொந்தளிப்பு ஏற்படும்போது—அதாவது பூமியதிர்ச்சி, எரிமலையுடைதல், பெரும்புயல் வீசுதல் முதலியன தோற்றும்போது—சில மணிக்கு முன்னதாகவே மாற்றமடைய ஆரம்பிக்கும். இதைக்கொண்டு திரு. றோவாக் பூகம்ப ஜோவியம் கூறி வந்தார். ஜப்பான், சான்பிரான்சிஸ்கோ முதலிய இடங்களில் நடைபெற்ற பூகம்ப அதிர்ச்சியின்போது இவ் கூறிய ஜோவியம் பலரையும் அதிசயமடையச் செய்தது. இவ் பதினொரு வாயிரம் பூகம்பச் செடியை வண்டனுக்குக் கொண்டுவந்து பயிர்செய்தார். பல விஞ்ஞானிகள் சென்று பரிட்சை நடத்தினர்.

விஷத்தைக் கக்கும் வானப்பகி.

ஆபிரிக்காவிலே ஒருவித விசித்திரப் பறவை இருக்கிறதாம். அதற்கு அங்குள்ள சனங்கள் “மரணப்பறவை” என்று சொல்லுகிறார்கள். அதுவும் தன் பெயருக்கேற்ப உடல் முழுவதிலும் விஷம் பொருந்தியிருக்கிறதாம். யாரையாவது இப்பகி தீண்டினால்போதும், தீண்டப்பட்டவர்கள் மரணத்துக்குட்பட வேண்டியதுதான்.

யாரோ ஒருவன் ஒரு மரணப்பறவையை ஒருமுறை சுட்டு வீழ்த்தினான். அப்பகி நிலத்தில் வீழ்ந்ததும் கையிலெடுத்த ஆளை உடனே தீண்டிவிட்டதாம். அதனால் அவன் எட்டு நாட்களாய் பெரும் அவஸ்தைக்குட்பட்டானாம்.

பேசும் புத்தகம்.

“புத்தகங்களும் பேசுமா? என்று யாவரும் வியக்கக் கூடும் ஆம். அப்படிச் செய்வலாம். இப்போது ஒருவர் ஒரு புத்தகத்தைக் கண்டுபிடித்துள்ளார். இதனுடன் ஓர் இசைத் தட்டும் உண்டு. இப்புத்தகத்தைக் குழந்தையொன்றின் கையில் விரித்துக் கொடுத்துவிட்டு, இசைத்தட்டைக் கிராமபோனில் போடவேண்டியதுதான். புத்தகத்திலுள்ள படம், படம் காட்டும் கதை, கதைக்குரிய பாட்டு யாவும் சொல்லிக்கொடுத்து விடும் அக்கருவி.”

செடிப் பூச்சிகளை கொல்ல.

செடிகளிலுள்ள பூச்சிகளை ஒழிப்பதற்கு பல சாதனங்கள் செய்தும் கொல்ல முடிவதில்லை. இதை நிவர்த்திக்க பல ரிபுணர்கள் ஆராய்ச்சி செய்ததன்மேல் இப்பொழுது செடி உலோகத்திலிருந்து கிடைக்கும் தூள்களை செடிகளின் மேல் தூவினால் பூச்சிகள் இறந்துபோவதுடன் செடிகளும் நல்ல பலனைத் தருவதாக கண்டுபிடித்திருக்கிறார்கள். எலக்டிரிக் மூலமாக பவுடர் செய்தால், சிகப்பு, பழுப்பு, மஞ்சள் நிறமான பவுடர்கள் கிடைக்கிறது. இதில் மஞ்சள் பவுடர் நல்ல பலனைத் தருகிறது.



பத்திரிகைகள் வரவு.



ஆரம்பக்கல்வி
செங்குந்த மித்திரன்
நல்வழி
மிராசதார்
ஜகன்மோகினி
விதேலை
கதேச நாட்டியம்
சோதிட பரிபாலனி
சந்திரோதயம்
சினிமா உலகம்

சமரசம்
குமரன்
கதர் தொழில்
குடி அரசு
கட்டுறவு
செட்டிராடு
கிராம இந்தியா
அம்ருதலஹரி
மார்க்கப்பந்து
கிராம பஞ்சாயத்து பத்திரிகை



JOTTINGS



Radio Licences.

An increase of 25235 broadcast receiver licences during 1939-40 has brought the total figure of licences in force at the end of March 1940 to 97517. During March, 1940, altogether 8864 licences were issued of which 3660 were new licences.

Import Duty on Wattle Bark.

The bill for imposing an import duty of 3 per cent ad valorem on imports of Wattle Bark was passed by the Central Legislature. The duty is expected to yield Rs. 1.2 lakhs a year and is intended to cover any possible loss to Government in their efforts to maintain a reserve of Wattle Bark with a view to ensuring supplies for the tanning industry.

Baroda's Concession for Small Industries.

To stimulate small industries Government have granted concession in terminal tax and water rate to the Baroda Ice Factory for a further period of five years. The factory is given 3/4ths exemption from terminal tax on raw materials for the use of the factory and is to be charged 1/2 water rate on water consumed in the factory during the period.

Cess on Agricultural Exports.

The Central Indian Legislature has passed the Agricultural Produce Cess Bill imposing an export cess of half per cent ad valorem on certain agricultural commodities not subject to an export duty or cess. The proceeds of the cess are estimated at Rs. 14 lakhs which is earmarked for financing the work of the Imperial Council of Agricultural Research.

Training in Radio Engineering.

In order that Indian Students may obtain experience in radio engineering, All India Radio has decided to offer facilities to students of the Indian Universities to work in its Engineering Department. All-India Radio has invited each of the Indian Universities to nominate students to study the practical side of radio engineering under its direct supervision.

Indian Tobacco in Southern Europe.

It is learnt that there is no possibility of creating a market for Indian tobacco in Italy which has prohibited the importation of tobacco and its products on private account owing to the existence of a State monopoly for tobacco.

Nor is there any market for Indian tobacco in the other countries of Southern Europe. Most of the countries in this area are producers of tobacco and have State monopolies in operation for controlling this trade.

Jaggery from Sweet Toddy.

Co-operative Societies formed in certain areas in Malabar are endeavouring to take advantage of the concession offered by Government to assist persons who tap cocoanut trees for sweet toddy with the object of making jaggery from the juice. The jaggery can be supplied to factories which will convert them into sugar. The Government of Madras have lent the services of their industrial chemist in this connection.

Grading Station for Jaggery.

An experimental station for the grading of sugar-cane jaggery under the Agricultural Produce Grading and Marking Act was inaugurated at Coimbatore by Rao Bahadur Gopalakrishna Raju, Provincial Marketing Officer, Madras. The jaggery marketed will be graded according to the All-India standards fixed by the Government of India thus ensuring produce of quality for the consumer and a better price for the producer.

Imports of Wireless Apparatus.

There was a record increase in the customs revenue from the import of wireless receiving apparatus in India during 1939-40, the total revenue under this head being Rs. 21,19,000 as against Rs. 14,87,000 for the previous year. In actual fact, this considerably understates the general increase, says the *Indian Listener*, since customs duty is *ad valorem* and the prices of sets on the whole are much lower than before.

Sugar from Sweet Toddy.

A demonstration of the process of manufacture of white sugar from sweet palmyra toddy was given at a village near Palghat and the villagers present resolved to form a co-operative society for the manufacture of sugar. Mr. K. Seshachalam Choudry, Research Chemist, Industries Department, who was present at the time explained the process and pointed out that the quality of jaggery could be improved by using less lime to convert palmyra juice into sweet toddy.

Electro-Culture Experiments in Cochin.

From observations recorded during 1938-39 in Cochin as regards the behaviour of trees subjected to electro-culture treatment, it has been found that there was hardly any response on the part of several species of fruit trees treated. Even in the case of citrus trees which had been claimed to be highly susceptible to this form of treatment, there was no perceptible improvement either in growth or in fruiting. Treated rose bushes, however, continued to produce more flowers as compared with the controls.

Forestry Training in Travancore.

The Government of Travancore have sanctioned the starting of a diploma course in Forestry by the Travancore University as an experimental measure with one batch of students not exceeding 15 of whom not more than five will be permanent employees of the Forest Department. The question of continuing the course will be taken up after the training of the first batch. The course will extend over two years and a half of which the first six months will be spent in the forests of Travancore and the remaining two years at the college.

A Five Year Plan for Madras.

The Government of Madras have approved the five year scheme of the Director of Agriculture for the multiplication and distribution of improved strains of paddy in Salem, North Arcot, Malabar and South Kanara Districts, of groundnut in Coimbatore and potato in the Nilgiris.

The scheme for the improvement of bee-keeping introduced in Chittoor last year has been ordered to be continued while a new scheme for intensive work in bee-keeping in three taluks of the West Godavari District has been sanctioned for one year.

Oilseeds Purchase by the Allies.

An assurance has been received from the British Government that the prices paid by the Allies for linseed, rapeseed and castor seed exported from India will be based on the parity of prices prevailing for linseed and rapeseed in Argentine and for castorseed in Brazil. Due account will be taken of the normal premium of Indian prices over such prices. They have also stated that they see no reason to fear any lack of shipping. Their intention is to continue the purchases through the normal channels.

Demonstrations in Weaving and Spinning.

Demonstrations in hand-loom weaving, at four centres in the State, with 87 students, and in hand spinning at six centres in the State training 156 students were some of the activities of the Industries and Labour Department of Baroda in rendering help to agriculturists in the year 1938-39.

Training in subsidiary occupations like cotton ginning, carding, sizing and weaving of yarns, tape making etc., was given to farmers in these classes.

A trained eri silk demonstrator was obtained from Bhagalpore and a centre for conducting experiments in eri silk worm rearing was started from 26-5-39. Eri eggs were obtained from Bhagalpore, Assam and other eri silk rearing centres and castor leaves required for feeding the worms were bought from farmers. At the end of the year the work was still in an experimental stage.

Fruit Growing in Baroda.

With a view to improve fruit growing in Baroda, a survey of fruit growing centres and orchards in the State has been carried out. The possibilities of developing new centres are also being explored.

In order to enable growers to plant reliable stocks of superior varieties, it is considered necessary to regulate the fruit nursery trade of the State. Nurserymen and seedsmen all over the State are being registered by the department of agriculture, so that they hold themselves responsible for what they sell, and keep an accurate record of their transactions. These nurseries are periodically inspected by the horticultural staff and attempt is made to settle any complaints from purchasers amicably.

Animal Husbandry Training.

The Government of India have decided to institute an advanced course in animal husbandry which will be held at the Imperial Agricultural Research Institute, Delhi, and its sub-station at Karnal, and at the Imperial Veterinary Research Institute, Izatnagar. The object of the course is to train officers in work connected with animal health and animal industry and the course will not replace any of the post-graduate or other courses in agricultural, veterinary, or dairying science and allied subjects at present being given at the central research institutions.

The course will cover a period of eight months, commencing in the middle of July in each year and ending in the middle of March in the next year. The first course will commence in July 1940.

Japanese Dyes and Chemicals for Tanning Leather.

Heavy chemicals and dyes required for the tanning of leather, electric wires and cables and slate-making machinery are among Japanese products on which inquiries have been dealt with by the Indian Government Trade Commissioner in Japan.

A Sialkot firm has been supplied with the names of manufacturers and exporters of wood-screw and crown cork making machine, and sheet cork. The name of a firm of exporters of slate-making machines has been supplied to a slate works in Bagalkot (South India).

A rice and flour mill at Jammu (Tawi) has been furnished with the address of a firm in Japan having the monopoly of the manufacture of pulp from paddy husk.

IF YOU REQUIRE**BEST AND GOOD QUALITY OF MALIGAI**

CALL AT

“KONAR MALIGAI”**OR PHONE No. 105****PRICES MODERATE**

COMMUNICATE WITH

T. KRISHNASAMY PILLAY

TELEGRAM:

“KRISHNA”

PROPRIETOR

507-508, BIG BAZAAR STREET**TRICHINOPOLY**

PAINT YOUR CAR,**BUS,****HOUSE****WITH****THE DOUBLE
PROTECTION PAINT
WITH THE ENAMEL FINISH**AGENT:— **T. R. Rangasawmy Naidu,****PAINT & GLASS MERCHANT,
BIG BAZAAR STREET, TRICHINOPOLY.**