REPORT



ON THE

MADRAS CIVIL FUND,

WITH

VALUATION 1st MAY, 1863.

BY

SAMUEL BROWN, V.P.S.S.,

VICE-PRESIDENT OF THE INSTITUTE OF ACTUARIES, AND ACTUARY OF THE GUARDIAN ASSURANCE COMPANY.

LONDON:
CHARLES AND EDWIN LAYTON,
150, FLEET STREET.

1866.

PRINTED BY
CHARLES & EDWIN LAYTON,
FLEET STREET AND GOUGH SQUARE, LONDON.

INDEX TO REPORT.

ART.

- 2. Memorandum for the Actuary.
- 8, 4. Proposal of the Right Honourable the Secretary of State for India, as to fixed donations in lieu of increased interest on capital.
 - 5. Observations on mortality and marriage.
 - 6. Previous Reports on the Madras Civil Fund described.
 - 7. Mr. Davies used his tables formed for the Bombay Civil Fund.
- 8-10. Mr. Neison, in his first Report, for widows and children, used his tables for England and Wales, and for members, Mr. Davies' table for Bengal Civil Fund; and his own for England and Wales. In his second Report, experience of the Madras Civil Fund under years of service.
 - 11. Mr. Grant used Neison's data for new tables.
- 12-15. New observations of mortality in Madras Civil Service to 1863, now corrected but still somewhat imperfect.
- 16-18. Total number and proportion of deaths, withdrawals, and retirements.
- 19-21. Abstract A.—New table; Mr. Neison's and Bengal Civil Service Table, compared in quinquennial periods of age.
 - 22. Abstract B.—Mortality in decennial periods of age.
 - 23. The observations of mortality amongst wives and children generally defective.
 - 24. Abstract B².—Mortality amongst bachelors and married members, compared in the Madras Civil Service, Bengal Civil Fund, and Madras Military Fund.
 - 25. Rate of marriage amongst bachelors.
 - 26. Proportion of retirements relatively small.
- 27, 28. Abstract C.—Tables in use compared with Bengal Civil Fund and Madras Military Fund (wives and widows) in decennial periods of age.
 - 29. Abstract D.—Rates of marriage amongst the widows and daughters of Madras Civil Fund and Bengal Civil Fund.
 - 30. Abstract E.—Mortality of children, sexes distinguished.
- 31-35. Abstract F.—Members and their families in the Madras Civil Fund, living at the date of each valuation; proportion to 100 members in Service.
- 36-40. Abstract G.—Average ages of pensioners, members and their families, living at each valuation.

New Tables constructed for the present Valuation.

- 41. Mr. Neison's and Mr. Grant's Tables, at 8 and 4 per cent., used as far as available.
- 42. Another series at 6 and 5 per cent. formed.
- 43. Incumbent pensions—widows' annuity table.
- 44. Difference between the benefits of sons or daughters before age 19.

- 45. Value of annuity, £50 to daughters above age 19, in lieu of donation.
- 46. Ditto to fatherless daughters, above age 19, for whom the subsidiary payments have been made.
- 47, 48. Ditto, ditto, if under age 19.
 - 49. Value of increase in children's pensions at age 6 and 10.
 - 50. The above tables computed at 6 and 5 per cent.
 - 51. Values of contingent reversionary pensions to wives of living members.
 - 52. Correction of the value of p_m from 8 to 4 per cent.
- 53, 54. A much larger reserve required in the 4 per cent. valuations.
 - 55. Corrected in the 6 and 5 per cent. tables.
 - 56. The same corrections required in the reversionary pensions of sons and daughters after father at 4 per cent.
 - 57. Value of increase of pension if mother dies before the children attain age 10.
 - 58. Reversionary benefits to children of widowers.
- 59, 60. Value of reversionary benefits to daughters, under age 19, after father's death.
- 61-62. Ditto to daughters placed on the Subsidiary Fund, whether above or below age 19.
 - 63. All the above tables completed at 8, 6, 5, and 4 per cent.
 - 64. Values of annuities on the lives of members for 16 and 25 years' service, and of joint lives with their wives.
 - 65. Tables similar in form required for the new values under the new Rules.
 - 66. Values of pensions to widows under new Rules reducible to one-half on remarriage.
 - 67. Values of son's benefits extended to age 21.
 - 68. Values of daughter's benefits with increase after mother's death and of endowment of £300 on marriage.
 - 69. Reversionary benefits to wives, sons, and daughters, all required new tables.
 - 70. Valuation Tables for subscriptions of members, single life and joint lives, with their wives, for 16 and 25 years' service.
 - 71. Value of marriage donations of members-Table from the Bengal Civil Fund.
 - 72. Proceed to consider the results of the valuation.

Amount to be required from Retired Subscribers to entitle their Families to the Benefits of the New Scheme.

- 73. Form of Circular, 25th October, 1863, Appendix II.A.
- 74, 75. Reply containing particulars of member's family more complete than before.
 - 76. Summary of replies, arranged alphabetically, Appendix II.B.
 - 77. Values of benefits under old and new schemes, according to age, given in the general valuation.
- 78, 79. Enquiry as to extent to which pensions diminished by the property clause.
 - 80. Of late years larger proportion of pensions paid in full.
- 81-86. Enquiry into the number of widows, from 1803 to 1861, whether admitted or not, and whether of annuitants or members in Service.
- 87-89. Abstract H.-Widows of annuitants or of members in Service admitted on the Fund.
- 90-92. Of widows admitted, proportion receiving the benefits in full.
- 93, 94. Final proportion excluded by the property clause.
- 95, 96. Alphabetical list of members who had conditionally accepted the new scheme sent to Messrs. Coutts & Co., with the payments required from each.
 - 97. Total values of new benefits, wives, daughters, sons.
 - 98. Whether partial benefits should be allowed to individuals in families.



- 99. All the values for daughters calculated as if the retired member desired to secure the larger annuity under the Provident scheme, whether they were previously placed on the Subsidiary Fund or not.
- 100. Valuation of existing liabilities, 1st May, 1863.
- 101. Appendix IV.—Tables for valuation under the old and new Rules, at 8, 6, 5, and 4 per cent.
- 102. Summary of the valuation, 1st May, 1863.

Liabilities for the Families of Members under the old Rules.

- 103. Incumbent liabilities, old Rules.
- 104. a. Widows' pensions.
- 105, 106. Ditto compared with previous valuations.
- 107-109. b. Sons' pensions.
- 110-112. c. Daughters' pensions.
- 113-115. Values of sons' and daughters' pensions compared with preceding valuations.
- 116, 117. Values of daughters' incumbent pensions in the Subsidiary Fund brought into the general valuation.
 - 118. Total summary of all the values of incumbent pensions.
 - 119. Other contingent liabilities under the old Rules.
 - 120. d. Estimate for contingent annuities of remarried widows.
- 121, 122. Reduction in above value on account of the "property clause."
 - 123. Mr. Grant's estimate for similar item in 1861.
- 124, 125. e. Values of liabilities for wives and families of members, retired and on service, who elect to abide by the old Rules.
 - 126. The above form total of liabilities under the old Rules.

Liabilities for the Families of Members who have elected to join the New Scheme.

- 127, 128. These liabilities valued at 8, 6, 5, and 4 per cent., and the proportion under the old and the new Rules.
 - 129. Liabilities for retired members and those on service, if valued in the proportion of the diminished to the full incumbent pensions of widows.
 - 130. Shows a reduction in value to 85 per cent. of full value.
- 131-138. Summary of result of valuation of liabilities for members who adhere to the old Rules, at 6 per cent., and of those who have joined the new scheme, partly at 8 and partly at 4 per cent.
 - 134. f. Value of benefits for families of retired members, classed under ages.
 - 135. The facts as to families corrected by the statements of the members themselves.
 - 136. Number of retired members, of their sons, and of their daughters.
 - 137. Average number of children in a family.
 - 138. Total value of benefits, in full and reduced, to the families of retired members.
- 139, 140. Average value for each class and mean age, valued as under old Rules.
 - 141. Difference from the values in Art. 97.
 - 142. The same liabilities valued as under the new Rules.
- 143, 144. Mr. Neison's values of wives' reversionary pensions in full, at 8 per cent., nearly the same under old and new Rules, and the increase only slight at other rates.
 - 145. But heavy excess when the values reduced under the property clause are compared.
 - 146. Values under the old Rules at 8 per cent., and excess under new Rules at 4 per cent.



- 147. Number of children rather greater under new Rules.
- 148. g. Reversionary pensions to families of members in the Service who have accepted the new scheme under old and new Rules.
- 149-151. Total number and average number of children to each family.
- 152-153. Average value of pension and mean age.
 - 154. All the daughters of members in the Service assumed as if under the subsidiary Rules.
 - 155. Diminution; on account of the "property clause," in the reserves for the reversionary benefits to the families of members in the Service.
 - 156. Values of pensions, full and reduced, in each class, at 8, 6, 5, and 4 per cent., as under old Rules.
 - 157. Excess value of the liability for the above, under new Rules.
 - 158. Total value of liability by combining the two.
 - 159. Greater number of sons entitled to benefits by the extension to age 21.
 - 160. Total excess value under the new scheme for members retired and on service, £312085.6.
 - 161. Other items of liability for future children of present marriages, and probable marriages of bachelors.
 - 162. h. Mr. Grant adopts for the former, one-fourth of values for existing children.
 - 163. Method adopted in the Bengal Civil Fund Report, showing about 20 per cent. only of the values for existing children.
 - 164. Abstract I.—Number of children in families, according to the age of the husband, in Madras Civil Fund and Bengal Civil Fund compared.
 - 165. Excess values for future children under the new over those under the old Rules.
 - 166. j. Mr. Grant's method for valuing liabilities under future marriages of bachelors.
 - 167. Reference to table of rate of marriage of bachelors in Bengal Civil Fund.
 - 168. Method now adopted for computing the value of liabilities under the probable marriages of Bachelors.
 - 169. Excess values of these liabilities under the new over those under the old Rules.
 - 170. Value of subsequent marriages of existing married members not estimated.
 - 171. Passage-money, assistance to sick members, and charges of management, valued by average annuity at age 35, the two former during service and the latter for the whole of life.
 - 172. k. Reserve for passage-money of widows and children.
 - 173. 1. Reserve for assistance to sick members carried to "profit and loss."
 - 174. m. Reserve for charges of management, &c.
 - 175. The preceding comprise estimates for all the liabilities of the Fund.
 - 176. Assets to meet the preceding liabilities.
 - 177. n. Capital of the Fund, 1st May, 1863.
 - 178. o. Amount to be paid by retired members who have conditionally accepted the new scheme.
 - 179. Estimated value of subscriptions of members under old and new Rules requires special tables.
 - 180. The old method of valuing does not allow for the increasing rates as incomes increase with advancing age.
 - 181. List No. 18, total income from subscriptions computed as on 1st May, 1863.
 - 182. Salaries of members according to age, whether married, widowers, or single.
 - 183. Salaries of members.
 - 184. Abstract J.—Summary of List No. 18. Salaries of members under 16 years' service, and 16 years and upwards, and 1 per cent. thereon.
- 185-187. Comparison of List No. 18, with Mr. Grant's Reports.
 - 188. Value of a single member's subscription under 16 years' service.



- 189-190. Total values of annuities for 16 and 25 years' service for members of every age.
- 191-193. Abstract K.—Values of subscriptions under old and new Rules, and excess value of the latter at 8, 6, 5, and 4 per cent.
 - 195. Abstract L.—Total salaries of members living in the Service on 1st May, 1863, and average salary at every 5th year of service.
 - 196. Suggestion that a similar table be formed at next valuation, and new method of valuing the subscriptions tried.
- 197-199. q. Value of future donations for daughters estimated under old Rules, estimated as 20 per cent., on existing numbers.
 - 200. Another method of valuing these donations from Abstract I.
 - 201. Estimate for donations of daughters from the probable marriages of existing bachelors under old Rules.
- 202-203. Value of ditto and of marriage donations under new Rules, and excess value over the old Rules.
 - 204. r. Value of Government donation—views of Mr. Grant and Mr. Neison.
 - 205. Ditto, in present valuation.
 - 206. s. Value of gain by exchange.
 - 209. BALANCE SHEET OF THE MADRAS CIVIL FUND ON 1ST MAY, 1863.
 - 210. Estimated surplus, £120593.4.
 - 211. The present capital and rates of subscriptions nearly sufficient to carry out the new scheme, except as to existing pensions.
 - 212. Large value given to profit by exchanges, by taking the rupee at 2s. 3d.
 - 213. Various values given to the rupee in exchange.
 - 214. The profit from this source not brought to account.
 - 215. Mode in which the charges are to be debited to capital account if the present system is continued.
- 216-218. Value of incumbent liabilities on the same principle as in former Reports.
- 219-222. Surplus available to carry out the new scheme, assuming all the new liabilities at 4 per cent.
 - 223. Ditto, if the new liabilities be valued at 8 per cent.
 - 224. Effect of placing existing pensioners under the new Rules.
 - 225. Abstract M.—Values of incumbent liabilities, 1st May, 1863, if placed under the new Rules.
 - 226. Proportion of charges to the several capital accounts.
 - 228. Proportion under the old and new Rules estimated on the values of reversionary benefits to the families of members in the Service.
 - 229. Proportion of subscriptions under the old and under the new Rules.
 - 230. Miscellaneous items, passage money, advances to sick members, met by Government donation, all under the old Rules.
 - 231. Very desirable to get rid of the separation of Funds and capitals.
 - 232. This is the effect of the Government proposition.
 - 233. Government donation in lieu of the existing rate of exchange.
 - 234. Ditto for difference of interests between the allowed and current rate.
 - 235. Average excess of interest, for 5 years, to 1st January, 1863.
 - 236. Balance sheet at 5 per cent. if the old and new schemes united.
 - 237. Valuation at 5 per cent. not very different from incumbent liabilities at 6 per cent., those under the old Rules at 8 per cent., and excess under new Rules at 4 per cent.
 - 238. Value of Government donation in lieu of interest.
 - 289. Very advisable to adopt the Government proposition.



- 240. The prosperous condition of the Fund arises from restrictive property clause and high interest. Incumbent pensioners and retired members should participate in new benefits.
- 241-247. Liabilities of future members compared with the value of their subscriptions and donations.
- 248-250. Excess of liability if incumbent pensions are put under new Rules.
- 251, 252. Abatement in the payments of retired members if they pay the same proportion for the increased benefits to their families as members on service will pay.
 - 253. Cost of reducing the subscriptions from $2\frac{1}{4}$ to 2 per cent.
 - 254. Total deduction from surplus by the above propositions.
 - 255. Effect of reducing the subscriptions of future members to 2 per cent.
 - 256. Subscriptions of future members will not bear further reduction.
- 257, 258. Additional statistics as to rates of mortality and marriage desirable.
 - 259. The assets appear to afford margin for any changes going on.
 - 260. Conclusion.

REPORT

ON THE

MADRAS CIVIL FUND.

TO THE TRUSTEES OF THE MADRAS CIVIL FUND.

GENTLEMEN,

- 1. Having been favoured, through Messrs. Coutts & Co., with instructions to make an investigation into the financial condition of the Madras Civil Fund on its new footing, and to report on the various questions which it had been decided to submit to the opinion of an Actuary, I now beg to lay before you the results, regretting that from the laborious nature of the inquiry, and the large number of new tables which had to be formed, so long a period has elapsed before this Report could be completed.
- 2. The Memorandum prepared by the Secretary contains so clear a statement of the changes recently effected in the Fund, and of the points to which attention should be specially directed, that I introduce it here, and propose as nearly as possible to follow the order in which the various subjects of investigation are therein stated.

Memorandum for the Actuary.

Under the system hitherto in force in the Madras Civil Fund, the benefits claimable by the families of deceased subscribers, and which are affected by the new Provident Scheme, were as follows:—

Annuities, liable to be reduced by the amount of any private income in excess of £45 per annum.

To a Widow.

£300 during widowhood or till death—the annuity being discontinued during second marriage, but reviving on second widowhood.



To a Daughter or Son.

		If father on	ly were dead.	If both pare	ents were dead.
Under 6 years of age		£30 pe	r annum.	£50 pe	er annum.
Above 6 and under 10		£50	,,	£80	,,
From 10 to 19 .		£100	**	£100	••

On attaining the age of 19 years, a donation of £300 was payable, and all further claim on the Fund ceased; but in the case of daughters for whom the Subsidiary Payment to the Fund had been made, the annuity of £100 was continued after the age of 19 till marriage or death—in lieu of the donation of £300; and in the case of daughters for whom the subsidiary payment had not been made, an annuity of £50 till marriage or death was allowed in lieu of the donation of £300, when it was proved that such daughters were left in indigent circumstances—these annuities being similarly reducible by the amount of private income in excess of 45. To sons physically incapable of earning a livelihood, from blindness, insanity, or such like infirmity, a similar annual allowance of £50 for life was made in lieu of the donation—the allowance being reducible by the amount of any private income in excess of £50.

The payments required from members of the service to secure these benefits to their families were a subscription at the rate of $2\frac{1}{4}$ per cent. on all allowances for 16 years, commencing from arrival in India; and a donation of £30 on the birth of each daughter to secure the subsidiary benefits.

Under the Provident scheme the corresponding benefits are to be as follows:—

Annuities, not affected by the possession of private income—

To a Widow.

£300 during widowhood, the allowance being reduced to £150 on second marriage, and continued at that rate during second coverture and till death. But in the event of the second husband being a subscriber to the Provident branch, then on second widowhood the annuity is to be again raised to £300, which is the maximum.

To a Daughter.

				If the mother not rem			ner be dead or emarried.
Under 6 years	•			£40 per	annum.	£50 pe	r annum.
From 6 to 10				£60	,,	£70	,,
From 10 till mar	riage	or d	eath,	£100	,,	£125	"

On marriage, a donation of £300, and all further claims on the Fund to cease.

To a Son.

Under 6 years			£40 per annum.	£50 per annum.
From 6 to 10	•		£60 "	£70 "
From 10 to 21			£125 "	£125 "

On attaining the age of 21, a donation of £300, and all further claim to cease.

The payments which members now in the service joining the new Fund, and all future members of the service, are to make, to secure these benefits to all the members of their families, including children born before 1st May, 1863, are as follows:—

Subscription at the rate of 2½ per cent. for the first 16 years of service, in all cases; to be continued at the same rate during the whole further period of service in the cases of married men and widowers with families.

But to be reduced to 1 per cent. after 16 years' service, in the case of unmarried men and widowers without families; and to be raised to the higher rate on marriage.

^{*} See Note at end of Memorandum.

Donations.

On each	marriage, and	lbye	ach n	arried	man	enter	ing t	he	
serv	rice, after 1st	May,	1863	•	•				Rs. 1,500
On birth	of a daughter								500
Ditto	of a son								250

Members in the service who had ceased to subscribe under the old rules, are to pay arrears of subscription at the appropriate rate from 27th July, 1860, to 1st May, 1863; and to subscribe from the last date at the rate suitable to their individual cases.

The first point on which the Actuary's decision is required is as to the amount which retired subscribers to the Civil Fund under the old system shall pay to entitle their families to the benefits of the new scheme—the Service having resolved to admit them to the new benefits on payment by them of the estimated value of the additional contingent liability incurred by the Fund under the new scheme in the case of a wife, daughter, or son—by the abolition of the property disqualification—the value of the annuities being calculated at 6 per cent. interest per annum.

It is to be understood that in the case of daughters for whom the subsidiary payments have not been made, the annuity after the age of 19 will be limited to £50; but will, of course, be granted irrespective of the amount of private income. And the Actuary should also calculate the amount of special payment to be required in any case of a retired member who may not have placed his daughter on the subsidiary list, but may now desire to secure for her the larger annuity under the Provident scheme.

He will also express his opinion as to whether retired members may be permitted to secure part only of the new benefits (as, e. g., for children and not for widows, or vice versd), by payment of the value of the additional liability for the particular members of their families at the same rate as in cases where the whole benefits are secured for both widow and children; and in the event of his considering that this concession would in any way prove injurious to the financial interests of the Fund, he will please to suggest the addition to the rate which he may consider sufficient in such cases of partial benefit to secure the Fund from loss.

Doubts have been expressed as to the feasibility of calculating the value of the additional contingent liability in such form as to allow of a table being framed of rates applicable to the several cases according to age, but it is presumed that there can be no real difficulty in deducing an average value for age, &c., of the limited contingent or reversionary liability under the old rules from the data which accompany this Memorandum; and there certainly can be nothing unusual in the calculation of the value of the contingent liability, unlimited by any restriction on the possession of private property, which will devolve on the Fund under the new rules.

The difference between these two contingent values will, it is presumed, represent the sum to be paid by the retired subscribers according to the numbers and ages, &c., of the members of their families.

A set of tables must be prepared, showing for each age the value at 6 per cent. of the reversionary annuity to a widow, a daughter, or a son, under the rules which limited the amount of the annuity with reference to the amount of the private income, and under the new rules which recognise no such limitation.

Presuming that the difference between the average value of the past and present contingent liabilities under the old and new rules respectively will constitute the standard by which to calculate the payments to be made by retired members to secure the benefits of the new scheme, and as it is desired to remove all possible ground for complaint, it is suggested

for the consideration of the Actuary, that as the circumstances of the Service have altered greatly since 1814, when the Fund was established on the footing recently modified; and notably in 1825, when the present retiring Annuity Fund was established; in 1833, when the trading privileges were abolished; in 1853, when the rules of the retiring Annuity Fund were made less favourable; and in 1861, when the exclusive privileges of the service were greatly restricted—the rates of pay having also been much reduced in the course of years, and the means of providing a private income for their families in great measure withdrawn from the members of the Service—it is for these reasons suggested that the average value of the contingent liabilities in former years will be more fairly viewed if the period taken into calculation is broken up into groups of 10 years or thereabouts, and separate averages calculated for each, than if a single general average were deduced from the whole period.

It is believed that the proportion of actual liabilities devolving on the Fund, as compared with the contingent liabilities, will be found much and progressively larger in the later than in the earlier groups of years; and therefore, it is presumed, the value of the reversionary liability under the old rules will be enhanced, and the increase in value under the new rules will be reduced.

The next point on which the Actuary's decision is required is as to the amount of capital to be set aside as appropriated to meet the following liabilities:—

- 1. The value at 6 per cent. of all incumbent liabilities of the Civil Fund.
- The value at 6 per cent. of the contingent liabilities of the Civil Fund in the cases of subscribers retired or in the Service who abide by the old rules.
- 3, 4. The same as No. 1, at 5 and 4 per cent.
- 5, 6. The same as No. 2, at 5 and 4 per cent.
- 7, 8, 9. The value, at 8, 6, 5, and 4 per cent. of the contingent liabilities under the . Provident scheme.
- 10, 11, 12. The ditto ditto, at ditto, of incumbent liabilities under ditto as they may arise.

For these purposes tables must be drawn showing for each age the value under each scheme of the incumbent and reversionary liability at each rate of interest, by means of which the capital account may be periodically adjusted.

The last point on which the Actuary's opinion is required is, as to the sufficiency or otherwise of the estimated income to meet the liabilities devolving on the Fund under the change of scheme, assuming that the terms obtained at present by the Fund from Government—viz., interest at 8 per cent. per annum—are continued so far as regards the existing capital, and the future subscriptions up to the limit of the old rates—viz., the $2\frac{1}{4}$ per cent. subscription for 16 years and the donation of Rs. 300 for each daughter. The excess subscriptions and donations beyond the former amount will be invested in the open market, to the best advantage, in Government securities; and it may be assumed that 4 per cent. interest will be obtained on this additional capital and on the uninvested balance of it.

The Actuary will state his opinion as to the mode in which the charges are to be debited to the several capital accounts in due proportion. They will be chargeable to the new capital account at (say) 4 per cent. interest, so far as they are in excess of the charges properly devolving on the Fund under the former rules; and these last charges only will be debitable to the ordinary capital account, at 8 per cent. interest.

The Actuary will observe that the liability on account of PASSAGE-MONEY TO THE FAMILIES OF DECEASED SUBSCRIBERS, and of ASSISTANCE TO SICK SUBSCRIBERS, remains the same under either scheme—or rather may be said in the latter case to be reduced under the Provident Branch Rules, as the maximum amount to which a sick subscriber can become indebted to the Fund is limited, while there is no such limit under the Charity Branch Rules.

The Actuary will also be requested to prepare an individual statement for the retired subscribers to the Civil Fund, showing for each individual the amount which he is liable to pay for the admission of his family to the additional benefits of the Provident Branch, according to the particulars of each family, which will be furnished to the Actuary by Messrs. Coutts & Co.

The following Reports and Statements which accompany this Memorandum will, it is believed, together with the further particulars to be supplied by Messrs. Coutts & Co., furnish all the *data* necessary for the Actuary's calculations.

J. HUDLESTON,

MADRAS CIVIL FUND OFFICE, 24th October, 1863.

Secretary.

List of Reports and Statements furnished to the Actuary.

- 1. List of Widows on the Fund on 1st May, 1863, showing the dates of admission as annuitants, their ages on that date, and the amount of pension paid to each.
- 2. List of Daughters on ditto ditto, showing ditto ditto.
- 3. List of Sons on ditto ditto, showing ditto ditto.
- 4. List of Remarried Ladies no longer on the Fund.
- 5. List of Remarried Widows who have reverted to the Fund.
- 6. List of Members in the Service, with their ages and the ages of their wives, on 1st May, 1863, as also the number of their children at each age on that date.
- 7. List of Annuitants on 1st May, 1863, with ditto ditto.
- 8. List of Widows admitted on the Fund from its commencement, showing lapses by death, &c., up to 30th April, 1863.
- 9. List of Daughters admitted on ditto from ditto ditto.
- 10. List of Sons admitted on ditto from ditto ditto.
- 11. Statement showing the amounts of Petty Charges on account of Office Establishment, &c., for the last 15 years, with an average for one year.
- 12. Statement showing the Amounts of Assistance granted to Sick Civil Servants, carried to the head of "Profit and Loss."
- 13. List of Annuitants under the Subsidiary Rules on 1st May, 1863, with their ages, &c.
- 14. Memorandum showing the Number of Members in the Service on 1st January in each year, commencing from 1st January, 1850.
- 15. Statement showing the Receipts and Disbursements of the Civil Fund Charity and Subsidiary Branches, from the year 1831 to 1861 inclusive.
- 16. Statement of Passage-money granted to Widows and Children for the last 8 years, from 1855 to 1862 inclusive, and the average for one year.
- 17. Statement showing the Subscriptions actually received to the Civil Service Annuity Fund of 1825 and 1818 from 1825-26 to 1862-63, at 3\frac{3}{4} per cent., and at 4 per cent. on the same allowances on which subscriptions to the Civil Fund are chargeable.
- 18. Estimate of Subscriptions to the Civil Fund, under the Provident scheme, for one year.
- 19. Nominal List of Daughters of Retired Members for whom the benefits of the Subsidiary Rules have been secured.
- 20. Memorandum, showing all Retirements on the Annuity Fund of 1825, from 1st May, 1825, to 1st October, 1863, with the total number of years of their service, and the average number of years' service for one annuitant.
- 21. Estimate of Donations on account of Daughters under the operation of the Provident scheme for one year, based on the actual admissions to the Subsiduary Fund during the interval 1850-51 to 1862-63.
- 22. List of Civil Servants who died in the Service from 1825-26 to 1862-63, distinguishing those whose families were admitted on the Funds from those whose families never applied for its benefits.



- 23. List of Deceased Annuitants, distinguishing those whose families were admitted on the Funds from those whose families never applied for its benefits.
- 24. A Copy of the Deed of 1814.
- 25. Mr. Griffith Davies' Report on the Fund, dated 9th March, 1850.
- 26. Mr. F. G. P. Neison's ditto ditto, dated 27th December, 1852.
- 27. Mr. F. G. P. Neison's ditto ditto, dated 20th July, 1855.
- 28. Mr. W. Grant's ditto on the Subsidiary branch, dated 26th June, 1861.
- 29. Mr. W. Grant's ditto on the Civil Fund Charity Branch, dated 18th November, 1861.
- 30. Secretary's Memorandum on Mr. Grant's Reports.
- 31. Proceedings of a Quarterly General Meeting, dated 5th February, 1863, containing Trustees' Resolution on the Provident scheme, and Statements showing the condition of the Charity and Subsidiary branches of the Civil Fund on 1st January, 1863.
- 32. Statement showing the Capitals of the Charity and Subsidiary branches of the Civil Fund on 1st May, 1863, and the actual income to the Fund from subscriptions, &c., for 1862-63.
- 33. Rules of the Provident scheme, as finally adopted by the Service on the 16th October, 1863.
- 34. Copy of a Circular Letter addressed to retired members, explaining difference between the old and new benefits.

Note referred to in the foregoing Memorandum, p. 2.

The allowance of £45 private income to annuitants corresponds with the capital of £1,500 which, under the Resolution of 16th July, 1858, the Trustees were authorised to exclude from their calculations in estimating the private income derivable from the paternal estate by the family of a deceased subscriber, in order to determine the amount of annuity to which they may be entitled. The allowance of £45 is, therefore, due to the whole of the family, and not to each individual member or annuitant.

The plan of adjusting the account is that from the gross income derivable from the estate of deceased subscriber £45 is set aside. Then the remainder is divided into equal shares, corresponding with whole number of surviving members of deceased's family (widow and children), whether liable to come on the Fund, or superannuated, or otherwise ineligible.

The individual pensions are then reduced by the amount of these individual shares of the private income, and the balance is paid either to the mother on account of the family, or to the guardians, or separately to those of the daughters who may have attained their majority, if desired.

If the family consists of but one individual, and that individual should come on the Fund, he or she will derive the benefits of the full allowance of £45. But only £45 private income altogether is allowed to one family without reduction of pensions, except in the case of sons mentally or physically incapacitated, whose cases are disposed of under the special rule above.

3. There is, however, one more very important question which has since arisen, and which was communicated to me in a letter from the Secretary to Messrs. Coutts and Co., dated 9th February, 1865.

" Madras, 9th Feb., 1865.

"I annex an extract from a despatch of Sir C. Wood, dated 25th Nov., 1864, which I request you will forward to Mr. Brown, and inform him that, when sending in his Report, the Trustees will be glad if he will add his opinion as to the advisability of accepting the terms offered as to future interest.

"(Signed) W. HUDLESTON,
"Secretary Madras Civil Fund."

- "Extract from the Despatch from the Right Honourable Sir C. Wood, Bart., Secretary of State for India, dated India Office, London, 25th November, 1862. No. 193.
- Para. 11. "It only remains for me to convey to you the decision of Her Majesty's Government as to
 - "The Bengal Civil Fund;
 - "The Madras Civil Fund, Charity Branch;
 - "The Bombay Civil Fund, Provident Branch.
- 12. "There appears to be no ground for making any chauge in the management of these Funds, which will consequently, as heretofore, remain with the subscribers. In regard to the assistance from the State, Her Majesty's Government have no intention of withdrawing the aid which has been hitherto granted, and they see no reason for increasing it. If the subscribers prefer it, there would apparently be no objection to granting, in lieu of the present indirect aids, an annual sum equal to the average of the donations during the past five years; the future interest on the balance of the Funds being in that case fixed at 5 per cent., and the remittance of the sums required by the Funds in England being made at the same rate of exchange as that fixed annually for the adjustment of transactions with the British Exchequer."
- 4. If this proposition of the Government can be accepted without detriment to the interests of the Fund, it presents so many advantages in other respects, that I have thought it my duty to give special consideration to it; and the discussion of this subject follows the other points of interest above alluded to.

Tables of Observation of Mortality and Marriage.

- 5. In an inquiry of this kind the whole of the financial results must depend upon the correctness or sufficiency of the original tables of observation on which the monetary calculations are based. It is, therefore, an essential preliminary step to ascertain to what extent they can be trusted as likely to accord with the future experience of the Fund.
- 6. The previous actuarial Reports on the state of the Fund, giving valuations at different dates, are—
 - (1.) 9th March, 1850-Mr. Griffith Davies, with valuation on 1st January, 1848.
 - (2.) 27th December, 1852-Mr. Neison, with valuation to the same date.
 - (3.) 20th July, 1855.—Mr. Neison's second Report, with valuation on 1st January, 1854.
 - (4.) 26th June, 1861—Mr. W. Grant, Report on the Subsidiary Branch, with valuation on 1st January, 1861.
 - (5.) 18th November, 1861.—Ditto, Report on the Charity Branch to same date.
- 7. In the first of these Mr. Davies used his tables for the Madras Military Fund for valuing the pensions till death or marriage of the widows and daughters of members, and the Single Life Table for females, formed by him for the Bombay Civil Fund, and the Tables for Joint Lives of husband and wife, formed from the same table and that of the experience of the Fund as to Male Lives, which were computed therefrom by the Secretary of that Fund, Mr. Morris.



- Neison—Mortality of widows and of widows in the Bengal Military Fund with the mortality in England and Wales as given in his Contributions to Vital Statistics; and finding that their health did not appear to be much deteriorated by residence in India, adopted the latter table in his valuation of this Fund. For children he considered Mr. Davies' rate of mortality used in the Bombay Civil Fund too low, especially at the younger ages, and accordingly adopts his own Table for England and Wales.
- 9. For members he considered that Mr. Davies' Table for the Bengal Civil Fund, up to age 40, continued for retired members by his own Table of Male Life for England and Wales, with certain interpolations from 39 to 45, would very nearly express the facts, and it shows after 40 a rather longer duration of life than Mr. Davies' table.
 - 10. In his second Report Mr. Neison analyzed the experience of the Fund from 1762 to 1853, but as it exhibited the rates of mortality under years of service only, he assumed 20 as the average age of entry, and deduced the proportion surviving at every subsequent age to 100,000 assumed to enter at that age. From 84 to 90 it was interpolated, and then continued by the table in his former Report. The "equation of life" or number of years in which the living, at any age, would be reduced to one-half, is greater after age 50 by this table than even by the English Life Table. At about age 60 it is even two years higher, and he concludes that the schedules must be imperfect, especially as regards early members, and that on the whole it was still advisable to use the Table II. in his former Report, as more applicable to the circumstances of the Fund.
- Grant's Tables.

 11. Mr. Grant in both his Reports used Mr. Neison's data, and constructed new tables therefrom, though he pointed out that the ratio of marriages of daughters would no doubt be much greater than that of the remarriage of widows.
- New data.

 12. Considering, therefore, that additional light might be thrown by the records of the Fund on some of the important questions involved, I applied to the Secretary and received in July last year a list of members of the Civil Service, from 1762 to 1863, 825 in number. The dates of entry, and age at the time of retirement and death, were given in most cases; but in some it was impossible to distinguish whether the membership ceased by withdrawal or death, and in most cases the dates of marriage were defective.
 - 13. After filling up all the blanks, as far as possible, from the documents referred to in the Memorandum for the Actuary, I had again recourse to the Secretary (Mr. Hudleston), who kindly took great pains to complete the information as far as possible, and, in January of the present year, I received a schedule with the dates

of marriage of 208 members in India and 5 in England, and at the same time through Mr. Ward (Messrs. Coutts & Co.), the dates of marriage of 104 annuitants living in England. The facts, as far as the original list permitted, had been in the mean time copied on cards, to facilitate the formation of the tables, and the blanks were now as far as possible filled up. A considerable delay had been caused, but it was hoped, that the great changes about to be effected were a sufficient justification for endeavouring to collect the experience of the Fund, to elucidate some points which in previous Reports had been assumed on information which was imperfect, though it was all that was then available.

- 14. Even now the early records of the Fund are in many respects defective, as the information about deceased members, not being asked for at the time, cannot now be obtained. I can only look upon the labour expended in perfecting the present lists as the commencement of a more accurate register from this time. If the date of entry of every member on the Fund, and his date of birth at the time of his withdrawal, retirement, and death, and his date of marriage, the date of birth of the wife, and of her death, and the dates of birth, withdrawal, and death of each of his children, be kept together in families, there would in a few years accumulate some very valuable materials for the correction of the existing tables of valuation, and probably also allow of much simpler methods of calculation than the complicated and doubtful assumptions to which we are now obliged to have recourse.
- 15. I need not enter into an explanation of the means adopted to complete the Table of Mortality by approximating in some cases where the facts were unknown. Of 300, whose ages at entry were unknown, but the other facts given, I have assumed the average age at entry to be 20; and in some other cases, in which the date of marriage was wanting, I have assumed the average age at marriage, in order to bring them into account. These corrections will probably affect the results very slightly, as, in order to merge the differences, I have given the final Table of Observations (A) in quinquennial periods of age.
- 16. The total number who entered is represented as 752. Of these, 288 died, 65 withdrew, 245 retired, and 154 were living on 1st January, 1863. Of the 245 retired, 42 died, 92 withdrew or died (not distinguished which), and 111 were living 1st January, 1863. Of the 752, 2 appear to have entered as married, and 319 were married afterwards.
- 17. In ascertaining the number who were exposed to risk, we deduct half of all who entered or left from any cause, and also half the number living on 1st January, 1863, as the ages last birthday are taken, and consequently they had only lived over half the current year of age. This would give 15,291 as the years of life in active service, and 288 deaths, or 1.884 per cent.; 65 withdrew, or .425 per cent.; and 245 retired, or 1.602 per cent.

18. Amongst the retired members, some of them are described as died or withdrawn. There are no means now of distinguishing which, although from the advanced ages the former statement is the more probable. To be on the safe side, I have considered them all as deaths, and this would give the number exposed to risk as 3,607, and the deaths as 134, or 3.715 per cent.

Table A. Madras Civil Service.—Observations of Mortality, Withdrawal, Marriage and Retirement, from 1762 to 1863, in Quinquennial Periods of Age.

			Васна	LORS.						MARR	ED MEN	BERS.		
Age.	Entered.	Lived.	Died.	Married.	Retired.	With- drew.	Living in 1863.	Age.	Entered.	Lived.	Died.	Retired.	With- drew.	Living in 1863.
15 16 17 18 19	2 8 12 36 99	2 10 22 58 157		1			2	15 16 17 18 19	1	1				
20 21 22 23 24	494 58 26 12 2	648 698 700 677 627	1 6 11 25 9	3 16 18 19 21	••	2 1 4 3	2 2 5 4 6	20 21 22 23 24	3 1) 16 18 19 1) 21	4 21 39 57 79	1			4
25 26 27 28 29	1 	589 555 521 477 445	8 7 13 9 6	23 21 23 16 14		1 4 5 2	3 5 4 2 1	25 26 27 28 29	23 21 23 16 14	97 118 137 147 156	2 2 2 4			2 4 3 2
30 31 32 33 34		422 362 340 324 311	7 2 1 5 3	50 12 11 6 14		3 5 3 1 2	0 3 1 1	30 31 32 33 34	50 12 11 6	200 206 211 210 214	3 4 3 6 2			3 2 4 4 2
35 36 37 38 39		291 280 253 238 226	3 10 6 4 2	7 9 5 3 5	 2	1 5 3 1	3 1 2	35 36 37 38 39	7 9 5 3 5	217 217 212 205 204	7 3 5 3 3	i i		2 7 4 3 5
40 41 42 43 44		218 206 192 184 173	5 6 2 2 4	4 5 1 3	1 3 3 8	2 0 2 3	1 2	40 41 42 43 44	4 5 1 3	199 195 183 174 169	3 5 3 3 5	1 3 1 5	 	5 4 7 4 3
45 46 47 48 49		158 138 119 104 83	1 2 8 3	1 2 4 	16 15 9 12 10	3 1		45 46 47 48 49	1 2 4	157 141 133 123 109	7 3 1	8 8 10 18		3 1 2 4 4
50 51 52 53 54		70 62 57 49 43	1 1 3 2 1	1 1	6 2 5 3 5	1		50 51 52 53 54	1 1 	87 64 50 45 38	1 2 1 3 1	18 6 3 4 1		5 6 1
55 56 57 58 59		37 29 25 23 21	1 1 		6 3 2 1 2	1		55 56 57 58 59		35 29 26 18 17	1 1 2 	3 2 6 1 4	••	2
60 61 62 63 64		19 16 14 12 11	1 i		2 2 1 2	1		60 61 62 63 64		12 8 6 5	1 i	3 2 1		

MADRAS CIVIL FUND.

TABLE A. Madras Civil Service (continued).

	BACHELORS (continued). Te. Entered. Lived. Died. Married. Retired. With-Lived.								Mai	RRIED M	EMBERS (continued).	
Age.	Entered.	Lived.	Died.	Married.	Retired.	With- drew.	Living in 1863.	Age.	Entered.	Lived.	Died.	Retired.	With- drew.	Living in 1863.
65 66 67 68 69 70 71 72 73 74 75 76 77		997777666444211	 1 2 		1	1	·	65 66 67 68 69 70 71 72 73 74 75 76 77	:::::::::::::::::::::::::::::::::::::::	4 3 3 1 1 1 1 1 1 1	1 2			
79	750	11,364	188	319	127	65	51	79	2) 319	4,998	100	118		103

			•	Total, B.	ACHELOR	AND M	ARRIED I	(EMBERS C	OMBINED.	-			
Age.	Entered.	Lived.	Died.	Retired.	With- drew.	Living.	Age.	Entered.	Lived.	Died.	Retired.	With- drew.	Living.
15	2	2					49		192	4	28		4
16	8	10				1	50	۱	156	2	24		5
17	12 36	22 58				1	51		125	8	8	1	6
18 19	99	157		1 1		ا ا	52	.	107	4	8		ì
19			• • •		• • •	2	53		94	5	7	1	l
20	494	649	1		2	2	54		81	2	6		1
21	1) 58	703	6			2	55		72	2	9	1	2
22	26	721	12		1	5	56	::	58	2	5	•	۔ ا
23	12	715	25		4	4	57	::	51	2	8		l
24	1) 2	685	10		3	10	58		41	ī	2		l
25	1	663	8	l l		3	59		38	1	6		1
26		652	9	l l	1	7	60		31	2	5		1
27		635	15		4	8	61		24	_	4		
28		608	11	1	5	5	62		20	·.	- 1	1	
29	•••	587	10		2	3	63		17	_	2	•	
30	l	572	10	۱ ا	3	3	64	::	15		2		
31		556	6	::	5	5	65		_		-		
32		540	4		3	5	66		13	1	١,		
33	'	528	11		1	5	67	• • •	12 10	·:	1	1	
34		511	5		2	3	68		8				
35	Ì	501	10	1	1	2	69	l ::	8	1			
36	::	488	l iš	::	5	10			_	1			
37	::	460	lii	l i l	3	5	70	• • •	7				
38	::	440	7	2	ì	5	71	• • •	7		١,		ŀ
39	1	425	5	1	1	5	72 73		7	• • •	1	l	
40	į	413	8	2	2	5	74 74	•••	5 5	2			
41	1	396	lıî	6	_	4		• • •		*			
42	::	375	5	8	2	8	75	· · ·	3	· <u>·</u>	1		
43	::	357	5	4	3	6	76		2	2	1		
44	::	339	9	13		3	77		l	1	I		l
	1	314	7	24	3	3	78 79		l		1		ļ
45 46	1	277	4	24 23	1	1 3	19	1	Ì		1		ł
47		248	2	17	_	2					1		
48		227	ยี	22	'i	4		752	16,043	288	245	65	154
30	1 ,	~~'	1	""	•	•		1	•	l			1

TABLE A. Madras Civil Service (continued).

	RETURED MENCHERS.														
	Enter	red.				Living		Enter	red.			With-	Living		
Age.	Married after Re- tirement.		Lived.	Died.	With- drew.	in 1868.	Age.	Married after Re- tirement.		Lived.	Died.	drew or Died.	to 18 63 .		
35 36 37 38 39	: :	1 2 1	1 3 4				65 66 67 68 69	ï 	1 	113 103 101 93 88	1 3 3 2	5 3 2 1	5 2 2 6		
40 41 42 43 44	::	2 5 3 4 11	6 11 14 18 29				70 71 72 73 74	• • • • • • • • • • • • • • • • • • •	 i 	79 77 71 65 57	2 1 2	1 2 1 5	1 3 4 3 1		
45 46 47 48 49	.: 1 1 	24 20 16 21 27	53 70 86 197 130	'i 2	3 1 1	1 1 6	75 76 77 78 79	::	1 	54 46 40 38 34	5 1 1 2	1 2 2 1 4	2 3 2		
50 51 52 53 54	2 	24 8 8 7 6	147 146 149 148 149	1 i 	1 2 2 1 4	9 3 5 4	80 81 82 83 84	 	••	28 23 18 11 8	1 	3 4 3 3 2	1 1 1		
55 56 57 58 59	: :: ::	9 5 8 3 5	153 152 152 152 147 145	1 1 1 1	2 8 4 2 2	4 5 3 4 6	85 86 87 88 89	::		5 5 4 2 2	::	1 1	1		
60 61 62	1 1 	5 4	142 138 134	2 .;	4 3 4	3 1 2	90 91		••	2 2	1	1			
63 64	ï	2 2	129 120		3 1	777		24	.5	3,852	42	92	111		

Table A. Madras Civil Service.—Observations of Mortality, Withdrawal, Marriage and Retirement, from 1762 to 1863, in Quinquennial Periods of Age.

	Bachelors.								Married,						
Age.	Entered.	Lived.	Died.	Married.	Retired.	With- drew.	Living to 1863.	Entered.	Lived.	Died.	Retired.	With- drew.	Living to 1863.		
15- 20-	157 592	249 3,350	52	1 77		iò	2 19 As mar	1 77 } rd. 2 {	1 200	2		•••	4		
25-	1	2,587	43	97		12 14	15	97 ′	655	10			11		
30- 35-	٠٠ ا	1,759 1,288	18 25	93 29	2	11	6	9 3 29	1,041 1,055	18 21	' <u>ż</u>		15 21		
40-	::	973	19	13	18	1 7	8	18	920	19	10	::	23		
45-	::	602	14	7	62	5	1	7	663	ii	52	l ::	14		
50-	l ::	281	8	2	21	2		2	284	8	32		13		
55-		135	3		14	1	١		125	5	16		2		
60		72	2		7	1	1	٠	35	2	6	i	l		
65		3 9	1		1 1	1			12	3	ł		l		
70-		26	2		1	1			5		l	l	l		
75-		3	1		1	٠٠.		••	2	1					
Total	750	11,364	188	319	127	65	51	319 } 2 }	4,998	100	118		103		

	Васн	ELORS AND	On SE	rvice, do Membe	LS CONCER	iOED.				RETIRED		
Age.	Entered.	Lived.	Died.	Retired.	With- drew.	Living to 1863.	Age.	Entered. B. and M.	Lived.	Died.	Withdrew or Died.	Living to 1863.
15- 20- Ent ma 25- 30- 35- 40- 45- 55- 60- 65- 75-	157 592 } rrd. 2 } 1 	249 8,473 3,145 2,707 2,314 1,880 1,258 563 260 107 51 31	53 36 46 38 25 16 8 4 4 2	4 28 114 53 30 13 1	10 12 14 11 7 5 2 1 1 1	2 23 26 21 27 26 14 13 2	\$5- 40- 45- 50- 55- 60- 65- 75- 80- 85- 90-	4 28 114 53 30 13 1 1 1	8 78 446 739 749 663 498 212 88 18	3 2 4 5 9 5 9 5	5 10 18 15 11 10 10 15 2	8 22 22 20 15 12 7 4
Total	752	16,043	288	245	65	154		245	3,852	42	92	111

19. The following table shows the rate of mortality per cent. on 100 living in the middle of the year of age by the experience of the Madras Civil Service from 1762 to 1863 (Table I.) compared with Mr. Neison's Table II., in his First Report, 1852, which formed the basis of the many tables in use and the table deduced by him in his last Report from the mortality in years of service. It is also compared with the Observations in the Bengal Civil Service, from 1801 to 1858, in my Report recently completed for the Bengal Civil Fund.

Abstract A.

Rate of Mortality deduced from Observations in the Madras Civil Service, 1762 to 1863, compared with the Tables in Mr. Neison's Reports, and with the Rate of Mortality in the Bengal Civil Service, 1801 to 1858.

	Madras Cr	VIL SERVICE, 1	762 TO 1863.	Nz	ibon.	
Age.	Active.	Retired:	Both.	Table II. Report, 1852.	Table H. in Years of Service. Original facts, Madras Civil Fund.	Bengal Civil Service. S. Brown.
15- 20- 25- 80- 85- 40- 45- 50- 60- 65- 70- 75- 80- 85- 90-	1.72 1.71 1.35 2.03 2.08 2.12 3.07 3.34 4.08 8.33 6.90 57.14	2·09 1·73 2·38 3·15 4·17 4·49 9·57 24·84 12·12 66·67	1.73 1.71 1.35 2.02 2.00 2.11 2.30 2.62 3.27 4.55 4.67 10.40 24.84 12.12 66.67	1.41 1.59 1.77 1.94 2.37 2.71 2.50 2.74 3.77 5.43 8.02 12.07 21.74	1-39 1-64 1-31 1-85 1-91 1-81 2-53 2-75 3-26 2-59 4-55 8-64 17-72 14-29 100-	2-24 1-65 2-02 1-47 2-19 2-08 1-76 2-54 2-71 4-26 6-22 6-34 20-93
Exposed to risk	1·88 15291 288	3·72 3607 134	2·23 18898 422		1·96 17108·5 33 5	2·10 22766 478

- 20. It appears from the above table that at nearly all ages, except the younger ages, 20-30, the mortality on the whole experience of the Madras Civil Service is below that in Mr. Neison's Table, from which his own and Mr. Grant's extended tables have been computed. There is reason to think that, if the observations had been confined to the more recent years, a still greater improvement would have been perceptible. This favourable result is more marked when compared in decennial periods of age, as shown in the following Abstract B.
- 21. Indeed, a very well graduated table of mortality might have been formed from the new observations in the first column, but, considering the number of money tables which would have to be substituted for those in use, and that the assumed rates

of mortality are in favour of the stability and security of the Fund, as well as the want of further observations on female lives, and the rates of marriage amongst widows and daughters of members, I have thought it better, on the present occasion, to be content with the satisfactory conclusion that the basis of the tables in use gives an ample margin for safety so far as the assumed rate of mortality is concerned.

22. Abstract B1.
Rates of Mortality in Decennial Periods of Age (Active and Retired).

	MAD	BAS CIVIL SER	VICE.	BENGAL CIT	IL SERVICE.	
Age.		Nei	SON.			Farr's Healthy Life
Ago	1762 to 1863. New Observations.	Table in use.	Table H. In Years of Service.	Entered, 1801 to 1858.	In Years of Service 1790 to 1842.	(England), Males.
15	1.64	1.18	1.06	1.74	2·16	-69
25_	l·54	1.69	1.52	1.78	1.76	-82
35	2.01	2.16	1.70	2.14	2.75	.93
45-	2.20	2.61	2.30	2.08	3.76	1.27
55-	2.91	3.26	2.86	3.34	4.71	2.50
65-	4.60	6.84	4.21	6.26	9.09	5.49
75-	14.36	15.22	11.36	20.93	٠.	12.82
85-91	20.51	26.33	••	,,,	••	28.35
Total	2.23	••		2·10	2:30	

It will be noticed that the mortality in the Madras Civil Service is generally less than that in the Bengal Civil Service, from which I have recently constructed an entirely new set of tables for the valuation, and that, except at ages 45-55, the tables in use very nearly accord with the latter observations. As compared with Farr's Healthy Life Table (England), the mortality in the Madras Civil Service is below the age of 55—generally a constant of about one per cent. in excess.

23. I was anxious also to deduce from the records of the Fund the mortality amongst married as distinguished from the unmarried members, and the mortality amongst wives and widows, and the ratio of marriages amongst widows and daughters. But though the facts as to members and their wives and children now living are sufficiently well recorded, those of earlier date are generally deficient, so that it will require a few years of carefully recorded dates to allow of a sufficient number to be collected for any practical use. In the earlier years, in some cases the dates, in others the ages of marriage of either husband or wife, are wanting. Some are described as married twice, but no information about the first wife given. In some cases the ages at first marriage may be assumed by taking them a year before the birth of the first child, though this method is not certain, as the first child recorded may not have been the first born. In some, also, we may supply the mean age of entry as 20, and thence deduce the age at the date of other events. But, on the whole, I think it better to wait till the present statistics of this subject—important as it is—are more complete and ample.



24. But so far as these facts could be approximated to fill up the blanks in the schedules and obtain some information as to the rate of mortality, marriage, and retirement amongst bachelors, and mortality and retirement amongst the married members of the Fund only, I have endeavoured to do so, and the following Abstract embodies the results of Table A.

Abstract B².

Mortality amongst Bachelors and Married Members compared.

		MADRAS CIVIL SERVICE, 1762 TO 1863.								BENGAL CIVIL FUND, 1850 TO 1863.				MADRAS MILITARY FUND, 1828 TO 1857.	
		BAGE	BACHELOBA.		MARRIED MEMBERS.		Bachelora.		MARRIED		BACRELORS, ACTIVE AND RETIRED.				
	Exposed	R	Rate per Cent.				er Cent.	DAULILOSE.			Минения.		Rate per Cent.		
	to Risk.	Died.	Married.	Retired.	Exposed to Risk.	i i	Retired.	Died.	Married.	Retired.	Died.	Retired.	Died.	Married	
15-	169-		.59		-5			<u> </u>					2.39	-22	
20	2975	1.75	2.59		157.5	1.27		1.22	8.16	::	::	::	2.98	2.88	
25-	2503	1.72	3.88	١	596.	1.68		2.19	8.74	1	1.23		2.78	5.66	
30-	169 3 ·5		5.49		978	1.84		.81	13.67		1.63		2.73	7-25	
35	1251.5		2.32	·16	1018.5	2.06	.20	-54		•54	2.14	·46	1.89	5.99	
40-	943	2.01	1.38	1.91	887.5	2.14	1.13	1.04		4.67	-91	·61	3.87	5.94	
45-	558.	2.51	1.25	11.11	621	1.77	8 37	1.99		23.68	2.75	11.78	1.12	2.88	
50	264.5		·76	7.94	256.5	3.12	12.48	7.84	3.92	19.60	2.60	15.58	6.02	1-21	
55-	126.	2.38		11.11	113.5	4.41	14.10			50.	3.74	20.56	l	l	
60	67.	2.99	• •	10.45	31.	6.45	19.36					38.30	l		
65-	37.5	•		2.67	10.5	28.57	•		••			28.57	l		
70-	24·	8.33	••	4.17	5.	20.00	• •			• • •		100.		l	
75-		50·		50.	1.2	66-67	••	22-22		••	•••				
Total		1.77	3.01	1-20		2.14	2.52	1.54	8.39	1.44	1.69	3.38	2.77	4.05	
Exposed) to Risk Number	10614		••	••	4677				2919		35	49·5	278	44.5	
Died,		188	319	127		100	118	45	245	42	60	120	772	1127	

The observations in the Madras Civil Service extend over the whole period of more than 100 years, whilst those in the Bengal Civil Fund are only for the 13 years to 1863. There is, consequently, much greater regularity in the percentage of mortality in the former, and at the same time they show, as might be expected, a much higher rate.

25. In regard to the rate of marriage amongst bachelors, however, the rate recorded in the former seldom exceeds 40 per cent. of the latter. Though this result may be partly due to the facilities for marriage being less in India in former times, the difference is too great not to lead to the suspicion that many have married whose dates of marriage have not been given, and they have consequently been counted as bachelors. This seems the more probable, as the mortality amongst bachelors is shown as on the whole less than that amongst married men, which is contrary to the fact in nearly all other observations. The proportion of marriages is also considerably less (at least one-fourth) at all ages than in the Madras Military Fund for 35 years,

1823 to 1857, which does not seem consonant with the relative conditions of the Civil and Military Services.

- 26. The proportion of retiring members is also very small, both amongst bachelors and married men, when compared with that in the recent experience of the Bengal Civil Fund; so that, in all respects, it seems desirable to collect the facts more accurately and minutely from the present time.
- 27. As, however, the experience of the Bengal Civil Fund—under other heads—has been recently given to the members in my Report on the condition of that Fund, it may be useful to compare the tables in use in the Madras Civil Fund with the 13 years' experience of the Bengal Civil Fund, from 1850 to 1862.
- 28. First, as to the mortality amongst the wives of members and their widows (the former entering into the Joint Life Table by which the subscriptions are valued, and the latter into the tables for valuing widows' pensions), the following table shows the comparison, in decennial periods of age, of Mr. Neison's table (taken at the mean age) with the recently printed experience of the Bengal Civil and Madras Military Funds in my Reports thereon, dated 1865 and 1862.

Abstract C.

Comparison of Rates of Mortality amongst Wives and Widows.

Age.	FOR MAD	s Table ras (ivil n Age).		CIVIL, 1863.	MADRAS 1 1808 TO 185	Farr's Healthy Life	
	Wives.	Widows.	Wives.	Widows.	Wives.	Widows.	,
15- 25-	·85 1·31	·84 1·04	2·08 1·39	··. •66	1·74 1·23	•65 1•51	.77
35-	1.91	1.19	.95	.76	1.36	1.17	-89 1-00
45-	2.52	1.20	.52	1.01	∙87	1.72	1.19
55-	3.88	2.48	1.90	1.84	1.36	1.87	2.16
65- 75-	6.53 13.89	5·13 11·62		3·19 12·24		4·08 11·20	4·99 11·87
			1.31	1.54	1.34	1.68	
Exposed) to risk			4135	1170	22424.5	8343.5	
Died			54	18	300	140	

Mr. Neison's table for widows, though it shows a higher mortality at all ages under 75 than the experience of the Bengal Civil Fund for 13 years, is generally less than that of the Madras Military Fund under 55; and though I think it will require correction at the more advanced ages, I do not feel justified in altering the existing tables until further observations have been collected, as at these ages the rate does not much exceed the mortality of females in England by Farr's Healthy Life Table.

29. Again, as to the rate of marriage compared amongst the widows and daughters of members in the Madras and Bengal Civil Funds, we find the following to be the summary in quinquennial periods of age:—

Abstract D.

Rates of Marriage amongst the Widows and Daughters of Members.

	MADRAS CIVIL FUND, NEISON.	BREGAL CIVIL FUND.				
Ages.	Widows or Daughters.	Widows.	Daughters.			
15 20- 25 30- 35 40- 45- 50-	5-00 5-50 3-51 3-05 1-88 -88 -79	7·14 3·92 3·00 ·76	2:80 9:69 4:91 3:19			

If the few facts in the Bengal Civil Fund could be considered sufficient authority (being only 103 marriages of daughters and 8 marriages of widows), Mr. Neison's table, which is used for valuing the annuities both of widows and daughters, scarcely shows at ages under 30 a rate of marriage high enough for the widows, and still less for the daughters, which, as Mr. Grant suggested, considerably exceeds that of widows. This table also will, I think, require correction when the experience of the Fund has been more fully collected. With the existing materials it would be premature to alter the tables.

30. Lastly, as to the rate of mortality amongst children of both sexes under 20, for which we have the means of comparing recent and rather extensive series of observations.

Abstract E.

Rates of Mortality amongst Children of both Sexes.

	Neison's Tables.		CIVIL FUND, TO 1863.	Madras Military Fund, 1808 to 1858.		
Age.	Sons and Daughters.	Sons.	Daughters.	Sons.	Daughters.	
0-	14.63	6.64	6.12	9:14	7.84	
1	6.17	6.92	5.82	5.64	5.32	
2-	3.38	2.77	3.48	2-29	2.63	
3	2 39	1.20	-99	1.39	1.45	
4-	1.77	•42	-52	·82	1.34	
0–5	3.38	3.44	3.29	3.53	3.47	
5-10	•94	.46	·48	.53	.57	
10-15	.66	·43	·19	-23	•32	
15–20	75	·32	-66	·56	·56	
Exposed to risk		7751	7711.5	33851	35737:5	
Died	1	104	90	498	499	

At the mean of the quinquennial period, 0 to 5, Mr. Neison's table does not differ much from either the experience of the Bengal Civil or the Madras Military Fund, but he estimates a much higher mortality in the first year of life, and also at all ages from 5 to 20. This class of facts also requires correction by the collection of original data, as the above tables do not correspond sufficiently at each age to be applied at once to alter the tables in use.

Table No. 2. Madras Civil Fund.—Pensioners, Members and their Families, showing the Number in each Class living at each Age on 1st May, 1863.

				Інсомі	BENT.				RETIRED	Members
Wid	lows.		So	ns.	<u> </u>	Daug	hters.		THE OLI	RULES.
Age.	N	0.	Age.	No.	Age.	No.	On Sut	eidiary nd.	Mar	ried.
,		•					Age.	No.	Age.	No.
23 28 30 34	1	1 1 1	6 7 8 9	1 1 3 2 1	2 6 7 8	1 1 3 2	19 21 22 23	3 1 2 2	63 68 76	1 1 1
35 Retur 37 39	ned	2 } 1 } 2	10 11 12	1 1	9 10 1 3	1 3 3	24 25 26	1 3 3	Total	3
40 42 Retur	hen	າ	13 14 16 18	2 2 1 1	14 15 16 17	4 2 2 2	27 28 29 30	2 2 1 2	Wido	wers.
43 44 46	100	1 3 1			18 		34 37 38	1 2 1	59 65	1
47 48 49		1 1 1	Total	16	Total	25	39 40 43	1 1 1	75	1
50 52 54		1 4 1	33 36	1 1	Abov	e 19.	44 50	1	Total	3
56 Retur	ned	1 }	Total	2	25 32	1 1	Total	31	Sin	gle.
57 58 59 61 62		1			37 38 39 41	1 1 1			54 64 81	1 1 1
63 64 65 66		1 1 2 2			42 43 44 59	1 2 1 1			Total	3
67 68 69		1 1 1			Total	11			Sons of	ditto.
70 72 Retur 73 74		1 2 1 1							0 1 18	W.1 1 1
76 79 80		2 2 1 1							Total	3
84 88		i l							Dangi	nters.
Total	5	8							20	1

TABLE No. 2. Madras Civil Fund (continued).

	ed Memb Tonally New S Mar	ACCEPTE		Diz	гго, Wid Сви	OWERS V	VITH			OF RETIRED WIDOWERS,		M.
	N	(umber o	×	Number of			Number of				No. of	
Age.	Wives.	Sons under 21.	Daugh- ters.	Age.	Num- ber.	Sons.	Daugh- ters.	Age.	Sons under 19.	Daughters ditto.	Age.	Danghter 19 and upwards.
49	6	9	19	51	1	3	6	0	3		19	6 {
50	7	13	14	58	1	1	3	1		1 .		W.13
51 52	1 3	1 3	1 5	60 64	1 2	•	1 5	2 3	2	3 2	20 21	3)
53	5	7	4	65	1 1		2	4	3	4)	ائد	w.1
54	i	3	i	69	i	'n	4	•	"	w.i {	22	4 }
55	1		4	71	ī	i	6	5	4 }	1'		w.i \$
56	5	10	10	82	1	٠	2	١.	w. i }	1	23	1 1
57	3	12	9 5					6	2	4 2	24	W. 2 {
58 59	3 1	4	"	Total	9	8	29	7	3 } W. 1 }	2	- Z-E	$\left \begin{array}{c}5\\W.3\end{array}\right $
60	3	7	5	TOTAL	9	, °	29	8	3)	5	25	".",
61	1	1	1 1			<u>'</u>	1	_	w.i}		26	3
62	2	_		Wido	wers wit	hout Ch	ildren.	9	4	6	27	2
63 64	2 5	3 1	6	1				10	3	$\left\{\begin{array}{c}2\\W.1\end{array}\right\}$	28	$\left \begin{array}{c}2\\\mathbf{w},1\end{array}\right\}$
65	4	2	2				1	11	6	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	29	W.13
66	2	2	-	56	1			٠.	1	w.i {		w.i }
68	1	2	1			<u> </u>	<u> </u>	12	6 }	7 [30	1
69	1	2	1 1						W. 1 \$	W.25	31	1
70 71	3 2	1	2	ŀ	Sin	gie.		13	$\left\{\begin{array}{c}11\\w.1\end{array}\right\}$	w.1	32 33	2
72	3	3	2			l		14	W.1)	6}	34	i)
73	2	ì	-	48	1				-	w.i	٠.	w.i }
74	1		4	50	1			15	w.1}	6)	36	2
76	1	• •	1 1	52	1					W.3 5	37	1
78 81	1 2	• •	3 4	53 55	1 1	l		16	$\left \begin{array}{c}4\\\mathbf{w}.1\end{array}\right $	w.1 {	38 40	w. 1
87	l	••	4	56	1			17	10	51	43	1
Total	73	87	108	Total	6			18	5	W.2 { 3 } W.2 {	44 45 49	W.1
								Total	87	79	52 Total	W.1
								Sons	19 to 21.		daugh- ters	137
								19	w.1}			
								20	W.15			
								Total und ^r 21	} 96			

TABLE No. 2. Madras Civil Fund (continued).

MEMBERS ON	SERVICE WHO	ABIDE BY THE	OLD RULES.							
	Married Members.									
	Number of									
Age.	Wives.	Sons under 19.	Daughters.							
28	1	2	1							
43 51	1	4 2	١,							
53	1	i	i							
Total	4	9	3							

		MBERS 0	M SERVIC	H OHW E	AVE ACCEP	TED THE	New	SCHEM	z.		Under	16 YEARS' S	SERVICE
1	Married :	Members			Wido	wers.			8in	gle.			
	1	iumber (of .			Nu	mber	of					6:1-
Age.	Wives	Sons under 21.	Daugh- ters.	Age.	Number.	Sons under 2		Daugh- ters.	Age.	Num- ber.	Age.	Married Members.	Single Mem- bers.
44 48	6 1	1 1 7 6 2 7 1 4 3 4 4 1 1 7 2 1 1 6 1 9 4 1 1 1 1 9 6 1 4 1 1 1 1 6 4 4 1 1 1 1 6 4 4	4	32 36 42 43 46 49 Total 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	1 11 12 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1	1. I	2 2 2 2 2 1 1 1	3 3 4 1 3 14 14 9 8 8 9 9 11 14 9 8 5 8 7 7 7 5 10 11 12 12 13 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	20 21 22 23 24 25 26 27 28 29 31 32 34 35 36 37 39 42 43	5 2 5 6 3 6 2 7 3 1 2 2 2 1 2 2 5 6	20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39	 1 2 2 2 1 4 4 2 3 1 4 2 2 4 1 3 2 2 4 4 2 2 4 4 4 2 2 4 4 4 2 2 4	5 2 5 6 3 6 2 7 3 1 1 2 3 1 1 1 2 1 51
Total	99	175	140	Total	15 18	4 1	7 1	41					

Table No. 3. Madras Civil Fund.—Comparison of the Number of Pensioners and Members in each Quinquennial Period of Age, and of their Children, between the Ages at which the Annuities increase, living at the date of each Valuation.

				<u> </u>					1	868.
Widow's	Jan. I, 1848.	Jan. 1, 1854.	Jan. 1, 1861.	May I, 1868.	Married Mem- bers, Active. (Wives' Ages not given.)	1848.	1854.	1861.	Married Men.	Bachelors and Widowers without Children.
20- 25- 30-	2 4 3	2 1 7	 2 4	1 1 2	20- 25- 30-	4 16 22	3 17 24	••	13 12)	22 20 7
35 40-	2 5	3	5 6	6 9	3 5	29	10		W. 1 }	7
45- 50- 55-	4 6 6	9 4 8	5 5 6	4 6 5	40-	16	42		W. 1 { 22 } W. 2 {	3
60 65	4	7 3	8 5	4 7	45	13	7		w. 3	
70- 75- 80- 85-	2 	5 2 	5 2 2 1	7 3 2	50- 55-	10 4	7 5	::	13 2	
	•••	ļ ··		<u> </u>	Total	114	115	• •	93 } W. 7 {	59
Total Aver. Age	41 47·5	55 51·1	56 54·4	58 55·3	Aver. Age	37·8	38-2		39-1	27.6
Sons.					Wives' Ages. 17-			6	3	
0- 6-	6	3	5	7	20- 25-		•	16 15	15 15	
10-19	16	15	13	9	30- 35- 40-	••	•••	25 21 10	25 16 12	
Total Aver. Age	26 11 -2	20 11 [.] 7	22 11·3	16 11·0	45- 50- 55-	••	::	8 2 2	4 2 1	
Daughters. 0- 6- 10-19	7 8 3	1 4 23	4 6 12	1 7 17	Total Aver. Age			105 33·1	93 32-6	
Total Aver. Age	18 6·7	28 14·1	22 10·1	25 11·7	Sons' Ages. 0- 6- 10-19	75 22 52	94 45 53	70 42 75	80 36 75	
Not on Subsid. Fund. 19– 20– 25–	 4 6	 1 2	1 1 	1	Total Aver. Age	149 7·0	192 6·6	187 7·9	191 7·7	
30- 35- 40- 45- 50- 55-	 1 1 	6 1 1 	1 5 3	1 3 5	Daughters. 0- 6- 10-19	68 39 41	69 45 57	70 38 58	65 30 53	
Total Aver. Age	12 29·2	11 32·4	12 36·5	11 40·3	Total Aver. Age	148 6·5	171 7·4	166 7:3	148 7·5	

TABLE No. 3. Madras Civil Fund (continued).

				18	63.				18	61.		180	i3.
Retired Married Members.	1848.	1854.	1861. (Assumed as in 1854.)	Married Men.	Bachelors and Widowers without Children.	Members Married,	1848.	1854.	Less than 16 Years'	Less than 25 Years' Service.	Total.	Married Membs. less than 16 Years'	Single Mem- bers ditto.
(Wives' Ages not given.) 45-	6	5	5	6	1	Ages. 20-	4		6	6		Service.	22
50- 55-	10	10	10 9	18) W. 1 (16)	4	25– 30–	16 22	• •	12	12 14	::	13	20 7
60-	14 13	9 18	18	W.1 }	W. 1 }	35	29		(35) 2	20		W.1 (5) W.1 (2
65-	9	10	10	W.3 }	W. 1	40 45	16 13			15			
70-	4	10	10	W. 2 { 11 } W. 2 {		50 55 60	10 4			i i			
75- 80-		1 5	1 5	6 2	W. 1 W. 1								
85				W.1 }		Total	114		33	67	• •	36	51
Total	61	68	68	89)	9}	Total Members in Service.				Married and			
Aver. Age	59·5	62.5	62.5	W.10 { 62·1	W.4 5 51.4	19- 20-		1 24		Single.			
Wives' Ages.						25 30		36 31		29 20			
30- 35-	• • •	• • •		7	• • •	35 40		13 51		29 21		l	
40-	• • •	• • •	::	lii	::	45-	• •	12		21	ŀ	} '	
45	••	• • •	ł	14		50-		18		ł	l	i .	
50-	• • •	• • •	• • •	14	• • •				i	1	l	ł	
	• •	• •	• • •			55-	• • •	6	ł	ì	ł	1	
55-	• •	• •	• • •	15	• • •				L		i		
60		• • •	٠٠.	9									
65-			٠.	11		Total		182	l	122	1]	
70-		٠	• • •	3			l Jan.	184	l Jan.	167	l	1 May	150
75-				li		ĺ	I Jan.	104	1 5411.	107	l	1 May	109
'	• • •	• • •	l ''	_					<u> </u>				
Total			·	89		Years of Service.							
Aver. Age	••			53.6		0- 5-		29 32					
Sons' Ages.						10 15-16		30 4					
0-		7	7	13				<u> </u>	<u> </u>		<u> </u>	 	
6-	••	12	12	14	•••	١		۱	ł	İ		ł	
10–19	••	46	46	60		Total	••	95					
Total		65	65	87									
Aver. Age		11.7	11.7	11.2									
Daughters.						1							
0- 6- 10-19	•••	8 8 42	8 8 42	11 17 51									
Total Aver. Age		58 11-2	58 11 -2	79 11·4									
			<u> </u>	<u> </u>	<u> </u>				<u> </u>	<u> </u>	<u> </u>	<u> </u>	

Members and their 31. Some useful deductions may be made by comparing together families living at the members living at the date of each valuation with their wives and children as to number and ages. But the comparison is only fair, if a common measure be taken, and I have therefore reduced all classes to their proportion, to 100 total members living in the Service at each date, 1854, 1861, and 1863. It would have been better to have taken the total number of members, whether in the Service or retired; but it is only on the last occasion that the total number can be considered accurate for both combined. In 1848 only the married members are given; in 1854 and 1861 the number, respectively 184 and 167, is taken from List No. 14; and in 1863, number 159, from the total enumerated in Table No. 3, p. 22, distinguished there as married, widowers, and bachelors.

Abstract F.

Proportion Living to 100 Members in Service, whether Married or Single.

	Jan. 1, 1854.	Jan. 1, 1861.	May 1, 1863.
Pensioners—Widows	29.9	33.5	36.5
" Sons under 19	10.9	13.2	10-1
" Daughters under 19	15.2	13-2	15.7
Married Members or Widowers with Children, in Service	62:5	62.9	62:9
Sons of ditto under 19	104.4	1120	120-1
Daughters of ditto under 19	92.9	99·4	9 3 ·1
Married Members or Widowers with Children, Retired.	37:0	40.7	62:3
Sons of ditto under 19	35.3	38.9	54.7
Daughters of ditto under 19	31.2	34.7	49.7
Number of Sons under 19 in each family, in Service	1.67	1.78	1.91
, Daughters ditto ditto	1.49	1.58	1.48
Sons under 19 in each family, Retired	.96	·96	.88
Daughters ditto ditto	·85	·85	-80

- 32. From this little table we draw the conclusion that, compared with 100 members on Service at each period, the number of widows has been increasing—the children who are receiving pensions under age 19 have not increased in the course of the 9 years but taking the two sexes together, the number has been nearly stationary.
- 33. The number of married members in service has also maintained nearly the same proportion at each valuation, but the proportion of their children living under 19 has somewhat increased in the 9 years.
- 34. But the proportion of retired married members to 100 in the Service has increased considerably, especially in the last 2 years—the proportion at the three periods being about 37, 41, and 62 per cent., and their children 66.8, 73.6, and 104.4 to each 100 members in Service.

35. The number of daughters living under age 19 in each family, whether in service or retired, is in each case about 12 per cent. less than the number of sons, and the number of children in the former was 3·16, 3·26, and 3·39, and in the latter, 1·81, 1·81, and 1·68 at each valuation respectively. But in the last case it must be noticed that Mr. Grant adopted, in 1861, the same actual number as Mr. Neison in 1854, in the absence of fuller information about the families of retired members.

Average ages of living pensioners, members, and their families. 36. Another observation, from the same table, may be made as to the average age in different classes, and in this respect we can compare also the valuation of 1848, as shown by the following table:—

Abstract G.

Average Ages of Pensioners, and of Members and their Families, living at Date of Valuation.

	1848.	1854.	1861.	1863.
Pensioners—Widows	47.5	51.1	54.4	55.3
Sons	11.2	11.7	11.3	11.0
Daughters	6· 7	14.1	10·1	11.7
Do. under Subsidiary Rules	29.2	32·4	36.5	40.3
In Service—Husbands	37.8	38-2	.:.	39-1
Wives	2.5		33.1	32.6
Sons	7·0	6.6	7:9	7.7
Daughters	6.2	7.4	7∙3	7∙5
Retired—Husbands	59·5	62.5	62.5	62·1
Wives				53.6
Sons		11.7	11:7	11.5
Daughters		11-2	11.2	11.4

- 37. The average age is always taken as last birthday, and that of widows and daughters receiving pensions under Subsidiary Rules appears to have steadily increased, but the remaining classes have varied but little. In the Service the average age of the husband is now 39.1, of the wife 32.6, so that the difference of seven years, on which the tables of values are based, may be safely continued for the present. Amongst retired members, however, the difference of age is somewhat greater, the husband being 62.1 and the wife 53.6, or 8½ years. The children of the former average about 7.6 years, and amongst the retired about 11.5 years of age.
- 38. These ages are higher than the average in the Bengal Civil Fund, which about the same date was found to be active service—husband 35.4, wife 30, difference 5.4 years; retired, husband 54.5, wife 45.3, difference 9.2 years. The average age of the children of members in Service was about 6.4 years, and of retired members 12.1 years; but this includes the daughters who are living beyond 21, whilst in the above table only the children of both sexes under 19 are included.

- 39. The calculations as to average ages also confirm the tables in my Reports on the Madras Military and Bengal Civil Funds, showing the increasing difference in age between husband and wife in proportion as the husband is in the more advanced ages of life; but as, from paucity of numbers, the results are somewhat irregular, I have not thought it necessary to make the comparison here.
- 40. From Table No. 3 may also be adduced the proportion living in each quinquennial period of age, so as to show the changes that may have occurred during the past 15 years, and may be useful for reference when the operation of the new Rules is compared with the past history of the Fund.

New Tables constructed for the present Valuation.

- 41. The instructions contained in the Memorandum required a considerable number of new tables to be formed, but as the basis of them all is for the present the rate of mortality amongst the members, their wives, and widows, which Mr. Neison adopted in 1848, the tables at 8 and at 4 per cent. which he formed, and which were considerably extended by Mr. Grant, have been used as far as they are available under the old Rules.
- 42. But another series, at 6 and at 5 per cent., had to be formed in the same manner, and one or two completed which were left imperfect at the former rates. Before proceeding to explain how the amount was arrived at, which the retired subscribers to the Civil Fund have to pay to entitle them to the benefits of the new scheme, it may be well to describe the application of the old and the formation of the new tables.
- Incumbent 43. 1.—Value of widows' annuities of £300, payable half-yearly in Annuities. advance till death. At 8 per cent. this value is deduced from the D and N columns in Mr. Neison's Table XIV. (1848), from Table V., by adding to the pure annuity '750 at each age, to make it equivalent to the payment half-yearly in advance. These values will be found, for such as were living 1st January, 1848, in Table VII., and in 1854 in Table XXXV., and for other ages in Mr. Grant's Report on the Charity Branch, for 1st January, 1861, Appendix J. But as the table is not given entire, I have had it computed throughout, and subjoin it in Appendix IV.
 - 44. 2.—To a daughter or son till 19. The terms of the Memorandum imply that a son or daughter received the like annuity till death, up to age 19, and the same amount of donation, £300, at that age, convertible in the case of daughters, under the Subsidiary Rules. Mr. Davies, in 1850, valued these by the same Table III. in his Report. But Mr. Neison adopted different tables, using for sons' benefits values deduced from Table VI., being mortality only till age 19; but for the values of daughters' benefits Table VIII., being the values of annuities till death or marriage

before 19, and the endowment of £300 if living at 19. It makes the value of the daughter's benefits a little less than that of the son, at all ages, as may be seen by comparing Tables XVII. and XX. Mr. Grant, in 1861, adopted these separate values. But, keeping to the terms of the printed circular and the Memorandum, I have used for the values of daughters' benefits in this case the same table as for sons' The difference is very small. benefits.

- 45. 3.—For daughters above age 19, for whom the subsidiary payment had not been made, the annuity of £50 till marriage or death, granted in lieu of the donation of £300, has been valued by Mr. Neison by his Table XXXIV., which is the same as that for the widows' annuity, and for which consequently the similar table in Appendix IV. is applicable at any required age.
- 46. 4.—Fatherless daughters for whom the subsidiary payments Subsidiary Fund. have been made, above the age of 19, are entitled to the annuity of £100 half-yearly in advance till marriage or death, the value of which is computed by the above Table, and which will also be found at 8 and at 4 per cent. in Mr. Grant's Report on the Subsidiary Branch of the Fund, Tables I. and I.(a).
 - 47. 5.—But for fatherless daughters for whom the subsidiary payments have been made, who are under 19, and still on the Charity Branch, are required the values of their deferred annuities of £100 a year, to commence at 19 if they should then be living and unmarried. The value of the deferred annuity of £1 at 8 and at 4 per cent. will be found in Mr. Grant's Tables II. and II.(a), and he brings into account the values of the donation of £300 at 19, as an endowment to be transferred to the Subsidiary Account.
 - 48. But as at 6 and at 5 per cent. I had in this Report estimated the value of the £300 endowment at 19 as part of the benefits under the Charity Branch, I have formed Table No. 7(a), Appendix IV., in a somewhat different manner from Mr. Grant's.

The value of an annuity, at age 19, of £100, payable half-yearly in advance till marriage or death, is, at 6 per cent., £927.2, deducting £300, leaves £627.2 excess of value if the daughter is then living unmarried. Consequently, at any age m, under 19, £627.2 × $\frac{D_{19}}{D_{mi}}$, the D, by Neison, Table V., expresses the value of this excess over the benefits in the Charity Branch.

Value of increase of pension if the mother dies before her son or daughter attains 10 years of age.

49. There is, however, a small item, as regards sons and daughters, which has not been taken to account in the Valuation Tables at 8 and 4 per cent., that is the increase of pension from £30 to £50 below 6, and from £50 to £80 from age 6 to 10, if the mother dies before the children attain the latter age; but considering the average age of the incumbent annuitants, and the slight risk of the contingency in question for so short a period, there seems no necessity to form tables under the old Rules for the purpose.

- 50. The above tables, which are required for the valuation of the incumbent liabilities under the old scheme at 8 and 4 per cent., have been completed by the computation of similar tables at 6 and 5 per cent.
 - 51. The next set of tables relate to the values of contingent liabilities.

Tables for values of contingent if they survive their husbands, the age of the husband being taken on the average as 7 years older than the wife. In Mr. Neison's preparatory Table XII., at age 46:39, the number dying has been accidentally misquoted from Table II. as 1769 instead of 1669, and the wrong log. taken, and consequently the additions of Col. K at all younger ages from 20 to 46 also require correction, as well as the values of the reversionary annuity in Table XI. at the same ages. The same error has crept into the 4 per cent. table. The effect of the correction is slightly to diminish the values, but would not cause, on the whole, any great difference in the final results.

52. A more important error, however, has escaped notice in the 4 per cent. tables. In this case the value of p_m , or of the widows' annuity till marriage or death, has been taken at every age from the 8 per cent. table, when the value at 4 per cent. should have been computed, and brought forwards. The annuity, also, instead of being assumed as payable half-yearly in advance till marriage or death, is taken quarterly in advance, and reducible to one-half on remarriage. This correction will make a considerable difference in the results of this class of liabilities. Thus, at age 33 last birthday, $p_{m+1}=10.246$, at 8 per cent., in Neison's Table XII., quarterly in advance, reducible to one-half on remarriage.

9.622, at 8 per cent., if valued half-yearly in advance till marriage or death.

14.409, at 4 per cent., ditto ditto.

- 53. At the wife's age, 33, the value at 4 per cent. would be about 50 per cent. more than at 8 per cent., and about 40 per cent. more than that involved in Mr. Neison's Table XII.(a). At age 60 the differences would be about 30 and 20 per cent. respectively.
- 54. It thus follows that in the 4 per cent. valuations a much larger reserve should be made, and that even in the 8 per cent. a correction should be allowed for the different conditions on which the reversionary annuity has been assumed to be payable.
- 55. In the new tables for the value of the wife's reversionary annuity after the husband, at 6 and at 5 per cent., these errors have been corrected.

56. 6.—Values of sons' and daughters' reversionary annuities after Father. Unfortunately the same mistake in bringing forward the value of benefits to sons and daughters respectively at 8 per cent., instead of 4 per cent., has been made in Tables XXIII._(a) and XXVI._(a).

Thus, in Table XXIII._(a), for sons at age 0, p_m should be £744·09, instead of £498·96. And in Table XXV._(a), for daughters at ditto, , £734·50, , £493·88.

And so on, corrected for each age under 19.

- 57. I have also endeavoured to approach rather nearer to correctness by including in the reversionary benefits the value of the increase of pensions if the mother should die before the children attain 10 years of age, and making this additional value dependent upon the death of the father.
- 58. There may be also a few cases in which the father may die before the children are 10 years of age, the mother having died first, in which case the increased value after both parents are dead—as shown in Tables Nos. 2 and 3, Appendix IV.—would be the true value represented by p_m in the table of reversionary benefits. But these cases are rare, and, in so large a valuation, may be omitted without much risk, more especially as it is difficult to distinguish in the list of members and their families which are first or subsequent wives and first or subsequent families.
- 59. The values of the reversionary benefits to sons and daughters under 19, for whom the subsidiary payment has not been made, may be computed by the same table. The donation of £300 is only convertible into the prolonged annuity of £50 until marriage or death if it was proved that the daughters were left in indigent circumstances, and the annuities were even then reducible by the amount of any private income in excess of £45. The value of the annuity at 19 would depend on the rate of interest assumed, as follows:—

- 60. It may be safely concluded that, even at the lowest rate of interest, the value in excess of the £300 donation would be much more than met by the restriction under which it is given, as we shall see hereafter in the inquiry as to what extent the liabilities are affected by the "property" clause. It is evident that, in including in the benefits the donation of £300 as an endowment payable at 19 for daughters under that age, we make an ample reserve for the liability.
- Daughters on the Subsidiary Fund. Ments have been made, we must—as has been done by Mr. Grant in his able report—divide them into two classes, those who are above 19 years of age, and those who are under age 19. The table for the former would simply be that of a



reversionary annuity on the father's death, till marriage or death, which may be valued at 8 and 4 per cent. by Mr. Grant's Tables V. and V.(a), and for which further tables have been computed, in nearly the same form, at 6 and 5 per cent.

- In regard, however, to the values at ages below 19—which Mr. Grant, in Tables VI. and VI.(a), treats as those of a deferred reversionary annuity after the father, to commence at that age, setting against them the value of an endowment of £300 at 19, to be transferred from the Charity to the Subsidiary Branch—I have adopted a different rule, in consequence of the £300 being already included in the value of the benefits on the Charity Branch. Taking the value of an annuity of £100 a year half-yearly in advance till marriage or death, at age 19, according to the rate of interest employed, and deducting therefrom £300, the difference is the excess value to which the daughter is entitled if she is living at 19, and still unmarried, and the father be then dead. If we call this excess value V, this is expressed for age m by $V.\left(\frac{D_{\cdot 19}(l_{54}-l_{m+25})}{D_{m}.l_{m+25}}\right)$, the D being taken from Neison's Table V., and the l from Table II. But the daughter has also the chance, if the father is living when she attains that age, if unmarried, of being entitled to a reversionary annuity of £100 a year after his death; and calling the value of such annuity at that age V', we have a further value = $\frac{V'.D_{19}l_{54}}{D_{m}l_{m+15}}$. combination of these two values, shown in Table No. 7(a), Appendix IV., constitutes the total worth of the daughter's expectations.
- Tables of valuation 63. The whole of the tables found in Mr. Neison's and Grant's under the old Rules. Reports for 8 and 4 per cent. have been computed at 6 and 5 per cent., with the amendments and additions above explained, and these constitute the means of making a complete valuation of the liabilities under the old Rules at all these rates of interest.
 - 64. The only tables used for valuing the members' subscriptions are the Joint Life Annuities during the Joint Lives of Husband and Wife for 16 and for 25 years' service, which will be found at 8 and at 4 per cent. in Mr. Grant's Report on the Charity Branch, Tables X. and XII. and $X_{(a)}$ XII. (a). These I have also computed at 6 and 5 per cent., and added to them at those rates of interest the values of annuities for the same terms of service on the single lives of members by Neison's Table II.
- Valuation Tables 65. Under the new Rules all these tables had to be recomputed, at under new Rules. 8, 6, 5, and 4 per cent., since p_m , which is the basis of the reversionary values, was different in every case from the former. As, however, they are generally similar in the mode of construction, I will not stop to describe them particularly. The explanations given in Mr. Neison's and Mr. Grant's Reports are quite sufficient for any one who desires to understand their formation. I will merely show in what respects they differ from the tables under the old Rules, stating generally that when

an event is supposed to occur in the middle of a year I have not thought it necessary to discount the value for half a year, since in all other parts of the calculation interest is supposed to accumulate yearly, and the omission I have made is on the side of security, by slightly increasing the reserve for the liability. It is also more strictly in accordance with the fact, as the age at valuation is taken at the mean between each two successive ages, when the event (whether death or marriage) is also supposed to occur. The first payment is consequently not deferred for half a year, but is supposed immediately due.

- Widows' pensions.

 66. The pensions to widows under the new Rules, being continued for life but reducible to one-half on remarriage, required a table of annuities for life to be formed at each rate of interest from Mr. Neison's Table VI., at 6 and 5 per cent., or from the D and N columns Table XIV. and XIV. (a), at 8 and 4 per cent. By taking half the value from this new table, and half the value by the table under the old Rules, till marriage or death at each age, the new Valuation Table was formed.
- Son's benefits.

 67. New tables were computed at each age, extending the benefits till 21 years of age instead of 19, at the higher rates of annuity, and also for the increase of pension of £10 a-year, from age 0 to 10, in case of the mother's death before the son attains 10 years, both being formed from Neison's Table VI.
- Daughter's 68. These tables, though similar in form, were computed from benefits. Table V. of Neison, containing the annuity till marriage or death, the increase of £10 a year in case of the mother's death whilst the daughter is under 10 years of age, and of £25 a year if she is above that age and unmarried, involving also the use of Table VI. But the value of the endowment of £300 on marriage was calculated from Mr. Grant's Table XVI., in his Report on the Charity Branch in 1861; showing the number living unmarried and the number who marry at each age up to age 61.
- Reversionary benefits to wives, sons, and daughters, after the death of the husband and father, followed in all respects the same mode of formation as those under the old Rules; but they had all to be calculated afresh at the different rates of interest, as the new values obtained for the incumbent liabilities, or p_m , have to enter in an early part of the table and alter all the rest of the columns at every age.
- Values of sub25 years' service, under the old Rules, are sufficient for computing the new
 rates, except that for unmarried members, the single life table must be formed for the
 same terms of service. Deducting the value by the former from the latter at each age,

allows of the computation of the values of subscriptions when they are reduced from 2½ to 1 per cent., after 16 years.

- Marriage dona71. I had intended to form from the records of the Fund a new tions of members. table of the rate per cent. of marriage amongst bachelors at every age; but the observations are not sufficiently accurate at present for the purpose. There seems no reason to doubt that the similar Table 25 (B), in my recent Report on the Bengal Civil Fund, showing, out of 10,000 entering at 20, the proportion surviving unmarried or marrying at every age up to 60, would be quite sufficient for any calculations required for the donations payable on each marriage if the rate of marriage amongst bachelors in the Madras Civil Fund should become higher in future years. This table was deduced from 13 years' experience of the Bengal Civil Fund, 1850 to 1862 inclusive, from 599 members, who were either living unmarried, on 1st January, 1850, or entered the Fund since, and of whom 245 had married in the 13 years.
 - 72. With these explanations of the new tables, the construction of which has involved so much time and labour, I proceed to consider the results of the valuation under the old and under the new scheme.

Amount to be required from Retired Subscribers to entitle their Families to the Benefits of the New Scheme.

- 73. The first point on which the decision of the Actuary is required is as to the amount which the retired subscribers ought to pay as an equivalent for the additional contingent liability incurred by the Fund, if their families are admitted to the benefits of the new scheme, of which the option was given them by a circular from the Secretary, bearing date 25th October, 1863. In this circular, of which I give a copy in Appendix II.A., the conditions under which the offer was made were clearly stated, and the relative benefits under the old and under the new scheme were fairly compared.
- 74. The form of reply announcing the assent of the member to join the New Provident Scheme, or to abide by the old Rules of the Civil Fund regarding widows and orphans, contained on it the information respecting his family required for the adjustment of the appropriated capital, his name, date of birth, whether married or single, date of birth of wife if living, number of sons living under the age of 21, their dates of birth; number of daughters living and unmarried, their dates of birth; whether the subsidiary payments to the Civil Fund were made on account of the daughters, or not. The replies, which were handed to me by Messrs. Coutts & Co., produced a mass of information more complete than any which had yet been given respecting the families of retired annuitants, in which the previous valuations have been very defective.
- 75. It not only served the immediate purpose of this inquiry, but helped to fill up blanks in the schedules of original observations, which from this time may be kept

up, and in a few years form some valuable data for the correction of the existing tables in use.

- 76. A summary of these replies, arranged alphabetically under the members names, will be found marked B, Appendix II., distinguishing in separate lists those who have signified their assent to joining the new scheme, or those who abide by the old Rules.
- 77. The next step was to arrange them under ages, beginning with the youngest married member, and against each name giving the age of his wife and of each living son, and daughter if living unmarried. Against these were inserted in columns the full values of the benefits under the old and new Rules, computed according to the instructions at 6 per cent. by the new tables formed for the purpose, as I have before explained. These will be found in the general valuation, Appendix III.
- 78. The most difficult part of the question as to the value under the old Rules was the extent to which the full value would be diminished by the property disqualification clause. The proportion ascertained from incumbent pensions by comparing the diminished with the full values, taken on the average of any one or of all the actuarial valuations which have been made, was not sufficient. That would only show the amount of diminution in pensions that were granted, but not paid in full; but there were many families who received no pension at all, by reason of the member having left property beyond the limit which entitled to a pension.
- 79. Again, the diminutions of incumbent pensions were actual facts at the time when ascertained, and though the average does not differ much at each valuation, they might not represent the condition as to property of any one or of the whole body of the existing retired annuitants, whose circumstances as to amount of property might vary between the present time and their respective deaths, on which the diminution of the pension was contingent.
- 80. The Memorandum for the Actuary contains suggestions on this head, that "as the circumstances of the Fund have altered greatly since 1814, when the Fund was established on the footing recently modified, and notably in 1825, when the present Retiring Annuity Fund was established; in 1833, when the trading privileges were abolished; in 1853, when the rules of the Retiring Annuity Fund were made less favourable; and, in 1861, when the exclusive privileges of the Service were greatly restricted, the rates of pay having also been much reduced in the course of years, and the means of providing a private income for their families in a great measure withdrawn from the members of the Service," it would be more fair to divide the periods under review into groups of ten years, and calculate separate averages for each. It seems probable, indeed, that of late years a larger proportion of pensions to be granted would be paid either in full or in part.

81. Mr. Grant, in his Report 1861, also discusses this question, and goes into some calculations to show how many widows would be living, from the average number who had left widows, whether admitted or not.

82. The maximum number of annuitants would depend upon the number of married pairs, and this had been continually increasing up to 1854.

			Nun	ber Married.	In	the Service.	Proport	ion Married.
Of members on service,	1833-	88 .		88				
	1838	43 .	•	100	Jan.	1, 1848,	$\frac{114=59}{194}$	per cent.
	1843	48 .	•	$112\frac{1}{2}$	••	1854,	$\frac{115}{182} = 63$,,
	Jan. 1,	, 1848	3.	114	"	1861,	$\frac{105}{166} = 63$	"
	"	1854		115	May	1, 1863,	$\frac{100}{159} = 63$	"
	"	1861	•	105			100	

- 83. Up to 1861, under regulations then in force, 122 widows have been admitted—
 - 28 died after admission,
 - 9 ceased by becoming possessed of property,
 - 27 remarried.
 - 58 living as pensioners.

122

- 84. But the number who never applied, in consequence of being possessed of property, was very considerable. The list of deceased annuitants, from 1803 to 1861, showing whether their families were admitted or not, gives a total of 131, of whom 22 only were admitted, and 109 entailed no liability.
- 85. By Neison, 1st January, 1854, out of 104 annuitants, 68 were married and 36 unmarried, or 65.4 per cent., and $\frac{68}{104} \times 131 = 85$, as the number of widows who would have been admitted; but 22 only were admitted, and the remaining 63 not admitted, or $\frac{22}{85} = 25.88$ per cent. admitted.
- 86. Similar results are obtained from members in Service. Since 1825, from 135 deceased members, 53 widows were admitted. Taking the same proportion as before, 88 of these members would have been married, and $\frac{53}{88} = 60.2$ per cent. admitted.

87. To bring the information down to the latest date, I have carefully analysed the Lists No. 22 and 23, given in the Appendix I., the former showing of civil servants, who died in the Service from 1825 to 1863, the number of those whose families were admitted to pensions on the Fund, and of those whose families never applied for its benefits, the latter exhibiting the same facts as to the families of deceased annuitants from 1803 to 1863. The summary for each list, and for each year, will be found in Appendix II., C and D, and grouped in periods of years, gives the following results:—

Abstract H.

Widows of Annuitants and of Members in Service admitted on the Fund.

	IN THE SERVICE. pe		Admitted per Cent. of Total,	per Cent. of		Annuitante.				
Years.	Admitted.	Not admitted.	Total.	assuming 60 per Cent. to be Married.	Years.	Admitted.	Not admitted.	Total.	Total, assuming 80 per Cent. to be married.	
1825 to 1833	10	24	34	49.0	1803 to 1833	3	24	27	13.9	
1833 to 1853	34	42	76	74.6	1833 to 1853	13	63	76	21.4	
1853 to 1861	12	10	22	99.7	1853 to 1861	6	28	34	22.1	
1861 to 1863	4	1	5	100.0	1861 to 1863	3	1	4	93.7	
Total	60	77	137	73.0		25	116	141	22-2	

88. In 1854, 1861, and 1863, the proportion of married members in Service was 63 per cent. of the whole; in 1848, only 59 per cent., and as the above list comprises a large proportion of deaths at still earlier periods, I think we shall be very near the truth in assuming 60 per cent. of the total deaths in the Service to have been those of married members. Then $137 \times 6 = 82.2$, of whom 1825-64, 60 were admitted, and $\frac{60}{82.2} = 73$ per cent.

89. But of the retired members a larger proportion is married. Thus, at the present valuation, we find amongst the retired—

89 married,

10 widowers with children,

4 ditto without children,

9 bachelors.

112

Taking the married only (as widowers' children form but a small part of the liability), $\frac{89}{112}$ gives 79.5 per cent. married, or say 80 per cent., and $141 \times .8 = 113$; consequently $\frac{25}{113} = 22.1$ per cent. of the families of retired members admitted to the Fund on the average of the whole period, 1803 to 1863, which is also the rate for the latter part of the period, 1853 to 1861.



90. Of those admitted, however, a certain proportion does not receive the benefits in full. To ascertain this proportion we may compare the value at 8 per cent. of the full and the diminished pensions, on the average of the different valuations:—

Jan. 1,	1848				•	£91,250	=	83.8 per cent.
						£108,942		
,,	1854	•	•	•	•	£111,321	==	78.6 "
						£141,595		
· ,,	1861	•	•			£121,980	=	87.9 "
						£138,824		
May 1,	1863	•	•	•	•	£120,295	=	85.3 "
						£141,059		
		Total				£444,845	=	83.9 "
						£530,420		

Thus the full pension of those admitted may be assumed to be diminished by the property disqualification to the extent of about 84 per cent., or, taking the present time, only about 85 per cent.

- 91. Applying this to the 22.2 per cent. admitted, we find $22.2 \times .85 = 18.9$ per cent. only, actually paid to the families of retired members of the pensions that will have to be paid when the restrictive clause as to property is wholly removed.
- 92. This may appear a great reduction, but even in the memorandum by Mr. Birch, quoted by Mr. Neison in his first Report, he concluded that not one-fourth of the annuitants would, under the existing system, leave a title to their widows for any benefit whatever from the Fund, independent of any reduction of those actually admitted.
- 93. On the whole I come to the conclusion, that the fairest estimate would be to assume, that under the present rules 20 per cent. only of the total reversionary pensions to the families of retired members fall as a liability on the Fund.
- 94. By the same method of reasoning, of those in the Service, the nearest estimate gives rather more than 60 per cent., and of both active and retired, about 40 per cent. of the full reversionary pensions as the probable amount that would fall upon the Fund, whilst the regulation as to exclusion on account of property remained in force.
- .95. Upon this basis the valuation under the old Rules and of the full value under the new Rules was made, and an alphabetical list of retired annuitants who had conditionally accepted the new scheme, with the amount payable by each for the difference in the value of the benefits he would thereby secure to his family, was sent to Messrs. Coutts & Co., on 30th August last with a brief explanation, as an answer to inquiries that might be made.



- 96. But it was afterwards found that several of the members had already paid, under new Rule 12, the amount that was necessary to place them on the footing of members whose families are entitled to the full benefits, and I have accordingly amended the List E, Appendix II., by striking out their names and putting them in a separate List F, Appendix II. Another List G, Appendix II., contains the names of those retired members who abide by the old Rules. The number is that in Messrs. Coutts' list, and the ages are added, that they may be more easily found in their place in the valuation.
- 97. The total number of members on the corrected List E is 69, and the total amount they have to pay is—

Total 1	Value o	of B	enefits.
---------	---------	--------	----------

For Wives .		•		Under Old Rules. £11525:3	New Rules. £58004·7	Difference. £46479·4
" Daughters				4856.4	40994.9	36138.5
"Sons .	•	•	•	1025.9	7981· 4	6955.5
To	tal			£17407·6	£106981·0	£89573·4

- 98. In regard to the question whether retired members should be permitted to secure part only of the new benefits—as, for instance, for children and not for widows, and vice versd—by payment of the value of the additional liability for particular members of their family, I am decidedly of opinion that it should only be allowed separately in the case of the wife, or in the case of the whole of the sons, or the whole of the daughters. The tables on which the calculations are based assume average difference of ages which were originally deduced from the average of existing families, and they might be materially altered if a partial selection is made from a family. This explanation has been given to Messrs. Coutts & Co., and communicated in their circular to the members.
- 99. I must also draw particular attention to the fact that in all cases the estimated difference for daughters' benefits has been computed as if the member had decided to pay for the new benefits, whether the subsidiary payment had been made for his daughter or not. It seemed very desirable that under the new Rules there should only be one class of benefits for daughters, and not a combination partly of the old and partly of the new scheme; and having been requested, in the Memorandum, to calculate the payment to be required in any case of a retired member, who may not have placed his daughter on the subsidiary list, but may now desire to secure for her the larger annuity under the Provident scheme, I thought it better to name this latter value in all cases. The consequence is, that all who eventually pay for the increased benefits for daughters will constitute but one class in the Provident fund. The number not placed under the Subsidiary Rules is very small indeed, and there did not seem sufficient reason for continuing them as a distinct class under the new scheme.



Summary of Valuation of the Madras Civil Fund on 1st May, 1863.

VALUES OF LIABILITIES.

				I	NCUMBENT	Pensions.					
		Pensi	ONA.	8 PER	CENT.	6 PER	CENT.	5 PER	CENT.	4 PER	CEST.
	No.	Now payable.	In full.	As now payable.	In full.	As now payable.	In full.	As now payable.	In full.	As now payable.	In full
8. Widows	58	£ 14884·9	£ 17,400	£ 119540·	£ 140195·1	£ 137841·6	£ 161841·6	£ 149 33 5·9	£ 175467·9	£ 162920·1	£ 191599
b. Sons Ditto	16 2	1223-9 93-6	1,310 100	10069·8 944·4			11857·1 1208·0	11578·7 1250·3	12393·1 1336·9	11931·4 1 3 99·7	
	18	1317:5	1,410	11014-2	11787-6	12207-6	13065-1	12829-0	13730-0	13331-1	1426
Daughters Ditto above 19 Ditto on Sub-1	25 11	1718·3 489·6	550	_	5285.0	5568.3	6273.7	6138-2	6915-6	6829.8	769:
sidiary Fund	31	2705.7	3,100	24647.4	28079.0	29425.6	33523.2	32600-9	37145-0	36474.3	41621
	67	4913-6	5,790	41631-2	48673.7	4867 3 ·1	56832-9	53013 ·5	61838-0	57793-8	6736
Total		21116·	24,600	172185·4	200656-4	198722:3	231739-6	215178-4	2510 35 ·9	234045.0	2 7323
		VAL	UES OF	Incumbent	PENSIONS	IP PUT UNI	DER NEW R	ULES.			
a. Widows b. Sons	58 18 67				144365·8 15494·7 75229·0		167354·2 17144·2 89683·2		181888-2 18087-8 99146-7		19920; 19131 110852
Total	•••				235089-5		274181-6		299122:7		329192
I. Remarried widows }	12			6642:3	7768-8	9200-1	10760-4	10806-9	12639-6	12816-8	14990
bers who abide by the	M. 3 W.1 B. 8	Sons Daught Son	3 2 er 1 1	502·1 22·9 41·2 20·2	2510·7 114·7 206·0 100·9	640·0 30·3 60·2 26·8	3200·1 151·5 300·8 133·9	707·8 34·1 72·9 30·3	3538·8 170·3 364·4 151·6	88.0	3926 190 440 171
Total	12			586.4	2932-3	757:3	3786·3	845-1	4225-1	945.7	4728
Members on service ditto	4	Wives Sons Daught	4 6 ers 3	1004-0 202-1 221-9	2510·1 505·1 554·7	1390·6 253·9 329·4	3476·4 634·8 823·5		4149·0 696·5 1001·5	2011·3 305·9 483·8	5028 764 1209
Total				1428.0	3569 9	1973-9	4934.7	2338-8	5847:0	2801.0	7002
Total value of					214927:4						

MADRAS CIVIL FUND.

Summary of Valuation of Madras Civil Fund (continued). VALUES OF LIABILITIES.

				ALUES OF	LIABILI	II.EQ.				
			8 PER	CENT.	6 рев	CENT.	5 PER	CENT.	4 PER	CENT.
	No.		As now payable.	In full.	As now payable.	In full.	As now payable.	In full.	As now payable.	In full.
f. Retired mem- bers who have conditionally accepted the new scheme B.&	73 W.9 W.7	Sons 79 Daughters 94	£ 10890·4 955·8 3772·2 100·6 1201·1	4779·0 18861·2 502·8	1156·3 5461·7 120·8	5781·8 27308·4 603·8	1238·3 6550·5 129·1	6191·7 32752·5 645·6	1323·1 7806·2 137·8	6615·6 39030·9 689·1
Total	89		16920-1	84600-2	22876-5	114382:5	26358.9	131794:3	30468-0	152340-2
	· · ·	VAL	UATION OF	THE SAME	AS UNDER	NEW RULE	L .			<u></u>
	M. W.	Wives 73 Sons 87 Daughts. 108 Sons 8 Daughters 29		55181·8 7965·5 30896·3 811·8 9074·6	:: :: ::	72799·2 9095·0 42406·0 928·8 12275·1	••	82721·1 9750·0 50715·4 996·2 14560·0		94800·0 10468·8 61750·5 1069·9 17575·3
Total	••	٠,		103930-0	:	137504·1		158742-7		185664-5
g. Members on Service ditto Resigned but families enti-tled	M92 W.7 B.56	Wives 92 Sons 172 Daughts. 137 Sons 13 Daughters 16 Wives 2 Sons 5 Daughters 4	22579·1 6275·6 9691·5 295·4 1160·0 525·5 117·6 302·0	15689·1 24228·7 738·4 2900·0 1313·7	31360·2 7758·9 14286·0 365·3 1708·7 729·2 138·9 443·8	19397·2 35714·9 913·2 4271·8 1823·1 347·3	8480·9 17319·1 395·6 2070·0 865·7 147·0	21202·2 43297·8 989·1 5175·0 2164·2 367·4	9244·2 20918·8 428·1 2496·6 1043·1 154·7	52297·1 1070·3 6241·5 2607·6 386·7
Total	155	••	40946-7	102366:7	56791.0	141977:5	67684.3	169210-8	81501.6	203754-1
		Val	UATION OF	THE SAME	AS UNDER	NEW RULE	s.		·	
	M. { W. {	Wives 92 Sons 175 Daughts. 137 Sons 14 Daughters 16 Wives 2 Sons 6 Daughters 4	: : : : : : :	57367·7 23413·1 28655·6 1224·9 3435·6 1333·7 505·2 898·4	::::::	83359·2 28001·1 40396·2 1422·1 4836·2 1884·6 564·7 1263·3	 	100876·5 30634·7 49153·9 1539·4 5879·4 2238·9 598·3 1533·6		124297·5 33697·5 61123·6 1670·2 7301·9 2699·7 634·1 1898·4
Total				116834.2		161727-4		192454.7		233322-9
h. Estimated reser- benefits of futu- ing marriages, o	re chil	dren of exist-	365 3 ·2	9133-0	50 57·0	12642:4	5925-7	14814-4	6935-5	17338-7
Ditto, new	Rule	:s		11919-9		15678-0		18307-9		21782-0

Summary of Valuation of Madras Civil Fund (continued). VALUES OF LIABILITIES.

	8 PER	CENT.	6 PER	CENT.	5 PER	CENT.	4 PER	Cent.
	As now payable.	In full.	As now payable.	In full.	As now payable.	In full.	As now payable.	In full
i Oli Dulus Builtani dan	£	£	£	£	£	£	£	£
j. Old Rules.—Estimated reserves for the wives and families of 63 bache- lors and widowers if they should marry hereafter	6535-7	16 3 39-2	10139-1	25347:8	12956-0	32390-0	16784-6	41961-4
Ditto, new Rules		18153-9		29 182·3		37361-1	••	48783-2
k. Passage-money to widows and children		1912-2		2072-1		2160.3		2255·1
Advances to sick members Charges of management and contin-)	• •	1593.5	••	1726.8	• •	1800-3	••	1879-3
gencies	•••	4457.4	••	5 37 1·2	••	5973-9	••	6660-2
	v	ALUES OF	Assets.					
n. Capital of the Fund		617901		617901	••	617901	••	617901
o. Estimated amount, at 6 per cent., to be paid by retired members who have conditionally accepted the new scheme		89573:4		89573:4		89573-4		89573-4
p. Value of members' subscriptions— One member, under 16 years' ser-) vice, who abides by the old Rules §		107-4		114.8	••	1'18·7		123-0
Subscriptions of members who have accepted the new scheme, valued as under the old Rules:— Unmarried members		6197·3 60 73 ·1		6878·1 6499·1		7215-2 6731-8		7516·4 6981·7
		12270-4	••	13377-2		13947:0		14498-1
Valued as under new Rules:		0010-0		10170.4		10090-7		112.05
Unmarried members		9010·9 25516·4		10172·4 27923·5		10832·7 29296·8	••	11543·7 30804·9
	•••	34527:3		38095-9		40129.5		42348.6
q. Old Rules.—Value of donations. Subsidiary payments for future born a daughters of present marriages		924.3		1014-9		1064-1	••	1116:3
Old Rules.—Ditto for daughters from probable marrriages of bachelors }	••	802:3		931.7		1005·1		1085-0
New Rules.—Ditto for marriage and birth of each son and daughter		4626-2		5100·		5363	•••	5646.4
r. Value of Government donation of Rs. 12,950		8254.3		8944.6	• •	9325.2		9734·4
6. Value of gain by exchange:— Government donation, Ra. 40,000	::	25496· 8923·6	• •	27628· 9669·8		28804· 10081·4	••	30068· 10523·8



Valuation of Existing Liabilities, 1st May, 1863.

- 100. Though the various and complicated contingencies, either under the old or new scheme, require a great mass of preliminary tables, and from the instructions in the Memorandum at four different rates of interest—8, 6, 5, and 4 per cent.—I will endeavour to bring the results into as small a compass as possible, comparing them together, and then give an opinion on the various questions submitted.
- 101. In order to simplify the process of calculations, I have placed together, in Appendix IV., the series of tables finally used in the present valuation, and, as far as they will be required on future occasions, until the bases of the tables are altered. They are given for each of the above rates of interest for the valuations both under the old and the new scheme.
- 102. In the summary of the valuation on 1st May, 1863, pp. 38-40, will be found all the total values of each class, brought under one view, and we may examine the results separately.
- 103. I. Incumbent Liabilities—Old Rules.—Although, in the Memorandum for the Actuary, the amount of capital to be set aside as appropriated to meet these liabilities, together with those which are contingent for the families of members retired or in the Service who decide to abide by the old Rules, is only required at 6 per cent. interest, I have thought it better to compute them also at the other rates of interest, in order to compare the present condition with the past condition of the Fund at former valuations.

a. Widows' Pensions.

- 104. The total number is 58, the amount payable in full would be £17,400 per annum, and that actually payable, as diminished by the "property clause," is close upon £14,885 per annum, showing a proportion of 85.5 per cent. At 6 per cent. the full value is £161,842, and of the diminished pensions £137,842, or 85.2 per cent., very nearly the same. The average value of each full annuity is 9.3, which very nearly corresponds with the mean age, 61.
- 105. Comparing the present valuation at 8 per cent. with those made by Mr. Neison and Mr. Grant at the same rates of interest, the following is a summary of the results:—

•	No. of	Full	Pensions	8 PER	CENT.	Proportion per Cent. of	Average Value	Equivalent
·	Widows.	Pensions.	paid.	Value of full Pensions Pension. Paid.		full Pension paid.	of Annuity of £1.	Age.
Neison, 1 Jan., 1848	41	£ 12,300	£ 10,356	£ 108,942	£ 91,250	83.8	8.857	56
, , 1854 Grant, , 1861	55 56	16,500 16,800	13,083	141,595	111,321 121,980	78·6 87·9	8·582 8·263	59 61
" 1 May, 1863	58	17,400	14,885	140,195	119,540	85.3	8.058	62

106. From this comparison it would appear that though the number of widows has increased considerably since 1848, yet the average age has so far increased also that the value of the full liability during the last nine years has actually diminished. The last three valuations were all made by the same table, and the first only differs by taking the age at last birthday, instead of an average advance of half a year for the mean present age in each case.

b. Sons' Pensions.

- 107. Under age 19 there are 16 in number, and there are 2, who, under special rule, receive annuities of £50 each, above that age. The total full annuities would be £1,410 per annum, and those actually paid £1317.5 per annum.
- 108. At 6 per cent. the full value would be £13065·1, and of those actually payable £12207·6, being a proportion of 93·4 per cent. The estimated value of the latter has been obtained from the former by reducing it in the proportion in which the annuities are actually diminished by the property clause. In cases under 10 years of age, the deduction would not be in exactly the same proportion when the annuity came to be increased according to the Rules, but they are too few to affect the results seriously.
- 109. Of the 18 annuitants, 6 were orphans who had lost both parents, or whose mothers had remarried, and 2 of them under 10 years of age were consequently taking higher annuities, and by the new tables, at 6 and 5 per cent., the increased annuity of the latter until 10 years of age was brought into account. The values at 8 and at 4 per cent. were by Mr. Neison's Tables XVII. and XVII(a)., in which this slight addition is omitted.

c. Daughters' Pensions.

- 110. At ages under 19, we find on the present valuation 25, the full pension of which would be £2,140 per annum, and those actually payable £1718. The value at 6 per cent. of the former is £17,036, of the latter £13679.2, found in the same manner as the sons' annuities.
- 111. Above age 19 there are 11 receiving £50 a year in lieu of the donation, but liable to reduction by the "property clause"; their full pensions being £550 per annum, and so reduced £489.6 per annum. The value, at 6 per cent., is £6237.7 for the former, and £5568.3 for the latter.
- 112. Of these 36 annuitants, 14 had lost both parents, or the mother had remarried, and 2 of them were taking the higher annuities under 10 years of age.
- 113. These annuities for sons and daughters, independent of those on the Subsidiary Fund, may be compared with the values at the previous investigations.



	1	848.	18	354.	10	361.	1863.	
	Sons.	Daughters.	Sons.	Daughters.	Sons.	Daughters.	Sons.	Daughters.
Number	2 6	18 12	20	28 11	22	22 12	16 	25 11
8 per Cent. Valuation) of full Pension	£ 15,825	£ 10,924 } 5,389 }	£ 12,992	£ 16,452 } 5,136 }	£ 1 3, 509	£ 14,303 } 5,695 }	£ 10,778	£ 15,310 } 5,285 }
Average Value	608:7	543:7	649.6	553-5	614·	588-2	673:4	572·1

- 114. The values of the reduced pensions have only been obtained by proportion, so that it is not worth while to make the comparison, but the average values to each child fluctuate within certain limits without showing any increasing liability.
- 115. I have before explained that in the construction of the tables at 6 and at 5 per cent., I have followed the statement in the Memorandum, which after age 14 would, at the same rates of interest, make a slightly increased value for daughters' pensions up to age 19, over Mr. Neison's values.
- 116. The next item is the transfer from the Subsidiary Fund of the values required for daughters' incumbent annuities of £100 a year under those rules. By List No. 13, Appendix I., in which the ages are given, they amount to 31 in number, the full annuities being £3,100 per annum, and the amount actually payable £2705.6. The total value at 6 per cent. is £33523.2, and of those actually payable £29425.6, being 87.8 per cent.
- 117. As the principal and subsidiary capital accounts are amalgamated, from 1st May, 1863, there is no longer any object for keeping these liabilities as a separate account, and I have, therefore, brought them into their place in the general valuation.
- 118. These various items constitute the whole of the incumbent liabilities, and the total value of the annuities actually payable under the old Rules, at the various rates of interest, is—

At 8 per cent.			£172185·4
6 per cent.			£198722·3
5 per cent.			£215178·4
4 per cent.			£234045·

119. To complete the required estimates under the old Rules, we must add such of the contingent liabilities as may yet come on to this branch.

d. Contingent Pensions of Remarried Widows.

120. The first of these is the estimated value of the annuities of remarried widows, who may survive their second husbands and return to the Fund. Those who have already returned, 4 in number, from List 5, are included in List 1, and Item a in valuation. But in List 4 are given the names, date of remarriage, and age on 1st May, 1863, as far as they could be ascertained, of 20 widows on the Fund who have remarried, from 1798 to 1863; but the ages only of 12, since 1835, could be ascertained with sufficient accuracy. Of 7 whose ages are given, the average present age would be nearly 43, and the average age on remarriage 38. Of 5 whose age were approximated by taking 20 as the average age of the husband on entering the Service, and 7 years as the mean difference in age of husband and wife, the average present age would come out as 45, and the average age at marriage about 30. The remaining 8 were remarried between 1798 and 1822, and we may safely leave them now out of the account. If we assume that the remaining 12 are all living (though this is hardly probable), and take the average present age at 45, there can be little doubt that the result will be sufficiently near for all practical purposes without putting a value against each of the names. The result would be by table—

	In full.	Reduced Pensions.
At 8 per cent.	$2.158 \times £300 = 647.4 \times 12 = £7768.8$	£6642·3
6 per cent.	$2.989 \times £300 = 896.7 \times 12 = £10760.4$	£9200·1
5 per cent.	$3.511 \times £300 = 1053.3 \times 12 = £12639.6$	£10806-9
4 per cent.	$4.164 \times £300 = 1249.2 \times 12 = £14990.4$	£12816·8

- 121. The probable reduction of pension on account of the "property clause" is assumed to be in the same proportion as that of widows now on the Fund, 85.5 per cent., which gives the values of the diminished pensions as above.
- 122. The amount might possibly be sufficient, if the full values were reduced still further, since some widows might be left in the possession of property which would wholly exclude them from the Fund, but in the absence of more accurate information, it is better to allow sufficient margin.
- 123. Mr. Grant, in his valuation for 1861, justly brought this liability to account, and seems to have had nearly the same list to compute from, as he also leaves out the first 8, and estimates the values of 11 then remaining—

At 8 per cent.			£7507.5 for full Pensions.
4 per cent.		•	£10351·8 ,,

reducing them in the diminished proportion of then existing widows for the property clause. The large apparent difference at 4 per cent. arises from his having used Mr. Neison's Table XI.(a), in which the p_m , at 8 per cent., has been imported into the 4 per cent. table. The average age also appears to be only 30, which leads me to think that it may have been the age at marriage instead of the existing age.

e. Liabilities for Families of Members who abide by the Old Rules.

124. The last contingent liability under the old scheme is that of members who, in reply to the circular sent to them, have elected to abide by the old Rules. These are taken from Retired Members' List G. They consist of a very small number—only 9; of these, 3 are described as widowers (of whom 2 have no sons under 21, or daughters unmarried), 3 single, and of 3 the ages and particulars of family (if any) are not given. The total value of the liability is as follows—that of the diminished pensions being only 20 per cent. of the full pensions, for the reasons more fully explained in Articles 93, 94:—

	8 PER	Свит.	6 PER	CENT.	5 PER	CENT.	4 PER CENT.	
	In Full.	Reduced.	In Full.	Reduced.	In Full.	Reduced.	In Full.	Reduced.
Wives, 3 Sons, 3 Daughters, 1 (on Subsidiary Fund)	£ 2510·7 215·6 206·	£ 502·1 43·1 41·2	£ 3200·1 285·4 300·8	£ 640·0 57·1 60·2	£ 3538·8 321·9 364·4	£ 707·8 64·4 72·9	£ 3926·4 362· 440·1	£ 785·3 72·4 88·
Total	2932·3	586.4	3786:3	757:3	4225·1	845·1	4728.5	945.7

Value of Contingent Pensions.

125. But there are also a few members on Service who appear amongst the list of those who have decided to abide by the old Rules. They are but 4 in number—the families consisting of 6 sons and 3 daughters. The additional liability under the old Rules is, consequently, very small; and as it would be very desirable to arrive, as soon as possible, at the uniform working of the new scheme, I would suggest that they should, till retirement from Service, have the option of accepting the new scheme upon paying up any arrears of contributions which they might have to pay under the new Rules, with interest. The full and diminished values reserved for this contingent liability are as follows:—

	8 PER	CENT.	6 PER CENT.		5 PER	CENT.	4 PER CENT.	
	In Full.	Reduced.	In Full.	Reduced.	In Fall.	Reduced.	In Full.	Reduced.
Wives, 4 Sons, 6 Daughters, 3	£ 2510·1 505·1 554·7	£ 1004·0 202·1 221·9	£ 3476·4 634·8 823·5	£ 1390·6 253·9 329·4	£ 4149·0 696·5 1001·5	£ 1659·6 278·6 400·6	£ 5028·3 764·7 1209·5	£ 2011·3 305·9 483·8
Total	3569-9	1428.0	4934.7	1973-9	5847:0	23 3 8·8	7002-5	2801-0

126. The preceding items, a to e, comprise all those which, according to the instructions in the Memorandum, are to be valued at 6 per cent., and capital set aside at that rate to meet them, the total amount of which will be £210653.6.



f. and g. Liabilities for the Families of Members who have elected to join the New Scheme.

- 127. We now come to the consideration of the values of the contingent liabilities appertaining to the members who have elected to be placed under the new Rules. These are also to be valued at 8, 6, 5, and 4 per cent.; but as it is important to ascertain the excess value over the old, which is required to be reserved in consequence of the adoption of the new scheme, we must also value these contingent liabilities at the same rates of interest, supposing them to have continued under the old Rules.
- 128. This is necessary with the view of obtaining the proportion of surplus which remains in the existing capital towards carrying out the new objects, and whether the intended increase of donations and subscriptions is fully adequate to the alterations proposed.
- 129. Before proceeding to the detailed examination of each item, it may be convenient to state, in a few words, the condition of the Fund and the charges that would be made on the actual capital on 1st May, 1863, supposing that, after reserving the incumbent liabilities, and for the families of those members who have decided to abide by the old Rules at 6 per cent. interest, the whole of the contingent liabilities for the retired members and those on Service were also charged (as has been done in former Reports) as if the full pensions were reduced in the same proportion as the value of incumbent widows' pensions in full bears to the value of their reduction caused by the possession of private property.
- 130. This common ratio is taken from the valuation at 8 per cent., and it will be seen by the Summary, pp. 38-40, is $\frac{£119540}{£140195\cdot1}$, a little more than 85 per cent for the liabilities under the old Rules, and (which is still nearer the same rate at 4 per cent.) for the excess of the liabilities under the new Rules over those under the old, at 4 per cent.
- 131. Computing all the contingent liabilities at this rate of reduction, and comparing the results with the balance of the actual capital of the Fund on 1st May, 1863, after reserving for the incumbent liabilities, and for those members who adhere to the old Rules, at 6 per cent., we shall have the following results:—

1st May, 1863.—Capital				•	•	£617901·
Old Rules-Liabilities valued a	t 6	per ce	ent.			210653.6
						407247.4



	£407247·4
Old Rules—f. Contingent liabilities, at 8 per cent.,	
retired members 71910.2	
,, g. Ditto, members on Service 87011.7	
" h. Ditto for future children of existing	
marriages	
,, j. Ditto for families of Bachelors, if they	
marry	
,, k, l, m. Miscellaneous 7963·1	
· · · · · · · · · · · · · · · · · · ·	188536.4
	218711.0
New Rules—f. Excess of liabilities, at 4 per cent.,	
Retired members	
,, g. Ditto, members on Service 60131.9	
" h. Ditto, for future children of existing	
marriage 7044·1	
,, j. Ditto, for families of bachelors, if they	
marry	
	136467:3
	£82243·7
•	202240 1

- 132. It appears from this statement that the total liabilities under the old Rules for all the existing members on 1st May, 1863—valued as required by the new regulations—would, under the proportion ascertained by the methods hitherto followed, absorb £399190.0 of the existing capital of £617901, leaving a surplus of £218711.
- 133. The excess of liabilities under the new scheme over the old for the members then existing, valued at 4 per cent., of which the details may be seen in the summary of the valuation, pp. 38-40, would require a reserve of £136467·3, which would still leave a surplus of £82243·7, without taking into account the future contributions and donations to be received from the members still in the Service.

To proceed to a more minute examination of each item—

- 134. The values of the first of the contingent liabilities is shown under
- f. For the Reversionary Pensions of Wives, Sons, and Daughters of Retired Members who have provisionally Elected to join the New Scheme.

The names are the same as those which have been given in the Alphabetical List E, but they have been re-arranged under ages commencing with the youngest age of the husband, with the youngest age of the wife, and showing the ages of the sons and daughters in each family, placing against each the respective value of the benefits according to each rate of interest. This admits of several useful deductions as to the number of children in families according to the ages of the parents, and the corresponding reserves required at the more advanced ages.

- 135. The total number of members somewhat differs from that given in List 7, in consequence of the corrections which were effected by the members' own statements in their replies to the circular sent out by Messrs. Coutts & Co. Having carefully compared these forms with the original list, I have adopted finally the facts which are given in Table f as the most accurate statement which has yet been obtained as to the wives and families of the retired members.
- 136. The total number of married members is 73, with 79 sons living under age 19, and 94 daughters, of whom many will be found above age 19, in consequence of the subsidiary payments having been made for them. In fact, the number not entitled to subsidiary benefits is very small, being only 25 out of the 94. There were 9 widowers, having 7 sons and 27 daughters, entitled under the old Rules to reversionary benefits; 1 widower without children, and 6 bachelors, making, with 12 retired members who abide by the old Rules, the total number of 101 on the retired list living 1st May, 1863.
- 137. The average number of children living in a family with both parents is, sons under 19, 1.05; daughters unmarried at any age, 1.25; together, 2.32; or 7 children to every 3 families.

In the families of 9 widowers the proportion of sons living under 19 was less, being .78; and of daughters living unmarried at any age still more, being 3; both together 3.78 to each family.

138. The total value of the liabilities for the reversionary benefits to wives and children, and the reduction estimated, as I have before explained, on account of the effect of the "property clause," at the several rates of interest, is as follows:—

		8 PER	CERT.	6 222	CENT.	5 PER	CRNT.	4 гив Сият.	
		Reduced.	Fall.	Reduced.	Full.	Reduced.	Full.	Reduced.	Full
Married members 73	Wives 73 Sons 79 Daughters 94 Sons 7 Daughters 27	£ 10890·4 955·8 3772·2 100·6 1201·1	£ 54451·8 4779· 18861·2 502·8 6005·4	£ 14411·6 1156·3 5461·7 120·8 1726·1	£ 72057·9 5781·8 27308·4 603·8 8630·6	£ 16379.4 1238.3 6550.5 129.1 2061.6	£ 81896·7 6191·7 32752·5 645·6 10307·8	£ 18755·5 1323·1 7806·2 137·8 2445·4	£ 93777-6 6615-6 39030-9 689-1 12227-0
	Total	16920-1	84600-2	22876-5	114382-5	26358-9	131794:3	30468-0	152340-2

139. It will be sufficient to take one rate of interest to ascertain the average value of the benefits in each class, and for this purpose to select 5 per cent. At this rate the average value of the wives' reversionary benefit is £1,122, corresponding nearly to the husbands' age 58; of the sons' benefits £78.4, about sons' age 12; and of the daughters' benefit £348.4, about daughters' age 19.

For the reversionary benefits of the sons of widowers the average value is £92.2, being age 11, and of daughters' benefits £381.8, being a little below the value at age 21.

- 140. These ages do not differ much from the average values found in the Retired Service of the Bengal Civil Fund, on 30th April, 1863, in which the husbands' age was found by this process to be 54, the sons' 11, and the daughters' about 21.
- 141. The total values at 6 per cent. will not exactly agree with those which were shown in article 97, and the corrected List E, showing the difference to be paid by retired members to place their families under the new Rules, because those who have retired since 27th July, 1860, are included in the present list, as bringing on liabilities under the new scheme, for which a reserve must be made.
- 142. The next inquiry is as to the total values which would have to be reserved under the new Rules for the families of the same retired members. For the convenience of comparison they have been classified in precisely the same way, and the value set against each age from the new tables which I have computed.
- 143. It will be seen that, as far as regards the wives' reversionary pensions, there would be but a very small addition required for the change proposed to continue half the pension during the second marriage, if the widow married again, provided the clause for reduction of pension on account of private property were not in force. At 8 per cent. interest the reserve is the same, because Mr. Neison's Table XI., used in former valuations, was actually framed on the supposition that the annuity would be continued at the rate of one-half during the second marriage. The only difference would be that he has assumed it as payable quarterly instead of half-yearly. A slight correction might be made in the result on this account. Mr. Grant, in his Report 1861, p. 30, has shown how this may be done by multiplying 125 into each widow's annuity=£37.5, and reducing it in the average ratio of a contingent to a full pension. In the present case it would be about age $52\frac{1}{2}$ for the valuation age of the wives of retired members, or $£37.5 \times 2667 = £10 \times 73 = £730$, thus giving £54451.8+£730=£55181.8 as the increased reserve for the whole class.
- 144. At the other rates of interest, 6, 5, and 4 per cent., the increase is only £741.3, £824.4, and £1022.4 respectively.
- 145. It is only when we take into account the very great reduction in the liabilities caused by the "property clause," that we begin to perceive the heavy excess of reserve which the new Rules will require to be made. Thus we have—

V	alue	of	Liabilities.	for
---	------	----	--------------	-----

	Wives.					So	MB.		DAUGHTERS.			
	8 per Ct.	6 per Ct.	5 per Ct.	4 per Ct	8 per Ct.	6 per Ct.	5 per Ct.	4 per Ct.	8 per Ct.	6 per Ct.	5 per Ct.	4 per Ct.
New Rules	£	£	£ 82791-1	£	£	£	£	£	£	£	£	£ 703-25-8
Old Rules.												
Excess	44291.4	58 387· 6	66341.7	76044-5	7720-9	8746.7	9378-8	10077-8	34997-6	4749 3 ·3	5666 3 -3	69074-2

146. It would appear therefore, from this comparison, that if the total value of the liabilities under the old Rules is to be set aside at 8 per cent., and the excess of the value under the new Rules over that under the old Rules at 4 per cent., the account would stand thus—

	Wives.	Sons.	Daughters.	Total.
Value under old Rules, 8 per cent	£ 10890·4 76044·5	£ 1056·4 10077·8	£ 4973·3 69074·2	£ 16920·1 155196·5
Total	86934-9	11134-2	74047.5	172116-6

- 147. By the extended application of the new Rules to children under age 21, the claims of an additional number are brought in for valuation, the wives being the same in number, but showing a rather higher liability by the continuance of half the pension during second marriage. Of sons of married members the number is 87, instead of 79 under the old Rules, and of sons of widowers 8 instead of 7, whilst the number of daughters of married members is 108 instead of 94 under the old Rules, and of daughters of widowers 29 instead of 27.
 - 148. g. Reversionary pensions to wives, sons, and daughters of members in the Service, under the old and new Rules, compared.
- 149. Some slight alterations in the original List, No. 7, have been made from the circulars sent to the members on service, at present on leave of absence in England. The total numbers so corrected are, 76 married members, whose families consist of 178 sons under age 19, and 140 daughters living unmarried, giving the proportion of 1.85 sons and 1.46 daughters, together 3.31 children to each family, or nearly 10 children to each three families.
- 150. In the families of 7 widowers there were 13 sons under age 19, and 16 daughters living unmarried, being 1.86 sons and 2.29 daughters, together 4.15 children in each family.



- 151. There were also two members who had resigned the Service, but whose wives and families, consisting of 5 sons and 4 daughters, are described as entitled to the benefits of the Fund.
- 152. Taking as before the valuation at 5 per cent., as the rate for obtaining the average age, we find the value of the full reversionary pensions to the 96 wives to be £98821.8, or an average of £1029.4, which very nearly corresponds to age 35.
- 153. For the 178 sons the total value of the reserves is £21898.7, average £123, corresponding to mean age about 9 years, and for the 140 daughters £44299.3, average 316.4, corresponding to age 10 very nearly.
- 154. In estimating the reserves for the daughters' reversionary pensions under the old Rules, I have assumed that they all come under the benefits of the Subsidiary Fund, since I found no distinction in the List 7, and the very large proportion so provided for amongst the retired members shows that the excess of liability thus assumed will very little disturb the general results of the valuation.
- 155. In allowing, however, for the diminution in those reserves on account of the "property clause," the proportion would be about 40 per cent. less, or 60 per cent, of the full value, if we took into account only the families of members who die But we must bear in mind that a considerable number of them whilst on service. will hereafter retire, as shown in the observations of the Madras Civil Service Table A, in which out of 321 married members who were entered on the list, 118 are stated to have retired. Out of the families of retired members, a larger proportion under the old Rules received no benefits from the Funds, so that it is necessary to combine both classes to estimate the probable diminution in the value of the reserves that would be required. By turning to article 87, p. 35, it will be seen that, according to the records of the Fund, only 60+25=85 families were admitted for 278 deaths of members, either on Service or annuitants. By the present valuation it appears that out of 260 members, either on Service or retired, there are 172 married, and 189 if we include widowers with children, the former being 66.2 per cent. of the whole, and the latter 72.7 per cent. Reducing the total number of 278 deaths in these proportions, we should find only $\frac{85}{184}$ = 46.2 per cent. of families of married men had been admitted, or $\frac{85}{202} = 42.0$ per cent. of the families of married men and widowers with children combined, the remaining families having been excluded wholly by the possession of private property. But of those admitted not more than 85 per cent. of the pensions, as was shown in art. 90, may be reckoned upon as paid in full, and which applied even to the former of these rates would show (as I before stated) not more than 40 per cent. of the full value as the reserve, which under the old Rules would have to be set aside to meet the liabilities for the reversionary pensions to wives and children of members now in the Service.



156. On these data the following would be the summary under the old Rules:—

		8 раз Свит.		6 раз. Скит.		5 PER CRIT.		4 PER CEST.	
		Reduced.	Full.	Reduced.	Full	Reduced.	Full	Reduced.	Full.
members 96 Sons Resigned 2 Dau Widowers 7 Son	res 98 s 183 sghters 144 s 13 sghters 16	£ 24108.6 6595.3 10215.4 295.4 1160.0	£ 60271·5 16488·2 25538·5 738·4 2900·0	£ 33480·0 8151·7 15059·2 365·3 1708·7	£ 83700·0 20379·3 37647·9 913·2 4271·8	£ 40394·4 8906·4 18256·6 395·6 2070·0	£ 100986-0 22266-1 45641-6 989-1 5175-0	£ 49625-2 9704-8 22048-0 428-0 2496-6	£ 124062-9 24262-0 55119-9 1070-3 6241-5
Total		42374.7	105936-6	58764-9	146912-2	70023-0	175057:8	84302-6	210756-6

157. In estimating the same class of liabilities under the new Rules, a correction must be made as before in the results by Mr. Neison's Table, at 8 per cent., to allow for the pensions being payable half-yearly in advance instead of quarterly, by adding £10 for each widow, or £960+£20 in the whole. The excess value of the reserve for each rate of interest will then be found, as follows:—

		W	IVBS.			So	m.		DAUGHTERS.			
	8 per Ct.	6 per Ct.	5 per Ct.	4 per Ct.	8 per Ct.	6 per Ct.	5 per Ct.	4 per Ct.	8 per Ct.	6 per Ct.	5 per Ct.	4 per Ct.
New Rules	£	£ 88885-5	£	£	£	£	£	£	£	£	£	£ 71748:1
			40394.4									
Excess	37142-9	55405:5	67074.9	82656·5	19055-5	22436.0	2452 3 ·4	27029-0	22277:8	30669-3	37387-4	47203·6

158. And continuing the same method as before of reserving the old portion of liability at 8 per cent., and the excess that would arise from the adoption of the new Rules at 4 per cent., we should have to set aside an amount of capital as follows:—

	Wives.	Sons.	Daughters.	Total.
Value under old Rules, 8 per cent Excess value under new Rules over } old Rules, 4 per cent	£ 24108·6 82656·5	£ 6890·7 27029·0	£ 11375·4 47203·6	£ 42374·7 156889·1
Total	106765·1	83919-7	58579.0	199263-8

159. The extension of the benefits to age 21 will increase the number of sons entitled in this class from 196 to 204, the number of daughters remaining the same, 160.

- 160. Taking the members on Service and retired together, the excess value of the benefits under the new scheme as compared with the old, and computed at 4 per cent., amount to the large sum of £155196.5 in the former class, and £156889.1 in the latter, together £312085.6.
- 161. There still remain two items of contingent liability, which though not so important as those we have examined, are too great to be wholly neglected, that of future children of present marriages, against which would have to be set the value of the donation of £30 on the birth of each daughter if they are placed on the Subsidiary Fund, and that for the wives and families of present bachelors, if they should marry hereafter, against which will have to be set the value of the increased contributions which they will have to pay after 16 years' service over the unmarried rates, and of the donations on marriage, and on the birth of each son or daughter.
- 162. h. Mr. Grant in his Report, p. 29, alludes to both of these liabilities, and adopts for the former Mr. Davies' estimate in the Bengal Civil Fund, as equal to one-fourth of the existing value of the reversionary benefits to children.
- 163. In my recent Report of the Bengal Civil Fund, p. 40, I have taken some pains to arrive at an approximate estimate, by ascertaining the proportion of children in each family according to the age of the husbands; and beginning with 5 between ages 20-25, the adjusted average came out very closely an increase of 1 in family for every 5 years of age of the husband up to 40-45, when it reached the maximum number of children, 4.5 in each family. The next step was to consider, that, if both parents lived to each successive period of 5 years, a reserve should be made of the value of the contingent reversionary interest of a son or daughter at birth discounted for the interval to the present ages of the parents. The final result for all the existing members showed that, under these conditions, the reserve for this liability would be equal to about 20 per cent. of the total value of the children's contingent pensions.
- 164. In order to compare the average number of children existing in a family, we may turn to the Valuation Table, g.

	Madras Civil Fund, 30rm April, 1863.						IVIL FUND.
	Married Members.	Sons.	Daughters.	Both.	Average to each Family.	In 18 63.	Adjusted Average.
20- 25- 30- 35- 40-	5 13 13 18 22 At 19	1 18 19 27 53 1	9 9 25 48	1 27 28 52 97	-2 2·1 2·2 2·9 4·4	·5 1·2 1·9 2·8 4·4	-5 1·5 2·5 3·5 4·5

Abstract I.

165. On the whole the adjusted average appears sufficiently near to afford a safe approximation, and making the reserves in the proportion of the final result, 20 per cent. of the values of contingent pensions of the children of members on service, we have under the old and new Rules—

Estimated Reserves for Contingent Benefits to the future Children of Present Marriages.

	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
New RulesOld Rules	£ 11919·9 3653·2	£ 15678•0 5057•0	£ 18 3 07:9 5925: 7	£ 21782·0 6935·5
Excess	8266-7	10621-0	12382-2	14846.5

Considering the advanced age of the retired married members, there does not seem any necessity to add to this liability on their account.

- 166. j. In regard to the reserves that should be made for the probabilities of marriage, and the future wives and families of the members at present unmarried, Mr. Grant estimates them in proportion to those for existing married members on service and retired, and then takes one-third of the amount, which reduces the total to less than 12 per cent. of the former.
- 167. But in my Report on the Bengal Civil Fund, the value deduced from the table of experience of the Fund, showing the proportion of bachelors who would marry or die in each year of age, brought out a total more than one-third of the values of the whole reversionary benefits to wives and children of the married members. The rate of marriage, however, was so high as compared with the records of this Fund, shown in Abstract B², art. 24, that I should hesitate in adopting it for the present occasion, or to frame a table from the latter till confirmed by further observations.
- 168. In order to form a rough approximation, however, we may assume that the present average age of bachelors is between 27 and 28, whilst the average age at marriage is very nearly 30, that there are on an average 4.5 children to a marriage (one-half sons and one-half daughters), and one with another assumed to be born 5 years after marriage, which accords very well with the tables in use, in which the fathers' age is assumed to be 35 years older than the children's. Then, if we add to the value of the wife's reversionary pension, at the husband's age 30, that of the children's reversionary benefits at birth, discounted for 5 years, we should have in hand the value of the contingent benefits for wives and children for each bachelor at the date of marriage, assuming that he will certainly marry. Thus, at 5 per cent.—

					New Rules.			
Husb. age 30.	Value	of wife's	reversiona	ry benefits,	£1068:3	•	. =:	£1068·3
Age 0.	Value	of son's	"	"	207·2 x	·7835	× 2·25=	$365 \cdot 3$
"	"	daugh	ter's "	"	302·0×	·7835	×2·25=	532.4
							4	£1966·0

The value of the contingent benefits for wife and children at the date of marriage thus appears, at 5 per cent. interest, to be £1,966, and if discounted for 3 years to the present age of bachelors, about 27, would be £1698.2. It appears from the experience of the Fund, that out of 750 members who entered as bachelors about 210 had either married or died under age $27\frac{1}{2}$, and of the remaining 540 about 192 married before retirement, which would be rather more than 35 per cent. If this proportion may be assumed for 56 members living in the Service as bachelors, and also 7 widowers in the Service, total 63, the number of marriages to be expected amongst them would be 22, and this multiplied into the above value would give £37,361 as the reserve for this item, at 5 per cent. interest.

169. By the same method of reasoning, the values, at the four rates of interest under the old and new Rules, would be found as follows, the former being taken at 40 per cent. of the full values, as liable to the depreciation for the "property clause."

Estimated	Value of	Liabilities	for	Wives	and	Families	of	Bachelors a	ınd	Widowers	if	they
	•	•	ร	hould I	Marr	y hereafte	7.				•	•

	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£
Old Rules.—Value of benefits for wife and family at date of marriage, husband's	935.6	1372:3	1704·4	2145.5
age 30	1039-2	1579-9	1966-0	2494.3
Old Rules.—Value of ditto for 63 bachelors and widowers at mean age 27, if they	6535.7	10139-1	12956-0	16784-6
should marry hereafter	18153-9	29182:3	373 61·1	48783-2
Excess value under new over old Rules	11618-2	19043-2	24405-1	31998-6

170. With the exception of the liability for reversionary benefits to second wives and families, should the existing members become widowers and marry again, which has not been brought to account, because their subscriptions are assumed to be payable only during the duration of the existing marriages, and consequently leave the excess after that term, together with the marriage and birth donations to meet this risk, there appear only three remaining items on this side of the account, namely—



- k. Passage-money granted to widows and children, List No. 16.
- Assistance granted to sick members, carried to the head of "profit and loss," List No. 12.
- m. Charges of management and contingencies, List No. 11.
- 171. In regard to the first and second of these items, Mr. Grant considers they may fairly be valued by the average annuity for the whole term of the lives of members in the Service, and the last by a similar annuity for the whole life, whether on service or after retirement. Mr. Neison computes this value on 182 members in the Service on 1st January, 1854, as on an average 9.694, at 8 per cent., corresponding very nearly to ages 36-37 and 14.448, at 4 per cent., which is also near the value at age 36. These values Mr. Grant uses, and they seem to be almost equally applicable to the results of the present investigation; but as the average age of bachelors and married members together in the Service corresponds more nearly to 35, I have taken the equivalent annuity at the four rates of interest:—

8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent.
Age 35. Value of annuity on member's life, £9.775 £11.779 £13.101 £14.606

The 6 and 5 per cent. being approximated, as there seemed no necessity to compute the whole table for this particular case.

172. The average passage-money paid, which Mr. Grant, from 1855 to 1860, found to be £290 per annum, by adding the two years, 1861 and 1862, averages £300 per annum. Consequently, the reserves should be—

	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
k. Reserve for passage-money for widows and children	£1912·2	£2072·1	£2160·3	£2255·1

The average value of an annuity during the life of a member whilst in the Service will be found, from the table, Appendix IV., to be, at age 35—

At 8 per cent.	•	•	•	•	6.374
6 per cent.			•	•	6.907
5 per cent.	•			•	7.201
4 per cent.					7.517

173. The assistance granted to sick Civil servants carried to the head of profit and loss is shown in Appendix I., List No. 12, for the years 1801 to 1862—the total amounting to 2,62,208 rupees, and averaging 4,230 rupees annually. The fluctuations in the list are very great—from 45,532 rupees in 1830 to 1,312 rupees in 1803, and from 1849 to 1858 there are no quotations. For the last five years, 1858 to 1862, they have only averaged 2,557 rupees per annum. As the maximum amount to which a sick member can become indebted to the Fund is now limited, it is probable

we may reasonably reckon on £250 per annum being sufficient to carry to account for this item, and which, valued by the above annuities, would give—

- 1. Reserve for assistance to sick members, carried to "profit and loss" . . . } & per Cent. 6 per Cent. 5 per Cent. 4 per Cent. carried to "profit and loss" . . . } £1593.5 £1726.8 £1800.3 £1879.3
- 174. The average charges of management, taken from Appendix I., List No. 11, are deduced from the statements for the 15 years 1848 to 1862, and show about 4,562 rupees per annum. If we assume £456 per annum, it will probably allow for some slight permanent increase, as the recent average is swelled by an unusual charge in 1861; and this sum, multiplied into the annuities given in Art. 171, makes the reserves
 - m. Reserve for charges of management and contingencies . . } 8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent.
 £4457.4 £5371.2 £5973.9 £6660.2
- 175. The preceding comprise estimates for the whole of the liabilities which, under any head, may fall upon the Fund, so far as the complicated nature of some of the contingencies allow of an accurate computation being made. It is not to be expected that, from the changes going on, not merely in the probable rates of mortality and marriage, but in the constitution of the Fund itself, they should be accepted as free from the revision which subsequent observations, and the careful recording of all the facts, may render advisable. But they are given as the results of the best judgment, which a sincere anxiety to arrive at the truth has brought to bear on these difficult questions, and I trust they will be found to correspond very nearly with the future history of the Fund.
- 176. On the other side of the account we have to examine the assets by which these liabilities are to be met, and by the rules laid down, the valuation of them is of a much more simple character.
- 177. The first and most important item is the capital of the Fund. As the Principal and Subsidiary Capital Accounts are to be amalgamated from the 1st May, 1863, I take the total as I find it in the accounts on 1st January, 1863, and add one-third of the increase between that and the 1st January, 1864, to bring it to the date of valuation.

n. Capital of the Fund, 1st Jan., 1863.—Charity Fund Subsidiary Branch	•	•	Rupees. 43,02,035 17,67,051
Total On 1st Jan., 1864			60,69,086 68,98,861
		3)	3,29,775
			1,09,925
Total estimated capital on 1st May, 1863 . say £617,901,	•	•	61,79,011

1

178. The next important item under the Provident scheme is the amount to be paid by the retired members, who have conditionally accepted the new scheme, for the difference in the value of the benefits to their wives and families which they will gain by the exercise of their option. If any member should not eventually confirm the conditional choice, the liability on the other side will be diminished accordingly.

Value of benefits under new Rules	з.		£106981·0
Ditto under old Rules			17407.6
o. Estimated amount to be paid by retired members	who	have	
conditionally accepted the new scheme .			£89573.4 (Art. 97)

- 179. The estimated value of the subscriptions of members in the Service under the old Rules, at the rate of 2½ per cent. on all allowances, for 16 years, commencing from arrival in India, and under the new Rules, to be continued in the case of married members and widowers with children, during the whole further period of service; but in the case of unmarried members, or widowers without families, to be reduced to 1 per cent. after 16 years, and raised to the former rate, if they marry, require special tables for valuation.
- 180. The practice hitherto has been to place against the number of members at each age the total value of their life annuities during the temporary periods of payment, and then multiply the average annuity so obtained into the total income from subscriptions. But it is evident this method does not take into account, with sufficient accuracy, the increasing rates which are paid by the members on Service, as their allowances increase with advancing age. I propose to endeavour to make a nearer approximation to the true value of this asset.
- 181. By means of List No. 18, which gives an estimate of the subscriptions for one year under the Provident scheme, calculated on the salaries and allowances to which each member was entitled in May, 1863, the total annual income from subscriptions is computed to be 57,551 rupees.
- 182. But as those who have completed sixteen years, whether married, widowers, or single, are distinguished from the rest, I have, from the other lists, placed against each name the age of the member at that date, and reclassified them—beginning with the youngest—so as to show the average salary corresponding to each year of age, and obtained the value of the total subscriptions at each age according to the remaining term of service for which the subscription is due. The small amount that may be recovered from members under Rule 13, from such as had ceased to subscribe between 27th July, 1860, and 1st May, 1863, I have not the means of accurately estimating.
- 183. In Mr. Grant's Report, p. 19, it is stated, that from the contributions received in 1860, 1 per cent. on the official salaries and emoluments of members under

16 years' service would yield 7,505 rupees per annum; that 1 per cent. on the salaries of members under 25 years' service would produce 16,242 rupees per annum, and 1 per cent. on the salaries of all members in the Service, supposing their numbers and emoluments to continue as thus stated, would yield 28,366 rupees. The number of married members only is given as 67, and their subscriptions as 16,887 rupees, and of single and married together at 122, but it appears that the numbers represent only such members as are under 45 years of age.

184. In List No. 18, the total subscriptions of all the members, in number 159, single and married, with the exception of 4, who adhere to the old Rules, are given as 56,676 rupees 10 annas, at $2\frac{1}{4}$ per cent., and 874 rupees 9 annas at 1 per cent. of the single members of more than 16 years' standing. At 1 per cent. this would be equal only to a total of 26,065 rupees for those members who have accepted the new scheme. Of members under 16 years' service, the total subscriptions at the rate of 1 per cent. would be 10,209 rupees per annum by the above list—one described as married being returned as single in List No. 6. The following is the general summary:—

Abstract J.

Total Salaries of Members under 16 and above 16 Years' Service, and 1 per Cent. thereon.

	Und	ER 16 YEARS'	SERVICE.	Above 16 Years' Service			
	No.	Total Salaries.	l per Cent. on ditto.	No.	Total Salaries.	l per Cent. on ditto.	
Unmarried members	50 }	Rs. 4,33,000	Rs. 4,330	5	Rs. 1,04,260	Rs. 1,043	
Married members	42 } 2 }	5,63,401	5,635	47 }	13,76,656	13,766	
Widowers with children	2	24,400	244	5	1,04,600	1,046	
	97	10,20,907	10,209	58	15,85,516	15,855	
Married members who adhere to the old Rules	1	8,800	88	(3)	(90,200)	(902)	

185. It would appear, from the returns of salaries and emoluments made in this list, that 1 per cent. on the total under 16 years' service would yield 10,208 rupees, and at 2½ per cent. the total would be 22,968 rupees, and 198 rupees for four members (one only being under 16 years' service), who abide by the old Rules. But in the Appendix B to the Report presented to the Quarterly General Meeting, 5th February, 1863, I find the subscription for the year 1862 estimated at 17,937 rupees.

186. Mr. Grant, in 1860, gives the income from subscriptions as 16,887 rupees, and in the margin quotes for the five years, 1856 to 1860. The year 1858, which is the highest, shows only 22,156 rupees.



- 187. I conclude, therefore, that certain deductions should be made from List No. 18, but as three names appear without any subscriptions, as if they had compounded, and as it is an official document carefully drawn up, I have used it in the estimation of the value of subscriptions under the old and new Rules.
- 188. The single member under 16 years' service, who abides by the old Rules, stands at age 28, and the value of his annual subscription of 198 rupees is—

At 8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
Rs. 1074·3	Rs. 1147·6	Rs. 1187·4	Rs. 1229·6
Say £107.4	£114·8	£118·7	£123·0

- 189. For those members who have accepted the new scheme the total values of the temporary annuity, for 16 years' service, have been computed in the tables in Appendix IV., at each rate of interest, for the unmarried members separately, and for the married and widowers with families, and the average annuity deduced at each rate of interest.
- 190. The same process has been carried out for the values of annuities continued for the remainder of 25 years of service of members existing at each age.
- 191. The total amount of subscriptions is deduced from the incomes in each class, as shown in Abstract J., Art. 184, continued in the case of married members, at 2½ per cent. throughout.
- 192. In the case of unmarried members, I have taken the proportion which, by Art. 168, would probably remain unmarried to the end of the term of 25 years' service, to be very nearly 35 per cent., and reducing their subscription income from $2\frac{1}{4}$ to 1 per cent., multiplied into the excess of the average value of annuity to the end of 25 years' service over that for 16 years' service. The reduction of the income, after 16 years' service, would be Rs. $12,088 \times 65 \times \frac{1\cdot25}{2\cdot25} = 4,366$ rupees, the value of which must be deducted.
 - 193. The following shows the results:—

Abstract K.

Values of Subscriptions for both Classes in the Old and in the New Scheme, and the Excess of Value of Subscriptions under the latter.

	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
OLD RULES.—Unmarried members. Average value of annuity Value of subscriptions of Rs. 9742.5.	6·361 £6197·3	7·060 £6878·1	7·406 £7215·2	7·715 £7516·4
Married members and widowers with families. Average value of annuity	4·592 £6073·1	4·914 £6499·1	5·090 £6731·8	5·279 £6981·7
Total values	£12270·4	£13377-2	£13947-0	£14498·1
NEW RULES.— Unmarried members. Average value of annuity. Value of subscription of Ra. 12,088 Average value of annuity after 16 } years' service. Value of Rs. 4,366, reduction to one } per cent. to be deducted	8·073 £9758·4 1·712 £747·5	9·182 £11098·9 2·122 £926·5	9·840 £11895·4 2·434 £1062·7	10·587 £12797·6 2·872 £1253·9
Leaving net value	£9010·9	£10172·4	£10832·7	£11543·7
Married members and widowers with families. Average value of annuity	5·481 £25516·4	5·998 £27923·5	6-293 £29296·8	6·617 £30804·9
Total values	£34527·3	£38095·9	£40129.5	£42348·6
Excess of value of subscriptions under a new over old Rules	£22256·9	£24718·7	£26182·5	£27850·5

- 194. I should have preferred valuing the subscriptions of members, whether under the old Rules for 16 years' service or under the new Rules to the end of service, as represented on an average for 25 years, by an annuity increasing in the proportion in which each member's salary and emoluments increase with advancing age.
- 195. I have, from List No. 18, analyzed the salaries, and found the average rate for each age, as shown in the table in Appendix III., and also in the Summary, the average rate at every fifth year of age from 20, assumed as the entrance age. The following shows the total salaries and the average just stated:—



		•	Abstrac	t L.				
Total	Salaries of Members		e Service : th Year of		1863,	and Average	Salary at	every

Ages.	Number of Members.	Total Salaries.	Average Salary.	At Mean Age.
		Rupees.	Rupees.	
20-23	13	49,800	3,831	20
23–28	33 }	2,27,547	6,896	25
28 –33	23 }	3,15,360	13,711	30
33-38	23	3,93,260	17,098	35
38-43	28	7,01,750	25,062	40
43-48	15	3,43,542	22,903	45
48-53	18	5,82,164	32,342	50
5 3 –58	2 }	92,000	46,000	55
Total	155 }	27,05,423	17,460	

196. From this summary it is evident that, except at the mean age 45, the average future salaries might be computed for each member and the present value ascertained as an increasing annuity, on which the percentage of subscriptions may be valued. But it seems to me scarcely advisable to effect so great a change from the statement for a single day, and I have therefore arranged the facts, so that at the next quinquennial valuation a similar classification might be made and the average of the two then taken, if thought advisable, for the proposed new method of valuing this item.

q. Value of future Donations.

- 197. Under the old Rules the only donations to come into the valuation are those payable on the birth of each daughter to secure the subsidiary benefits, and as we have assumed that in all cases such benefits will be secured, the value of these donations may be computed as an asset.
- 198. The increase in the families of existing married members has been taken to be 20 per cent. on the value of their present contingent interests, and though this would be equivalent to a larger number, according to the value at birth, I think we may take it as the proportion for the cash value of the donations, setting the discount to the time of payment against the probable slight increase in number.
- 199. This would give children of married members $\frac{342}{2} \times 2 \times £30 = £972$ for the value of this item under the old Rules in existing families, the sons and daughters (though afterwards differing in number on the Fund) being taken as of equal numbers at birth.



200. Another approximation would be by Abstract I., Art. 164, which, at the rate of increase there indicated, would give 103 children to be born in families in which the father's age is under 40, say 52 daughters, and as these may be supposed to be born one with another 5 years from the mean present age of 30, if both the parents live so long, we have $52 \times £30 = £1560 \times \frac{D_{35.28}}{D_{30.23}}$, which at the different rates of interest would give—

At 8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent. £924·3 £1014·9 £1064·1 £1116·3

201. The donations payable for the daughters of the 22 members who it was computed would marry out of the 56 living bachelors, may be estimated at $2.25 \times £30 = £675$ for each family. This discounted for 5 years from the date of marriage, at say age 30, and for three years more to the present mean age 27, for the 22 members, would yield at the different rates of interest—

At 8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent. £802·3 £931·7 £1005·1 £1085·0

- 202. Under the new scheme, however, no donations will be payable on the birth of a son or daughter, except by those members who shall enter the Service as married, or who marry after 1st May, 1863.
- 203. We have, therefore, only to estimate the value in the last case for the 22 members before alluded to, comparing, however, their marriage donation of 1,500 rupees, 500 rupees on birth of a daughter, and 250 rupees on birth of a son. Reasoning as before, this would give $(250 \times 2.35) + (500 \times 2.25) = 1687.5$ rupees, say £168.75, discounted for 5 years, which together with 1,500 rupees=£150, will be the total value of donations at date of marriage, and the total discounted as before, for 3 years, will be a near approach to the value of this item. For the 22 computed marriages this will amount to—

	At 8 per Cent. £4626.2	6 per Cent. £5100.0	5 per Cent. £5363:0	4 per Cent. £5646.4
Excess value under new				
Excess value under new over old Rules	£3823·9	£4168·3	£4357·9	£4561·4

The only other items which are available for assets are the Government donation and the gain by exchange.

204. r. Mr. Grant contends against Mr. Neison's view that the former was available to meet the liabilities during the natural lives of the whole of the members, that it was merely a grant to the Service, and, consequently, could only extend until retirement; and further, that it must be limited to the term of the present married members' lives, as a portion must be reserved to meet their liabilities under second marriages. If the former view is correct—that it would cease to be allowed by the



Government if all the members were retired—we must of course estimate it by the average annuity on the lives of members in the Service. But it appears to me that the latter method reduces the value too much, as the unmarried as well as the married members have an interest in its estimated value, and that the only portion not to be brought to account is that which would be continued to new members entering after the date of valuation.

205. I have, therefore, used the same value as for items k and l, that is, an annuity during term of service at the average present age of 35, which is rather less than the average value deduced from the actual annuities of all classes combined, and will probably correspond with the average actual age at other valuations also.

The estimate for 12,950 rupees (=£1,295) Government donation is then—

At 8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent. £8254·3 £8944·6 £9325·2 £9734·4

- 206. s. The gain by exchange being the difference returned by the Government to the Fund in the form of a donation—in consequence of the old arrangement with the late Court of Directors that the rate of exchange was to be 2s. 3d. per standard rupee—is shown by Mr. Grant to have varied from 1856 to 1860, from about 11,000 to 14,000 rupees, at which rate he took it in the latter year.
- 207. But in the accounts for 1862, I find this donation stated as 46,725 rupees, and in the account for 1864, as 41,333 rupees.
- 208. If 40,000 instead of 14,000 rupees may now be considered as the rate of this donation, or £4,000 a year, the value by the preceding average annuities—which I think would be fairly applicable in this case also—would be

At 8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent. £25,496 £27,628 £28,804 £30,068

Note.—Feeling some difficulty of explanation in the sudden rise in the amount of this item, I applied to Messrs. Coutts & Co., and was favoured by them, through the kindness of Sir H. C. Montgomery, with the following memorandum from the India Office, which fully bears out the valuation which I have put upon it. Up to 1860-1, the differences of the rates of interest and of the exchange were combined.

Madras Civil Fund-Charity Branch.

	Difference between Rate of Interest on Bonded Property and Rate formerly allowed.	on Advances made in	Combined.	
1860–61	Rs. a. p.	Rs. a. p.	Rs. a. p. 207,114 13 1	
1861-62	164,722 5 1	43,130 7 0	207,852 12 1	
186263	164,722 5 1	40,434 12 7	205,157 1 8	
1863-64	196,722 5 1	46,724 10 3	243,446 15 4	

209. Having thus estimated the value of every item of the liabilities and assets, at the four different rates of interest, I proceed to present a balance sheet of the Fund, on 1st May, 1863, in the form required by the new Rules, and as set forth in the Memorandum for the Actuary. As the details are given in the summary of the valuation, p. 38-40, it will be better to state the results in the briefest manner.

Balance Sheet of the Madras Civil Fund, 1st May, 1863.

	Liabilities.	At 6 per Cent.	At 8 per Cent.	At 4 per Cent.	Total.
Old Rules.	a, b, c. Value of the incumbent liabilities of the Fund d. Value of reserve for remarried widows	9200-1	£	£	£
Old Rules. New Rules.	f. Ditto for contingent reversionary annuities, retired members Ditto ditto valued as under new Rules 185664-5 Under old Rules 30468-0	·	16920-1	••	210653
Old Bull-	Excess	• • •	100105	155196.5	172116·
New Rules.	g. Ditto ditto members on service Valued as under new Rules		40946.7	151821-3	
Old Rules.	b. Ditto for future children of present married members Valued as under new Rules 21782.0 under old Rules 6935.5	•.	3653.2		192768
New Itmes.	under old Rules 6935·5 Excess	• •		14846.5	18499
Old Rules. New Rules.	j. Ditto for liabilities under the probable marriage of bachelors Valued as under new Rules 48783.2 under old Rules 16784.6		6535.7		10433
	Excess			31998-6	38534
Old Rules.	k. Ditto for passage-money to widows, &c. 1. Ditto for advances to sick members m. Ditto for charges of management		1912-2 1593-5 4457-4		7963·
	Total estimated liabilities	210653·6	76018-8	353862.9	640535
	Assets.				
Old Rules.	n. Capital, 1st May, 1863		617901-0		617901-0
New Rules.	o. Payments to be made for new benefits by retired members			89573.4	89573
Old Rules. New Rules.	p. Value of subscriptions of a member who abides by old Rules Ditto of members who elect the new scheme Ditto valued as under new Rules		107·4 12270·4	27850-5	
Old Rules.	q. Ditto of donations for subsidiary payments for future }		924.3	21000	40228
New Rules.	born daughters of present married members { Ditto for daughters from probable marriages of bachelors Ditto ditto valued as under new Rules 5646.4 Ditto ditto as under old Rules 2201.3		802.3		
Old Rules.	Excess Ditto of Government donation		8254.3	3445·1	5171 : 8254 :
	Total estimated assets		640259.7	120869.0	
	SURPLUS		1	1	120593

- 210. It thus appears that, even after making the Reserves for all the incumbent liabilities and for those of the members who abide by the old Rules, at 6 per cent., the estimated surplus amounts on 1st May, 1863, to the large sum of £120,593.4.
- 211. Indeed, without any payments from the retired members, and without the value of the increased subscriptions and donations from members in the Service, the existing capital and the old rates of subscriptions and donations would very nearly suffice to carry out the new scheme so far as the existing members, retired or on service, are concerned. It would not, however, admit of the existing incumbent pensions to widows and children being placed on the same footing.
- 212. In this estimate I have taken the exchange, as 10 rupees to the £ sterling, that being the rate at which it is said that for some years past the transactions of India with the British Exchequer have been settled. If the old arrangement with the late Court of Directors, alluded to in Mr. Grant's Report, p. 21, stands permanent, viz., 2s. 3d. per standard rupee, at which rate the amount paid to the local Government will be much less than that actually disbursed, the difference returned to the Fund in the form of donation would evidently in the long run be worth very much more than he brings to account, viz., 14,000 rupees at 8 per cent., valued at 83,454 rupees. The Government donation is fully equal on the average to the items of passage-money, advances to sick members, and charges of management, so that the payments which remain are almost entirely pensions payable in England, whilst the receipts are mostly the subscriptions and interest paid in India. Consequently, if the Fund were closed to new members nearly its whole capital would eventually be converted into pensions payable in England, and the donation arising from so high a value given to the rupee in the exchange would considerably increase.
- 213. But Mr. Grant, in both his Reports, converts sterling money, at 1s. 11d. per sicca rupee, and at the rate of 15 sicca for 16 standard rupees, or £1=11·13 rupees. Mr. Neison converts his results at 1s. 11d. per rupee, or £1 = $10\cdot435$ rupees. In the Bengal Civil Fund Report, the rate was taken as £1 = $10\cdot24$ rupees. In the Madras Military Fund Report, £1=8·75 rupees. In the Appendix F of the accounts of the present Fund, I find the estimate, dated 1st January, 1863, of annuities, payable in 1863, as £22327·85, or 195744·6 rupees, which is £1=8·767 rupees; and 1st January, 1865, total pensions £21281·3, or 186564·6 rupees, which is £1=8·767 rupees as before.
- 214. I should have been disposed therefore to have converted the English money computations into rupees, in the same manner as in the Madras Military Fund, by £1=8.75 rupees; but that the question of the exchange is part of that involved in the Government proposal to be considered separately, and I have consequently not brought into the preceding account the gain by exchange which forms part of Mr. Grant's surplus.



- 215. Before proceeding to examine the question of the surplus, it may be well to endeavour to reply to the question in the Memorandum as to the mode in which the charges are to be debited to the several capital accounts in due proportion, if the present system is continued. "They will be chargeable to the New Capital Account, at (say) 4 per cent. interest, so far as they are in excess of the charges properly devolving on the Fund under the former Rules, and these last charges only will be debitable to the ordinary Capital Account at 8 per cent. interest."
- 216. According to the preceding Balance Sheet, it would appear that under the old Rules to provide for the existing incumbent liabilities would only require £210653.6 of a 6 per cent. capital and £76018.8 of an 8 per cent. capital. If the former was computed at 8 per cent., it will be seen in the Summary, Art. 102, that only £180842.1 would be required.
- 217. But the latter value is obtained after allowing of large deductions for the families of members who receive no benefits from the Fund. If they had been diminished merely in the proportion in which the pensions to the families of members actually on the Fund are reduced by the "property clause" (as has been done in previous Reports), the Reserves would have been very much higher. Thus, $\frac{£172,185}{£200,656} = .858 \times £186,967 = £160,438$, which would have been reserved on this principle, instead of £57866.8, the value of the contingent benefits to the families of members retired and on service.
- 218. On the other hand, the excess of value under the new Rules for these two large items would have been proportionately diminished.

Thus, $858 \times £356,094 = £305,568$, the value under the old Rules at 4 per cent., which deducted from £418,987, the full value under the new Rules at 4 per cent., would give the excess only £113,419, instead of £307017.8, as it now stands in the Balance Sheet.

- 219. To be on the safe side, therefore, we assume that, out of the capital, £210653.6 is set aside to meet the *incumbent liabilities* under the Charity and Subsidiary Funds as united.
- 220. There would then remain the contingent liabilities, of which the proportion under the old Rules is in value £76018.8, which includes miscellaneous items, and which are covered, in fact, on an average by the Government donation of 12,950 rupees. The values of subscriptions, donations for the births of children, and Government donation, under the old Rules, amount altogether to £22358.7, which being deducted from £76018.8 leaves £53660.1 required from the 8 per cent. capital to meet the liabilities under the old Rule. We have then—



Total capital				£617901·
Reserve for incumbent liabilities .		£210653	·6	
Ditto for contingent liabilities, valued under old Rules	l as }	53660	-1	264313.7
Leaving surplus for new liabilities	•			853587:3

- 221. Since the excess value of the liabilities under the new Rules at 4 per cent. over those under the old Rules at 4 per cent. is only £353862.9, it would appear that, if all the previous assumptions are correct, the new scheme could be carried out, without any additional contributions either from the retired members or from the members on service, beyond the rates which they now pay.
- 222. This view is confirmed by the fact that, even if the total Reserves for the new scheme, after providing for the liabilities of the incumbent pensions, and all who abide by the old Rules at 6 per cent., be estimated at 4 per cent., they only amount to £489552.6, without any deduction for the proportion which would under the old Rules receive no benefit whatever from the Fund by reason of the "property clause." This will be seen by adding together the liabilities, f, g, h, j, towards which the existing capital, after deducting £210653.6, as above, from £617,901, leaves £407247.4 available. This requires only £82305.2 to be made up by the payments of the retired members and the additional subscriptions and donations from those in service. These, as proposed in the new Regulations, amount in value to £120,869, so that they could be reduced in value by more than 30 per cent. and yet balance the account.
- 223. But if we consider that the whole of the capital is at present bearing 8 per cent., we may further compute the new liabilities for members retired and on service at 8 per cent., without any deduction for the "property clause," and at this rate the sum of the value of the items f, g, h, j, is found to be only £250,838, which is greatly within the limits of the balance of the 8 per cent. capital, viz., £407247.4, after providing for the incumbent liabilities at 6 per cent.
- 224. In all this reasoning the incumbent pensions are supposed to be as now—under the old Rules, and subject to the "property clause." But if the members, retired and on service, were admitted to the benefit of the new Rules without further contributions, it would naturally occur to consider whether all pensions on the Fund ought not to be placed on the same footing, since it is manifest that the capital has accumulated from the self-denial of members who are now deceased, and the high rate of interest at which their subscriptions have been laid out.
- 225. I have, therefore, valued the liabilities of existing pensioners as they would be under the new Rules, at 8, 6, 5, and 4 per cent., to see what additional burden

would be brought on the Fund were they also admitted, without extra payment, to the same benefits as the contingent pensioners under the new Rules. The results are as follows:—

Abstract M.

Values of Incumbent Liabilities, 1st May, 1863, if placed under the new Rules.

	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent,
TT': 1 - 10	£	£ 167354·2	£	£
Widows, 58	144365·8 14485·1	15936-2	181888-2 16750-9	199203·0 17634·8
Sona, 16	1009.6	1208.0	1336.9	1496.9
Daughters, 67	75229.0	89683-2	99146.7	110857-6
Values under new Rules (in full)	235089·5	274181.6	299122:7	329192·3
Do. under old Rules (reduced) by "property clause")	172185.4	198722:3	215178:4	234045-0
Excess	62904·1	75459-3	83944.3	95147:3

Amongst the widows' annuities the principal cause of excess is the cessation of the "property clause," as under the new Rules all the annuities would be paid in full; but in the daughters' pensions a large part of the increase, which is very considerable, is due to the greater annuity which is proposed to be given if the mother be dead or remarried.

226. To come now to the proportion of charges which would be borne by the several capital accounts if the present system is continued.

227. It is evident that this may vary from time to time, at the different valuations, according to the number of pensions charged upon the Fund, and what portion of them may fairly be considered as paid under the old Rules, the balance of them being under the new Rules. Even the rate at which they would be diminished by the "property clause" if the old Rules were in force, might vary from time to time, and the true estimate would be little more than conjecture. But on the whole, for the present occasion and until a new valuation leads to a new adjustment, I think it may fairly be concluded that the estimated value of the reversionary pensions for the families of members in the service on 1st May, 1863, would be the best proportion now to assume. In them we have taken into account, under the old Rules, the probable diminution on account of the "property clause," whether the pensions fall due whilst in the service or after retirement. For the retired members only, the proportion under the old Rules would be considerably less, as might be reasonably expected from the higher emoluments which are attainable in the Service for the last few years before retirement. If we were to take the incumbent pensions as a measure, we should be under the disadvantage of not knowing precisely how many are wholly excluded from the benefits.



- 228. For members in the Service, the estimated value of total benefits to their families under the old Rules is, £40946.7 at 8 per cent. under the old Rules, and £151821.3 at 4 per cent. for the excess of benefits under the new Rules. The proportion is, consequently, about 21½ per cent. for the old, and 78½ per cent. for the new Rules; or, in so doubtful a question, we might say 25 per cent. for the former and 75 for the latter. This appears to be, on the present occasion, the rate at which the charges, which fall in after the 1st May, 1863, should be debited respectively to the old and to the new Fund which will commence from that time.
- 229. The surplus of the subscriptions are more easily settled, since the old Fund will take all that are paid under 16 years' service, and the new Fund all that are in excess of that period of service; and also the marriage and birth donations, so far as they are above what would have been paid under the old Rules, will go to the new Fund and the balance to the old.
- 230. In regard to miscellaneous items, passage money, advances to sick members, which appear to be within the limits of the Government donations, they may reasonably be considered as falling wholly upon the old Fund and provided for by this donation, which also belongs to the old Fund.
- 231. But the great difficulty of fairly adjusting two Funds to bear different rates of interest, and liable to charges the true proportion of which may even, if known, be constantly changing, and which, from their very nature, can only be allotted to one or the other by conjecture and frequent readjustments, renders it a very desirable thing, if possible, to do away with the distinction and constitute only one Fund at a common rate of interest.
- 232. This is what the offer of the Government, as quoted in the Minutes of the meeting, 30th January, 1863—if it can be accepted without prejudice to existing rights and interests—is calculated to effect. The words are important:—
- "If the subscribers prefer it, there would apparently be no objection to granting, in lieu of the present indirect aids, an annual sum equal to the average of the donations during the past five years; the future interest on the balance of the Funds being in that case fixed at 5 per cent., and the remittance of the sums required by the Funds in England being made at the same rate of exchange as that fixed annually for the adjustment of transactions with the British Exchequer."
- 233. It is presumed that the direct donation of 12,950 rupees annually is not included in this question. But the benefit obtained by the rate of exchange under the old arrangement with the late Court of Directors, will require a careful inquiry as to its average amount for the last few years and probable amount hereafter, if it is to be given up for what it is understood has for some years been an average rate of 10 rupees to the £1 in the adjustments with the British Exchequer. It would appear by the Memorandum from the India Office, that in 1861–2 and 1862–3, the last two years of the Charity Branch, the difference of exchange on advances made in England

between the current rate and the rate formerly allowed, averaged 41,783 rupees per annum. I think we are justified, therefore in assuming that at least 40,000 rupees will be allowed by the Government as the fixed annual donation under this head.

- 234. The other and most important indirect aid, is the difference between 8 per cent. interest on the whole capital of the Fund, applicable to the original objects, and 4 per cent., which could have been reckoned upon in the open market for first-class investments.
- 235. As no capital for the new scheme had accumulated until after 1st January, 1863, it may perhaps be allowed by the Government to take the average rate of 4 per cent. on the capital, as it stood on the 1st of January in each year, for the 5 years terminating 1st January, 1863, as the indirect aid to be so commuted. In the accounts for 1862 and 1864 the capital of the Charity and Subsidiary Branches is stated—

Av	erage of	5 vea	rs			$55,51,904 \times 4$ per cent.=Rs. 2,22,706.
					5)277,59,517
	1863	•	•	•	•	60,69,086
	1862			•		58,01,325
	1861	•				55,32,542
	1860				•	52,94,841
1st Jan.,	1859				. R	s. 50,61,723

The average donation for interest at 4 per cent. would be 222,706 rupees, and this would accordingly be the direct aid, which by this proposition the Government would annually allow to the Fund,—the whole of the capital of the Fund, whether under the old or new scheme, being then guaranteed 5 per cent. interest.

236. If the whole of the liabilities and assets of the Fund, both under the old and new Rules, be computed at 5 per cent. interest, the following will be the

Balance Sheet on 1st May, 1863.

	VALUE OF RESERVES.	£	VALUE OF ASSETS.	£
", ć	k, b, c. Incumbent liabilities L. Remarried widows Retired members Do. on Service	215178·4 10806·9 845·1 2338·8	n. Capital in hand o. Amounts paid by retired members p. Subscriptions { Retired members } Members on Service q. Donations, marriages, and births r. Government donation, Rs. 12,950	617901·0 89573·4 118·7 40129·5 5363·0 9325·2
n 1	Contingent reversionary benefits, members retired	158742·7 192454·7 18307·9 37361·1 9934·5	Surplus Government donation in lieu of inte- } rest, valued at	762410·8 116440·7 159916·8
· " ,				

- 237. The total liabilities at 5 per cent., £645970·1, do not differ much from the value by reserving for the incumbent liabilities, under the old Rules by 6 per cent., and, for the centingent liabilities for their proportion, under the old Rules at 8 per cent., and their proportion of excess under the new Rules at 4 per cent., the total being as we have seen in the first Balance Sheet, £640535·3.
- 238. If we take into account the payments by retired members, and the increased rates of subscription and donations under the new Rules, the surplus will be £116440.7, whilst under the former Balance Sheet it was £120593.4; but then we have in addition the Government donation in lieu of interest, in which the interests of existing members may be taken at least by the annuity at 5 per cent., at the average age of 35, during the period of service=7.201. This makes the share of this Government donation to the present members equivalent to £159916.8.
- 239. Unless, therefore, the condition as to the rate of exchange should be deemed too unfavourable, it would appear to me highly advisable and conducive to the interests of the Fund to accept the Government proposition, as avoiding the difficulties and probable errors in the constant readjustment of two Funds at different rates of interest, simplifying the accounts, and securing a permanent instead of a fluctuating source of income. It is true the capital might continue to increase; but it would be in a great measure owing to the subscriptions and donations under the new Rules, which are only computed to bear 4 per cent. interest, whereas it is understood that the whole of the capital will, under the Government proposal, bear 5 per cent. interest.
- 240. It is evident upon a careful consideration of the whole subject, that the present satisfactory condition of the Fund has arisen from the restrictive clauses as to property, which wholly deprived many families of its benefits, whilst the contributions of the members continued to increase rapidly under the very high rate of interest of 8 per cent. It is also clear that the existing members have only assisted in part towards the large surplus which appears in the accounts. Therefore it is only just, that, if the Fund will bear it without additional payments, the present pensioners as well as the retired members should be brought under the new scheme without any extra charges. If this cannot be done with safety, at any rate the payments by the retired members should be greatly reduced from the estimate we have put upon them, inasmuch as they have already contributed to the surplus much more in proportion than the members now in the Service.
- 241. But before coming to a conclusion on this point it is essential to ascertain, if possible, whether, under the altered conditions and the greatly enlarged benefits now proposed, the future members will by their mere subscriptions and donations pay sufficient to secure the advantages they are to receive. If not, it would be for the members to consider whether the future rates must be raised, or whether as members



of the same Service they are to participate to some extent in the present prosperity of a Fund, the amount of which is probably due in great measure to the forbearance of members whose families and themselves have all passed away without sharing in it.

- 243. By the statistics of the Fund, it appears, that out of 750 members who have entered unmarried, from 1762 to 1863, about age 20, 319 had married and 51 were still living as bachelors. If we consider, then, that half the bachelors marry, it will probably be very near the truth, and it is confirmed by the facts in the Military Fund, in which, out of 1,481 who had entered between the years 1823 and 1840, 677 had married up to 1858, and 85 were living as bachelors in 1858. If of this number half should marry afterwards, it would show, as before, very nearly half of all who entered. At this rate the liability, at age 20, for probable future wives and and children of bachelors would be £501.7.
- 244. Against this we have to set the value of the subscriptions of $2\frac{1}{4}$ per cent. on the total income. The average income throughout the period of service, as shown in art. 195, may be taken as £1,746, including the increase in the later ages before retirement, and $2\frac{1}{4}$ per cent. thereon gives an annual average payment of £39·3. The value, therefore, may be ascertained by a temporary annuity on a single life, from 20 to 30, and then on the joint lives ages 30·23 (being computed only during the duration of the first marriage), if he should live to 30. The former $\left(\frac{N_{20}-N_{30}}{D_{20}}\right)$, by table in Appendix V.

The latter $\frac{D_{30}}{D_{20}} = .5289 \times 8.781$ = 4.644

£39·3 × 11·836 = $465\cdot2$

245. This result very nearly agrees with the value of his payments up to 25 years' service, but reduced to 11 per cent. on income after 16 years, if he should

not marry before retirement, the total value of which is £460.9, and may be considered equivalent to the value of his subscriptions, whether he marries or not, and therefore not reducible for the chance of his marrying.

246. But besides the subscriptions we have the d	onation	on r	narriage, £150,
and £25 on the birth of each son, and £50 on the b	oirth of	each	daughter, say,
$\{ \begin{array}{c} \text{£25} \\ \text{£50} \end{array} \} \times 2 \frac{1}{4} \times 7835 \dots \dots \dots \dots \dots$		•	. =£132·2
which being payable if the member age 20 lives to 30, $\frac{D_i}{D_i}$	= ·528	39 × £	282·2=£149·3
and being dependent on a bachelor marrying, say one half	f.	•	. = £79.7
making the total value of his subscriptions and donations		•	. £544·9

- 247. It appears, therefore, that we have a value of £544.9 to cover an estimated risk of £501.7, and may rest satisfied, so far as these rough estimates can be trusted, that there is no danger to the Fund from future liabilities under the new regulations proposed.
- 248. I return to the consideration of the surplus by the balance sheet, at 5 per cent., and put the following propositions hypothetically for the members to decide thereon.
- 249. If the members are willing to allow all who were pensioners on the Fund on 1st May, 1863, to be admitted to pensions under the new Rules, on the ground that the previous reductions on account of the "property clause" had aided in the accumulation of the surplus, the cost of such admission may be estimated as follows:—

Total value, under new Rules, of pensions to wid	ows		181888·2
Ditto ditto sons			18087.8
Ditto ditto daughters	•		99146.7
Total	•		299122.7
Total value of pensions as now granted		•	215178.4
Excess to be provided from surplus	•		£83944·8

- 250. There would also be a small addition for the new benefits to those members, on service and retired, who abide by the old Rules, if they should be allowed to reconsider their choice and pay the more moderate amounts next to be considered.
- 251. If it be admitted that, instead of paying the full value of the excess of benefits under the new as compared with the old Rules, the retired members should

only pay in the same proportion of this excess-value by direct payment, as members in the service will pay towards their excess-value by the additional annual subscriptions and donations to be required from them, a rough estimate may be made of this just proportion in the following manner:—

• • •	· ·	AT 5 PI	E CENT.	
		New Rules.	Old Rules.	Excess.
		£	£	£
Members on Service.	g. Value of benefits to existing families	192454.7	67684.3	
	h. Ditto to future children of present marriages	18307-9	5925.7	
	j. Ditto to families of bachelors who may marry }	37361-1	12956.0	
		248123.7	86566.0	161557.7
	p. Value of Subscriptions	40129.5	13947.0	
	q. Value of Donations	5363.0	1064·1 1005·1	
		45492.5	16016.2	29476:3
Retired members.	f. Value of benefits to families .	158742.7	26358 ·9	132383.8

Then $\frac{29476\cdot3}{161557\cdot7}$ equals nearly 18½ per cent., and £132383·8 × ·1825 = £24,160, which is the amount the retired members would then be required to pay, instead of £89573·4, which would further diminish the surplus by £65413·4.

- 252. If these suggestions are accepted, it may be said that, in round numbers, 27 per cent. only of the sums named to each retired member in the Circular need be demanded, and the difference returned in cases were the payments have been already made, though it would be more correct to compute them by the 5 per cent. tables.
- 253. If the members should feel disposed to reduce the subscriptions under the new Rules from 1st May, 1863, from 2½ to 2 per cent. during the period of service, reducing the rate to 1 per cent. after 16 years' service—in the case of unmarried members until they marry—the cost may be roughly estimated at one-ninth of the whole value of the subscriptions, or £4458.8. The marriage and family donations should remain as now fixed to compensate for a probable increase in the marriages.
- 254. The total deductions from the surplus—which is supposed to include the Government donation in lieu of interest—will then be,

				X.
Incumbent pensions.				83944.3
Retired members .				65413.4
Members on Service.	•	•		4458.8
			:	£153816·5

leaving the balance in favour of the Fund £122,541, besides the value of the proposed annual Government donation in lieu of profits by exchanges to be negotiated with the Government.

- 255. But if the subscriptions of present members be reduced to 2 per cent., those of future members would, no doubt, be fixed at the same rate, and this would reduce the value, at age 20, of the future subscriptions and donations from £544.9 to £493.2, against the estimated family benefits of £501.7.
- The subscriptions of future members will not bear much further reduction in view of the new benefits to be granted, unless their value is made up by giving them an interest in the existing surplus, and I should hesitate to recommend any greater diminution in the payments than these, until the new scheme has been fairly tried and subjected to the test of a few years' experience.
- 257. There are still some questions unsettled on which fresh data are required. especially the probability of an increase in the actual number of marriages, and perhaps a correction of the data examined at the beginning of this Report as to the present proportion of marriages amongst bachelors, differing as it does from that of the other Funds.
- 258. More minute information of the mortality amongst the wives and children of members and the rate of marriage amongst their daughters would also be desirable.
- 259. With these elements of uncertainty, I do not think it would be judicious at present to indulge in too liberal a diminution of the assets (actual and estimated), though they appear to afford ample margin to meet any changes which may be going on in the preceding subjects of inquiry.
- 260. I have endeavoured to work up the materials at command to throw as much light as possible on the real condition of the Fund, and conclude by expressing a hope that the prudence and sagacity which have placed it in so flourishing a condition under the old Regulations may be rewarded with like success in the greatly extended benefits which the present scheme confers.

I have the honour to be, Gentlemen, Your very faithful servant,

SAMUEL BROWN,

Actuary.

GUARDIAN ASSURANCE OFFICE, 11, Lombard Street, London, 7th December, 1865.

REPORT

ON THE

MADRAS CIVIL FUND.

APPENDIX I.	INDEX.
DOCUMENTS REFERRED TO IN THE MEMORANDUM FOR THE	ACTUARY . 79
APPENDIX II.	
RETIRED MEMBERS-PAYMENTS REQUIRED FOR NEW BEN	EFITS UNDER
THE PROVIDENT SCHEME	
APPENDIX III.	
VALUATION, 1st May, 1863	133
APPENDIX IV.	•
VALUATION TABLES FOR GENERAL USE AT 8, 6, 5, AND 4 I	PER CENT 177
APPENDIX V.	
PRELIMINARY TABLES FOR VALUATION	195
(This Appendix having been printed separately, has been repa	ged.)

INDEX TO APPENDIX I.

Documents referred to in the Memorandum for the Actuary.

- No. 1. Madras Civil Fund.—List of Widows on the Fund on 1st May, 1863, showing the dates of their admission as annuitants, their ages on that date, and the amount of pension paid to each.
- No. 2. List of Daughters on the Charity Branch on 1st May, 1863, showing their ages. &c.
- No. 3. List of Sons on the Fund 1st May, 1863, showing their ages, &c.
- No. 4. List of Remarried Ladies no longer on the Fund on 1st May, 1863.
- No. 5. List of Remarried Widows who have reverted to the Fund, living 1st May, 1863.
- No. 6. List of Members in the Service, with their ages and the ages of their wives, on 1st May, 1863, as also the number of their children at each age on that date.
- No. 7. List of Annuitants, with their ages and the ages of their wives on 1st May, 1863, as also the number of their children at each age on that date.
 - The above two Lists, Nos. 6 and 7, were afterwards corrected, as seen in the valuation, by returns obtained from members in England.
- No. 8. List of Widows admitted on the Fund from its commencement, showing lapses by death, &c., up to 30th April, 1863.
- No. 9. List of Daughters admitted on the Fund from its commencement in 1787, showing lapses by death, &c., up to 30th April, 1863.
- No. 10. List of Sons admitted on the Fund from its commencement in 1787, showing lapses by death, &c., up to 30th April, 1863.
- No. 11. Charity Branch.—Statement showing the amounts of Petty Charges incurred on account of Office Establishment, &c., for the last 15 years, with an average for one year.
- No. 12. Statement showing the Amount of Assistance granted to Sick Civil Servants, carried to the head of "Profit and Loss."
- No. 13. List of Annuitants under the Subsidiary Rules on 1st May, 1863, with their ages, &c.
- No. 14. Memorandum showing the Number of Members in the Service on 1st January in each year, commencing from 1st January, 1850.
- No. 15. Statement showing the Receipts and Disbursements of the Civil Fund (Charity and Subsidiary Branches), from the year 1831 to 1861, both inclusive.
- No. 16. Statement of Passage-money granted to Widows and Children for the last 8 years, from 1855 to 1862, both inclusive, and the average for one year.
- No. 17. Statement showing the Subscriptions actually received by the Civil Service Annuity Fund of 1825, and by the Annuity Fund of 1818, from the official year 1825-26 to 1862-63, at 3\frac{3}{4} per cent., and at 4 per cent. on the same allowances on which subscriptions to the Civil Fund are chargeable.



- No. 18. Estimate of Subscriptions to the Civil Fund, under the Provident scheme, for one year, calculated on the salaries and allowances to which each gentleman was entitled for May, 1863.
- No. 19. List of Daughters of Retired Members for whom the benefits of the Subsidiary Rules have been secured, and who are still living and unmarried, so far as is known in the Fund Office.
- No. 20. Memorandum, showing all Retirements on the Annuity Fund of 1825 of Civilians of the Madras Civil Service, from 1st May, 1825, to 1st October, 1863, with the total number of years of their service, and the average number of years' service for one annuitant.
- No. 21. Estimate of Donations on account of Daughters under the operation of the Provident scheme for one year, based on the actual admissions to the Subsidiary benefits during the interval 1850-51 to 1862-63.
- No. 22. List of Civil Servants who died from 1825-26 to 1863-64, whilst in the Service, distinguishing those whose families were admitted on the Funds from those whose families never applied for its benefits.
- No. 23. List of Deceased Annuitants, distinguishing those whose families were admitted on the Fund from those whose families never applied for its benefits.

No. 1. Madras Civil Fund.—List of Widows on the Fund on 1st May, 1863, showing the Dates of their Admission as Annuitants, their Ages on that Date, and the Amount of Pension paid to each.

0.	Names.	When Admitted.	Age on 1st May, 1863.	Amount of Pension paid.
			Years. ms. days.	£ s. d.
1 2	Mrs. L. Marriott	22nd February, 1805	80 4 0	300 0 0
3	" C. Kinchant	24th August, 1809	79 4 22	300 0 0
4	"A. Kenworthy	24th July, 1812		300 0 0
5	T M TTLAL OF	7th May, 1821 13th August, 1822	65 4 8 62 9 6	300 0 0 300 0 0
6	" H. C. Sewell	2nd Tune 1902	66 7 24	300 0 0
7	" E. M. Sullivan	6th October, 1823	65 5 15	*232 2 6
3	Hon. Mrs. E. M. Harris	17th May, 1824	73 4 3	296 5 0
)	Mrs. S. Fullerton	18th September, 1824	68 1 22	300 0 0
'	" C. Phillips	6th April, 1825	61 7 10	300 0 0
	" M. L. Munro	24th May, 1827	67 0 10	299 5 8
	" M. Dacre	23rd February, 1828	57 4 0	177 12 8
	F Smith	7th September, 1830	84 4 0	237 8 8
	F Dannaman	2nd June, 1831	58 0 14 56 5 2	300 0 0 300 0 0
	" E. Robson	4th , 1833 .	74 4 0	300 0 0
٠	" C. Moore	13th December, 1834	76 2 29	300 0 0
	" E. Woolf	2nd March, 1836	72 1 30	300 0 0
	Lady A. Home	12th , ,	70 7 30	235 15 6
ı	Mrs. E. Mortlock	13th February, 1837	72 0 0	300 0 0
1	" S. F. Stevenson	20th June, 1837	59 2 2	270 5 0
	"S. Oakes	20th August, 1837	49 10 0	300 0 0
	" L. A. Bushby	17th May, 1838	64 8 9	300 0 0
	A I Dumanana	6th November, 1839 22nd April, 1840	52 9 4 47 8 25	150 0 0
	C Cassin (late Wester)	96th November 1940	72 8 28	300 0 0 196 10 8
- 1	" E. Wetherell	lst March, 1842	52 3 18	300 0 0
- 1	" F. M. E. Newbury	27th August, 1842	43 10 3	290 7 4
ł	"C. Molle	2nd December, 1842	42 7 21	300 0 0
١	" J. M. Bury	11th May, 1848	54 4 0	300 0 0
ı	" E. Monckton	19th December, 1848	37 4 0	222 10 0
ı	" M. Harrington	28th June, 1849	63 4 0	300 0 0
- [" M. E. F. E. Lockhart	30th January, 1850	42 4 0	236 0 0
	" C C Hanth	25th August, 1850	40 4 0 66 4 0	300 0 0
	T Wright	28th January, 1851 30th December, 1851	66 4 0 50 4 0	300 0 0 265 7 4
	" H. Brown (late Pybus)	20th February, 1852	PC 4 0	300 0 0
	" J. Babington	22nd April, 1852	74 4 0	68 14 10
)	" E. H. Boileau	8th February, 1853	46 4 0	300 0 0
	" M. Swinton	24th October, 1853	44 4 0	26 1 11
	" M. Haig	31st May, 1854	69 4 0	300 0 0
	" M. Wedderburn	19th May, 1854	35 4 0	300 0 0
	" C. Sandeman	29th January, 1855	30 8 8	162 0 0
	" S. Gostling	1st April, 1857 9th n 1858	28 6 16 42 4 0	197 8 0 150 0 0
	II E Cullinan	6th February, 1858	34 4 0	300 0 0
	" R. C. Morris	2nd August, 1858	52 4 0	300 0 0
	" S. K. Mayne	22nd November, 1858	39 4 0	216 10 8
	" E. A. Monk	3rd March, 1859	+76 4 0	
	"A. F. Woodgate	13th April, 1859	+40 3 20	
	, V. Dickinson	29th November, 1859	48 4 0	274 3 0
	" E. J. Jackson (late T. J. W.)	7th December, 1859	35 4 0	275 0 0
	Thomas)	00-4 Falanana 1000		
	" I Cookeens	7th May, 1861	35 4 26 44 0 18	300 0 0 300 0 0
	, A. Fullerton	5th July, 1861	37 4 0	300 0 0
	" C. E. Tod	14th November, 1861	23 5 16	300 0 0
	" E. A. Lavie	28th April, 1862	44 4 0	205 9 8
_	"C. Walker	24th July, 1862	52 4 0	300 0 0
_	Since lapsed.		Total£	14,884 18 5 Including No. 7
•	Now on the Fund.		1	

^{*} Since become possessed of property, and off the Fund.

No. 2. Madras Civil Fund.—List of Daughters on the Charity Branch on 1st May, 1863, showing their Ages, &c.

No. Names.		When admitted.	Age on lat May, 1863.	Amount of Pension paid.
1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 22 23 42 5 26 27 28 30 31 32 33 33 33	Miss E. Sewell "C. M. Phillips "E. G. Phillips "J. R. Rickards "C. E. Moore "S. M. A. Moore "J. S. Moore "M. H. Chinnery "E. E. Pringle "M. A. M. Bell "M. H. Chinnery "E. E. Pringle "M. A. Gleig "A. Gleig "A. Gleig "A. Davidson "A. U. Boileau "M. H. Wedderburn "C. E. Sandeman "J. L. Tweedie "A. S. Tweedie "A. S. Tweedie "A. S. Tweedie "E. E. Daniell "E. E. Daniell "E. M. Daniell "M. E. S. Lewin "M. E. S. Lewin "M. L. Monk "M. L. Monk "M. L. Monk "M. L. Monk "M. L. Woodgate "H. C. Woodgate "H. C. Woodgate "E. M. Grenfell "E. M. Grenfell "E. M. Grenfell	2nd June, 1823 6th April, 1825 6th , " 27th November, 1834 13th December , " 13th , " 13th , " 2nd March, 1836 20th May, 1837 5th September, 1847 25th August, 1850 28th January, 1851 1st June, 1849 20th , " 20th , " 11th May, 1852 8th February, 1853 12th May, 1854 17th May, 1854 17th May, 1855 27th August, 1855 27th August, 1856 7th , " 1st April, 1857 28th July, 1858 28th , " 3rd March, 1859 13th April, 1859 13th , " 13th , " 12nd February, 1860	Years. ms. days. 42 0 1 43 6 30 41 6 18 32 5 20	
34 35 36	" G. D. Tod " A. C. Walker " E. Walker	14th November, 1861	2 10 28 15 10 19 13 10 1	30 0 0 100 0 0 100 0 0

APPENDIX I.

No. 3. Madras Civil Fund.—List of Sons on the Fund on 1st May, 1863, showing their Ages, &c.

No.	Names.	When Admitted.	Age on 1st May, 1863.	Amount of Pension paid.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Mr. H. Mortlock A. S. Bury W. F. Bury J. A. R. Bell A. E. Cherry W. E. Wright A. D. O. Wedderburn D. G. Sandeman A. S. A. Sandeman A. L. Tweedie G. S. Tweedie L. A. J. Daniell C. H. Gostling K. C. M. Lewin R. S. Lewin M. A. Morris H. B. Woodgate D. Walker	11th May, 1848	Years ms. days. 36 4 26 16 11 23 14 11 5 14 5 22 33 6 20 18 5 6 8 8 25 10 8 29 9 5 20 13 6 7 12 1 11 8 1 24 7 5 21 11 0 10 6 0 9 13 8 15 8 1 15 9 7 8	£ s. d. 50 0 0 100 0 0 100 0 0 100 0 0 100 0 0 43 12 0 100 0 0 50 0 0 100 0 0 50 0 0 100 0 0 46 11 0 50 0 0 95 17 93* 75 17 93* 100 0 0 5 11 6 5 0 0 £1,317 10 11

No. 4.—List of Remarried Ladies no longer on the Fund on 1st May, 1863.

No.	Names.	Date of Remarriage.			Age on 1st May, 1863.		
1 Mrs. 2 ""	Irvine E. Wilson (late Mrs. Slingsby) H. Bell H. Spottiswoode (now Sandys) M. C. Bushby (now Doig) F. W. Taylor F. M. Ward (now Remington) A. L. Grant (now Remington) R. C. Breeks (now Williams) C. White (now Duckett) M. Dumergue (now Radcliff) L. Daniel (now Curray) E. M. Hallett (now Houseman) E. O. Douglas (late Gahagan) J. A. F. Anderson		2nd July, 1804 16th January, 15th October, 1st June, 1812 5th November, 1st July, 1821 5th August, 18 3rd December, 6th April, 1844 6th November, 3rd December, 1th December, 3rd August, 18 5th January, 1 7th August, 18 5th January, 1 7th June, 1852 26th June, 1866	1807 1810 1821 1835 3		+58 +44 +40 +58 30 45 44 38 45 55 55 40	4 0 4 0 4 0 4 0 0 2 8 4 0 0 8 17 4 22 0 0 7 7

No. 5.—List of Remarried Widows who have reverted to the Fund, Living 1st May, 1863.

. No.	Name.	Date of Readmission.
1 2 3 4	Mrs. K. Brown (late Pybus) " J. C. Maitland (late J. Thomas) " E. J. Jackson (late T. J. W. Thomas) " C. Cassin (late Watts)	 20th February, 1852 9th April, 1858 7th December, 1859 26th November, 1840

^{*} Mother dead.

[†] These ages were assumed, by reckoning the ages of their husbands as 20 on the date of their appointments to the Service, and the difference between the ages of husbands and wives as 7 years. It is probable that many of these ladies are no longer alive; but no information is on the Fund's records.

No. 6.—List of Members in the Service, with their Ages and the Ages of their Wives, on 1st May, 1863.

(For the number of their children at each age on that date, see the Valuation, Appendix II.)

(For the number of their culturen at each age on that date, see the valuation, Appendix 11.)									
No.	Names.	Age of the Member on 1st May, 1863.	Age of the Lady on lst_May, 1863.	No.	Names.		Age of the Member on 1st May, 1863.	Age of the Lady on 1st May, 1863.	
•	T 1 0: D	1						00	
1 2	T. L. Strange, Esq		25	61	H. G. Smith, Esq	• •	39	20 22	
3	E. Maltby, Esq	52 55	37	62	C. A. Roberts, Esq.	• •	37 39		
4	W. Elliot, Esq	53	. 44	63 64	A. P. Hodgson, Esq. R. S. Ellis, Esq.	• •	37	Single 25	
5	H. D. Phillips, Esq.	51	40	65	E. B. Foord, Esq.	• •	36	22	
6	H. Frere, Esq.	51	44	66	C. Collett, Esq.	•	37	Single	
7	J. Rohde, Esq	51	48	67	G. A. Ballard, Esq		38	24	
8	E. Story, Esq	51	5	68	R. E. Master, Esq		36	Single	
9	G. A. Harris, Esq	50	34	69	W. Hudleston, Esq.		36	29	
10	T. J. P. Harris, Esq.	51	45	70	W. S. Nesbitt, Esq.		39	Single	
11	C. Pelly, Esq	50	50	71	J. H. Blair, Esq	• •	37	28	
13	S. D. Birch, Esq	50	42	72	B. Pauncefote, Esq.	• •	37	34	
14	S. N. Ward, Esq	49 50	36	73 74	G. L. Morris, Esq	• •	35 38	34 38	
15	T. Onslow, Esq	51	32 49	75	C. R. Pelly, Esq J. R. Kindersley, Esq.	• •	36	30	
16	A. Purvis, Esq.	50	40	76	J. G. Thompson, Esq.	• •	36	34	
17	C. J. Shubrick, Esq.	49	32	77	Wm. Holloway, Esq.		35	34	
18	J. Silver, Esq	48	81	78	W. T. Blair, Esq	•	35	Single	
19	H. Wood, Esq	49		79	H. M. S. Groeme, Esq.		36	Single	
20	T. Clarke, Esq	48	41	80	H. Morris, Esq		34	34	
21	B. Cunliffe, Esq	47	34	81	G. Banbury, Esq	• •	34	32	
22	H. D. Cooke, Esq	48	41	82	C. N. Pochin, Esq		36	Widower	
23 24	C. W. Reade, Esq		40	83	R. B. Swinton, Esq.	• •	33	22	
25	Wm. Fisher, Esq.	46	Widower	84	J. W. Breeks, Esq	٠.	34 33	22 32	
26	R. R. Cotton, Esq	45 43	39	85 86	T. A. N. Chase, Esq.	• •	33	29	
27	F. Lushington, Esq.	43	39 28	87	R. A. Dalyell, Esq	• • •	31	Single	
28	A. Hathaway, Esq	42	35	88	H. E. Sullivan, Esq.	••	32	34	
29	R. G. Clarke, Esq	46	Widower	89	J. R. Cockerell, Esq.		32	Single	
30	J. W. Cherry, Esq	42	Widower	90	D. F. Carmichael, Esq.		32	Widower	
31	G. H. Ellis, Esq	42	38	91	E. C. G. Thomas, Esq.		34	Single	
32	E. G. R. Fane, Esq	43	Single	92	C. H. Ames, Esq		32	Married	
33	J. Ratliff, Esq		30	93	R. K. Puckle, Esq	٠.,	32	Single	
34	J. H. Goldie, Esq		43	94	J. H. Master, Esq	• •	31	Single	
35 36	T. J. Knox, Esq	43	30	95	R. Davidson, Esq	• • •	31	19	
37	P. H. Levinge, Esq.	43	Single	96	G. Vans Agnew, Esq.	• •	32 30	Single 30	
38	A. W. Phillips, Esq	44	53	97 98	W. C. Sim, Esq F. B. Molony, Esq	• • •	29	28	
39	G. N. Taylor, Esq	42	34	99	J. D. Goldingham, Esq.		29	Single	
40	J. Fraser, Esq	40	42	100	C. T. Longley, Esq.		32	23	
41	J. D. R. Rolinson, Esq.	42	25	101	C. G. Master, Esq		29	25	
42	W. M. Cadell, Esq.	40	41	102	E. F. Eliott, Esq		28	28	
43	Wm. Hodgson, Esq.	41	30	103	F. W. Morris, Esq.		28	20	
44	Hon. D. Arbuthnott, Esq		39	104	H. S. Thomas, Esq.		30	30	
45	A. Wedderburne, Esq	41	37	105	J. A. C. Boswell, Esq.	٠.,	27	28	
46	J. L. Lushington, Esq		35	106	W. H. Arbuthnot, Esq.		27	Single	
47 48	A. J. Arbuthnot, Esq	40	40 Single	107	W. D. Horsley, Esq.	• •	28 28	Single	
49	J. W. B. Dykes, Esq E. W. Bird, Esq	42	Single 39	108 109	G. R. Sharpe, Esq W. Nisbet, Esq	• •	27 27	Single Single	
50	I I) Sim Fee	ا ۱۵	35	110	F. M. Kindersley, Esq.	• •	27	20	
51	W. Robinson, Esq.	40	30	iii	F. C. Carr, Esq.		28	24	
52	P. Grant, Esq.	ا مد ا	39	112	W. S. Hooper, Esq.		27	Single	
53	G. Thornbill, Esq	39	34	113	A. MacGregor, Esq.		26	Single	
54	M. J. Walhouse, Esq.	42	32	114	J. W. Reid, Esq		28	19	
55	Æ. R. McDonell, Esq		39	115	W. S. Whiteside, Esq.	• • •	30	25	
56	C. F. Chamier, Esq.		25	116	R. W. Barlow, Esq.		27	25	
57	L. C. Innes, Esq.		31	117	W. H. Kerr, Esq	• • •	26	Single	
58 59	F. S. Child, Esq	37	Single	118	C. G. Plumer, Esq D. Williams, Esq	••	26 28	22 23	
60	J. I. Minchin, Esq	39 40	37 36	119 120	J. C. St. Clair, Esq.		26 25	Single	
"	A. W. Sumvan, Esq	**	J 50	120	U. O. Die Olani, Lied.		20	Purkie	
		1		<u> </u>	1			<u> </u>	

No. 6 (continued).

No.	Names.	Age of the Member on 1st May, 1863.	Age of the Lady on 1st May, 1963.	No.	Names.	Age of the Member on 1st May, 1863.	Age of the Lady on 1st May, 1863.
121	O. B. Irvine, Esq	27	Single	144	James Hope, Esq	22	Single
122	R. J. Melville, Esq.	07	Single	145	I D Daniel Dan	20	Single
123	A. R. Hutchins, Esq.	1 00	Single	146	TT TOLI TO	. 20	Single
124	J. H. Garstin, Esq	1 04	Single	147	D D 14 E	. 22	Single
125	Wm. McQuhae, Esq.	1 00	Single	148	W. Tamp For	. 21	Single
126	J. R. Arbuthnot, Esq.	I	Single	149	T 337 D 17	. 23	Single
127	G. D. Leman, Esq	1 0-	Single	150	l m m rr oi "m	. 20	Single
128	A. M. Webster, Esq.	0.5	Single	151	J. F. Price, Esq	. 23	17
129	E. F. Webster, Esq.	1 04	Single	152	1 D C. D	. 22	Single
130	J. C. Hannyngton, Esq.	27	Single	153	W. S. Lilly, Esq	. 23	2Ĭ
131	P. P. Hutchins, Esq.	25	24	154	W. H. Comyn, Esq	. 20	Single
132	W. F. Hathaway, Esq.	25	Single	155	J. H. Horsfall, Esq	. 23	Single
133	C. G. Walker, Esq.		33	156	H. Sewell, Esq	. 22	Single
134	A. C. Burnell, Esq.	22	Single	157	A. Cruickshank, Esq.	. 23	Single
135	J. Grose, Esq		Single	158		. 22	22
136	William Wilson, Esq		Single	159	B. Horsbrugh, Esq	. 21	Single
137	W. S. Foster, Esq		Single			1	1
138	J. E. Armstrong, Esq.		Single	l			
139	H. Linton, Esq		Single	Mem	bers who resigned the Service, l		
140	J. H. Nelson, Esq		24		are entitled to benefits from	the Fund	
141	P. L. Roberts, Esq.		Single	ł	• •		
142	J. B. Pennington, Esq		Single		R. B. M. Binning	. 48	52
143	F. S. Woodroffe, Esq.	20	Single	ł	E. Peters	. 45	45

No. 7.—List of Annuitants, with their Ages and the Ages of their Wives, on 1st May, 1863.

(For the number of their children at each age on that date, see the Valuation, Appendix III.)

No.	Names.	Age of each Member on 1st May, 1863.	Age of each Lady on 1st May, 1863.	No.	Names.	Age of each Member on 1st May, 1863.	Age of each Lady on let May, 1863.
1	J. H. Piele, Esq	84	Qy. Widower	14	T. Hamilton, Esq	81	Resigned the
2 3	W. Cooke, Esq.	81	74				Service in 1813
3	S. R. Lushington, Esq.	88	45	15	E. Smalley, Esq	72	61
4 5	A. Wilson, Esq	82	Widower	16	H. G. Keene, Esq	81	70
	R. Clarke, Esq	78	78	17	E. W. Cunliffe, Esq	75	Widower
6	S. Harris, Esq	86	Resigned the	18	H. Combe, Esq.	76	
		İ	Service in 1817	19	J. A. Casamaijor, Esq.	76	
7	G. J. Hadow, Esq	73	66	20	G. E. Russell, Esq	76	67
8	W. T. Blair, Esq	70	Widower	21	H. Baskerville (late)	70	ا م
10	D. Hill, Esq.	76	(No informata		Fiveash) `	70	42
			from circular)	22	A. E. R. McDonell, Esq.	73	60
1		l	,	23	J. A. Dalzell, Esq	70	69
11	E. H. Woodcock, Esq.	74	65	24	J. T. Anstey, Esq	68	62.
12	H. Lacon, Esq.	71	51	25	J. G. Turnbull, Esq	72	45
13	J. Stokes, Esq.	72	75	26	J. M. Macleod, Esq	71	71

No. 7 (continued).

No.	Names.	Age of each Member on 1st May, 1863.	Age of each Lady on 1st May, 1863.	No.	Names.	Age of each Member on 1st May, 1863.	Age of each Lady on lat May, 1863.
27	H. Montgomerie, Esq	70	68	72	F. Lascelles, Esq.	66	55
28	W. B. Anderson, Esq	66	Since died	73	Sir T. V. Stonhouse, Bt.	64	59
29	G. M. Ogilvie, Esq	69	Widower	74	F. Anderson, Esq	56	38
30	R. H. Clive, Esq	66		75	J. F. Bishop, Esq	53	Single
31	C. R. Cotton, Esq	66	55	76	D. Eliott, Esq	65	6 2
32	T. R. Wheatley, Esq	63	50	77	Sir H.C. Montgomery Bt.	60	54
33	Rt. Clerk, Esq	64	64	78	P. B. Smollett, Esq	56	Single
34	R. Grant, Esq	65	52	79	T. Prendergast, Esq	56	Widower
35	W. R. Taylor, Esq	69		80	T. A. Anstruther, Esq.	53	41
36	W. Ashton, Esq	65	Widower	81	C. R. Baynes, Esq.	53	54
37	J. Paternoster, Esq	66		82	R. D. Parker, Esq.	52	37
38	F. F. Clementson, Esq.	64	65	83	S. Scott, Esq	52	Single
39	R. Eden, Esq	62	53	84	T. B. Roupell, Esq	53	44
40	H. M. Blair, Esq	64	55	85	C. J. Bird, Eeq.	50	34
41	F. M. Lewin, Esq	64	Widower	86	A. S. Matheson, Esq	51	46
42	G. J. Waters, Esq	71	Widower	87	G. S. Hooper, Esq	65	60
43	H. Chamier, Esq	68	51	88	J. Goldingham, Esq	62	60
44	M. Lewin, Esq	64	Widower	89	Walter Elliot, Esq	60	47
45	J. C. Scott, Esq	61		90	W. E. Underwood, Esq.	59	56
46	W. C. Ogilvie, Esq	58	40	91	F. B. Elton, Esq.	51	39
47	W. H. Babington, Esq.	59	52	92	J. Bird, Esq	52	39
48	M. D. Cockburn, Esq.	75	59	93	E. B. Glass, Esq	61	46
49	A. Maclean, Esq	64	54	94	J. D. Bourdillon, Esq	52	44
50	G. D. Drury, Esq	69	44	95	T. W. Goodwyn, Esq	50	, 51
51	G. Bird, Esq	60	44	96	M. Murray, Esq.	53	Single
52	A. Freese, Esq	60	Widower	97	E. B. Thomas, Esq	59	56
53	A. Mellor, Esq.	57 58	31	98	W. Dowdeswell, Esq	55 50	Single
54 55	E. P. Thompson, Esq	63	61 40	99 100	F. N. Maltby, Esq.	50	40 58
56	A. F. Bruce, Esq	58	55	101	G. T. Beauchamp, Esq.	57	50 57
57	H. Morris, Esq W. D. Davis, Esq	66	47	101	W. A. Morehead, Esq. R. H. Williamson, Esq.	53	47
58	S. Crawford, Esq	58	57	102	H. Forbes, Esq.	50	49
59	W. Douglas, Esq	56	48	103	C. Whittingham, Esq	49	35
60	C. P. Brown, Esq	64	Single	105	F. H. Crozier, Esq.	50	46
61	T. L. Blane, Esq.	56	Single	106	J. J. Cotton, Esq.	49	39
62	J. G. S. Bruere, Esq	55	54	107	W. M. Molle, Esq	49	36
63	W. A. Forsyth, Esq	56	42	108	F. Copleston, Esq.	50	34
64	A. Robertson, Esq	63	58	109	T. B. A. Conway, Esq.	50	Single
65	J. A. Hudleston, Esq	64	44	110	W. H. Bayley, Esq	49	47
66	A. P. Onslow, Esq	58	Widower	iii	A. Hall, Esq	49	38
67	R. T. Porter, Esq	57	44	112	P. Irvine, Esq	48	Single
68	J. F. Thomas, Esq	65	Widower	113	Wm. Knox, Esq	49	31
69	H. Stokes, Esq	56	50	114	R. W. Chatfield, Esq	51	51
70	W. A. Inglis, Esq.	54	52	115	W. U. Arbuthnut, Esq.	56	47
71	E. Smith, Esq	53	46	l	,		
1	l	1		l			

No. 8.—List of Widows admitted on the Fund from its commencement, showing Lapses by Death, &c., up to 30th April, 1863.

No.	Names.	When Admitted.	
	Names.		Remarks.
1	Mrs. E. Russell	18th Dec., 1790	Died on the 29th January, 1847.
2	"M. Erskine	3rd May, 1793	Died on the 21st August, 1824.
3	"A. J. Barclay	7th May, 1794	Ceased from 10th November, 1798, by being possessed
4	"Jervis	8th May, 1798	of property yielding income beyond the annuity. Remarried in 1798.
5	" Warrishan	24th July, 1799	Died in June, 1805.
6	" Warncker	8th October, 1800	Ceased from 1st January, 1816, by being possessed of
	,,		property yielding income beyond the annuity.
7	"Brodie	15th October, 1801	Remarried on the 2nd July, 1804.
8	"Thursby	13th May, 1802	Remarried on the 16th January, 1807.
.9		18th April, 1804	Died on the 14th November, 1841.
10 11	" M. Wrangham " Benfield	30th Nov., 1804 5th Feb., 1805	Died on the 20th November, 1805.
11	"Benfield	5th rep., 1005	Ceased from 15th October, 1816, by being possessed of property yielding income beyond the annuity.
12	" L. Marriott	22nd Feb., 1805	or property flexening meeting before the minutes.
13	" Chase	5th Feb., 1808	Died in 1835.
14	"Brown	30th Dec., 1808	Remarried on the 15th October, 1810.
15	" C. Maxtone	24th March, 1809	Died in April, 1822.
16	"Roebuck	13th August, 1809	Ceased from 1st July, 1814, by being possessed of
17	Kinchant	24th Angered 1000	property yielding income beyond the annuity.
18	" Q1:	24th August, 1809 6th October, 1809	Remarried on the 1st August, 1813; and readmitted,
10	"Slingsby	Jan () (1003	vide No. 29.
19	" E. Maidman	8th April, 1810	Died on the 4th May, 1844.
20	"Latham	8th October, 1810	Died on the 18th December, 1838.
21	" C. Taylor	lst January, 1811	Ceased from 1st January, 1817, by being possessed of
			property yielding income beyond the annuity.
22	"Irwine	17th July, 1811	Remarried on the 1st June, 1812.
23	"C. Watts	6th Sept., 1811	Remarried on the 29th July, 1819; and readmitted, vide No. 74.
24	"Kenworthy	24th July, 1812	21W0 \$ 14
25	" M. Gordon	6th June, 1813	Ceased from 1st July, 1820, by being possessed of
		,	property yielding income beyond the annuity.
26	" E. Smith	8th Dec., 1813	Died on the 4th October, 1817.
27	" A. P. Watts	26th July, 1815	Died in July, 1826.
28 29	"M. Chunery	22nd August, 1815	Died in 1847.
23	" E. Wilson (late)	9th July, 1817	Remarried on the 5th November, 1821.
30	" H. Bell	31st July, 1817	Remarried in 1821.
31	" H. Pybus	27th January, 1820	Remarried in 1831; and readmitted, vide No. 98.
32	" H. Spottiswoode	14th April, 1820	Remarried on the 5th August, 1822.
33	" M. Droz	7th May, 1821	Total 45 1745 No. 1000
34	" C. Cruttenden		Died on the 17th May, 1856.
35 36	"E. Young "J. M. Uhthoff	30th June, 1822	Died in 1861.
37	" IT TO Come!!	13th August, 1822 2nd June, 1823	
38	" E. M. Sullivan	6th October, 1823	Ceased from 1st July, 1863, by being possessed of
			property yielding income beyond the annuity.
39	Hon. Mrs. E. M. Harris	17th May, 1824	
40	Mrs. M. Maidman .	30th August, 1824	Died on the 10th February, 1849.
41	"S. Fullerton	18th Sept., 1824	
42	, C. Phillips	6th April, 1825 13th May, 1825	Died.
43 44	"F. A. Kensington	14th Sept., 1826	Died on the 7th June, 1843.
45	Lady Young	13th Dec., 1826	Ceased from 1st January, 1842, by being possessed of
		.,	property yielding income beyond the annuity.
46	Mrs. M. L. Munro	24th May, 1827	
47	" Mary Dacre	23rd Feb., 1828	D. 1 4 004 7 1 1055
48	" L. Lord	9th April, 1829	Died on the 29th July, 1855.
49	" B. M. Hargrave	lst March, 1830	Died on the 22nd December, 1841.
50 51	"A. Saunders "E. Boutflour	1st August, 1830 7th Sept., 1830	Died in 1834.
52	" E Smith	2nd June, 1831	
53	" M A McDonald	16th June, 1832	Died on the 7th July, 1832.
54	" E. Bannerman	1st Sept., 1832	• • • • • • • • • • • • • • • • • • • •
55	" E. Robson	4th Sept., 1833	
	<u> </u>		

No. 8 (continued).

		110. 8 (60)	
No.	Names.	When Admitted.	Remarks.
56	Mrs. E. O. Gahagan	29th Nov., 1833	Remarried on the 10th July, 1840; and readmitted, vide No. 86.
57	" E. Mason	2nd July, 1834	Ceased from 1st July, 1849, by being possessed of property yielding income beyond the annuity.
58	" J. Rickards	27th Nov., 1834	Remarried on the 10th August, 1836; and readmitted, vide No. 109.
59	" C. Moore	13th Dec., 1834	Demonial on the 2nd December 1995
60	"M. C. Bushby "E. Woolf	30th January, 1835 2nd March, 1836	Remarried on the 3rd December, 1835.
62	Lady Anna Home	12th March, 1836	
63	Mrs. Ann Wilson	2nd Sept., 1836	Died in July, 1840.
64	" E. Mortlock	13th Feb., 1837	
65	" S. F. Stevenson	20th June, 1837	
66	"S. Oakea	20th August, 1837	
67 68	"L. A. Bushby "E. J. Garrow	17th May, 1838 5th August, 1838	Died on the 30th June, 1856.
69	" M. Dumergue	16th January, 1839	Remarried on the 7th August, 1856.
70	"F. W. Taylor	4th Feb., 1839	Remarried on the 6th April, 1843.
71	"M. R. Vibart	6th Nov., 1839	
72	"J. C. Thomas	7th January, 1840	Remarried on the 5th November, 1842; and read- mitted, vide No. 112.
73 74	"A. J. Dumergue	22nd April, 1840 26th Nov., 1840	
75	A M Stromborn	20th August, 1841	Died in 1842.
76	" E. Wetherell	1st March, 1842	
77	" C. Sherson	23rd March, 1842	Died in 1858.
78	"A. L. Grant	25th May, 1842	Remarried on the 3rd December, 1845.
79	"F. M. E. Newberry "C. Mole	27th August, 1842	
80 81	" F M Ward	2nd Dec., 1842 6th March, 1843	Remarried on the 6th November, 1844.
82	" E. M. Hallett	4th Nov., 1843	Remarried on the 7th June, 1859.
83	" E. J. Thomas	17th March, 1845	Remarried on the 15th March, 1849; and readmitted on the 7th December, 1859, vide No. 120.
84 85	" C. J. Kaye	24th August, 1846 5th Sept., 1847	Remarried on the 3rd January, 1863. Remarried on the 19th September, 1848; and readmitted, vide No. 116.
86	" E. O. Douglas (late) Gahagan)	12th Dec., 1847	Remarried on the 26th June, 1860.
87 88	"J. M. Bury	11th May, 1848 3rd July, 1848	Ceased from 13th March, 1855, by being possessed of
89	" E. Monckton	19th Dec., 1848	property yielding income beyond the annuity.
90	" M. Harington	28th June, 1849	
91	"G. Cherry	26th October, 1849	Died on the 1st April, 1863.
92	" E. F. E. Lockart	30th January, 1850	
93	" O O II	25th August, 1850 28th January, 1851	
95	"C. C. Heath	30th Dec., 1851	
96	" C. C. E. Gleig	20th January, 1852	Died on the 24th January, 1859.
97	" R. C. Breeks	19th Feb., 1852	Remarried in 1855.
98	"K. Brown (late Pybus)		
99 100	"Jane Babington "E. H. Boileau	22nd April, 1852 8th Feb., 1853	
101	" C. White	1st April, 1853	Remarried on the 8th January, 1855.
102	" M. Swinton	24th October, 1853	•
103	" J. A. F. Anderson	9th Dec., 1853	Remarried in 1856.
104	"M. Skinner "M. Haig	21st May, 1854 31st May, 1854	Died in April, 1855.
105 106	" M Waddanhum	19th May, 1854	
107	" C. Sandeman	29th January, 1855	
108	" J. F. Tweedie	27th August, 1855	Died on the 22nd January, 1858.
109	J. Bennett (late) Rickards)	1st January, 1856	Died in 1860.
110	" L. Daniell	7th March, 1856	Remarried on the 5th January, 1858.
111	" S. Gostling	1st April, 1857	
112	"J. C. Maitland (late) Thomas)	9th April, 1858	}
113 114	" H. E. Sullivan " R. C. Morris	6th February, 1858 2nd August, 1858	
1			·

APPENDIX I.

No. 8 (continued).

No.	Names.	When Admitted.	Remarks.
115 116 117 118 119 120 121 122 123 124 125 126 127	Mrs. M. A. Nicholls H. E. Menzies (late) Pringle) A. F. Woodgate S. H. Mayne E. A. Monk E. J. Jackson (late) T.J. W. Thomas) G. Grenfell V. Dickenson L. Cochrane C. E. Tod A. Fullerton E. A. Lavie C. Walker	14th Nov., 1861 5th July, 1861	Died on the 5th June, 1862. Died on the 4th February, 1863.
32 10 28 57	Died. Ceased by being possessed Remarried. Now on the Fund.	I of property yielding	income beyond the annuity.

Abstract.

_	2100.	١.		NUMBER	OF LAPSE	S IN BACH	
	Number on 1st Jan.	of	Number Widows		YEAR.		Number on 1st Jan.
Years. admitted in each Year.		By Death.	By Re- marriage.	By posses- sion of Property.	in each Year.		
18	1		3	1		l	34
18	2	L	ĭ	ī	l i	l ::	33
18	3	l	ŝ		l ī	l	. 35
18	2	ı	3		1		38
18	3	L	2	i	1	1	39
18	4	1	3		1		42
18	5	1	3	ì	l ï		43
18	6	L	ĭ	2		1	42
18	7	L	5	ī	li	1	44
18	7	L	2	ì	1	1	44
18	6	ı		1	1		42
18	8	L	i		1		42
18	12	ı	ī				43
18	13	1	2	2	l		43
18	16	ı	3		1		4.5
18	16	t	2	1	1	1	44
18	17	ı	2		1		46
18	16	1	2				48
18	18	1	4		l		52
18	16	1	4		1	1	55
18	16	1	3				58
18	15	1	2	2	2		56
18	16	1	2	2	1		55
18	15	١	2		l		57
18	16	ı	5	2	1	1	59
18	18	1	4	1	1		61
18	20	1	ı	1	1		60
18	22	ı	3	2	1		60
18	23	1	2	1	1 :		61
18	24	1		2	1	1 onO	t.1, 57
		-			-	 	·¦
		1			28	10	
		1	70		h	I	·
		ı		10			1
		1-		L	-		i
	32	1	57	70	1	1	1
	25 26 29 29 30 32		127 70 57	32 28 10 70	28	10	

No. 9.—List of Daughters admitted on the Fund from its commencement in 1787, showing Lapses by Death, &c., up to 30th April, 1863.

	Zacpaca 1		5 to 50th April, 1863.
No.	Names.	When Admitted.	Remarks.
1	Miss M. Davidson	20th Nov., 1791	Ceased from 4th September, 1794.
2	, H. Davidson	Ditto	- · · · · · · · · · · · · · · · · · · ·
3	" C. Erskine	3rd May, 1793	Ceased from 31st December, 1802, by being possessed
5	" M. L. Erskine	Ditto (15th October, 1801)	of property yielding income beyond the annuity. Ceased from 26th April, 1814.
6	" J. A. C. Brodie	Ditto	Ceased from 28th May, 1815.
7	" C. Brodie	Ditto	Ceased from 10th May, 1816.
8	" J. Brodie	Ditto	Ceased from 11th May, 1817.
9	" L. Brodie	Ditto	Ceased from 18th April, 1820.
10 11	"A. A. E. Thursby "M. M. Thursby	13th May, 1802 Ditto	Ceased from 17th April, 1860. Ceased from 12th June, 1817.
12	" M. J. Thompson	18th April, 1804	Ceased from 11th November, 1810.
13	" H. C. Thompson	Ditto	Ceased from 23rd January, 1812.
14	" P. A. Thompson	Ditto	Ceased from 1st May, 1813.
15	" L. E. Thompson	Ditto	Ceased from 13th September, 1815.
16 17	"E. Wrangham "H. S. Benfield	30th Nov., 1804	Ceased from 13th January, 1811. Ceased from 2nd December, 1814.
18	" C M Damenia	5th February, 1805	Ceased from 15th October, 1816.
19	" M. A. Chase	5th February, 1808	Ceased from 5th February, 1808.
20	" L. M. Chase	Ditto	Ceased from 6th May, 1811.
21	" R. Chase	Ditto	Ceased from 23rd January, 1817.
22	"A. M. Brown	30th Dec., 1808	Censed from 19th January, 1823.
23 24	"E. C. Brown "L. Maxtone	Ditto 24th March, 1809	Ceased from 30th June, 1815. Ceased from 24th March, 1809.
25	" E. Maxtone	Ditto	Ceased from 12th August, 1812.
26	" S. Maxtone	Ditto	Ceased from 10th March, 1814.
27	"H. Maxtone	Ditto	Ceased from 7th September, 1816.
28	" M. A. Kinchant	24th August, 1809	Ceased from 26th August, 1817.
29	" E. Slingby	6th October, 1809	Ceased from 1st January, 1825.
30 31	"E. A. Maidman	8th April, 1810 Ditto	Ceased from 18th May, 1818. Ceased from 29th June, 1820.
32	J. Maidman	Ditto	Censed from 15th September, 1823.
33	" M. N. Maidman	Ditto	Ceased from 19th February, 1825.
34	"Ea. Taylor	1st January, 1811	Ceased from 1st January, 1816.
35 36	" C. Taylor	Ditto	County from let Innuary 1917 by being personed of
37	" L. Taylor	Ditto (Ceased from 1st January, 1817, by being possessed of property yielding income beyond the annuity.
38	"Eth. Taylor	Ditto	property freezing meetine to found the mining.
39	" M. A. Kenworthy	24th July, 1812	Crased from 1st January, 1815.
40	" E. F. Gordon	6th June, 1813	Ceased from 12th July, 1819.
41	" C. C. Gordon	Ditto	Ceased from 1st July, 1820, by being possessed of
42	,, H. Gordon	Ditto	property yielding income beyond the annuity.
44	, M. S. Gordon H. C. Watts .	Ditto) 26th July, 1815	Ceased from 22nd September, 1824.
45	" M. A. Watts	Ditto	Ceased from 22nd May, 1830.
46	" M. M. Chinnery	22nd August, 1815	Ceased from 29th December, 1816.
47	" E. M. Chinnery	Ditto	Ceased from 27th October, 1821.
48 49	, M. H. Chinnery	Ditto	Ceased from 19th November, 1822. Dead; date not known. Annuity paid up to lst
"	" n. b. ben	31st July, 1817	July, 1818.
50	" E. H. Spottiswoode	14th April, 1820 (
51	" C. Spottiswoode	Ditto	Ceased from 30th March, 1824.
52	" E. B. Spottiswoode .	Ditto	Ceased from 6th July, 1830.
53 54	" H. Spottiswoode	Ditto 14th Dec., 1821	Died in June, 1826; date not known. Annuity paid up to 30th June, 1826. Ceased from 19th December, 1827.
55	" L. E. Young	30th June, 1822	Ceased from 19th January, 1830.
56	" H. Young	Ditto	Ceased, by death, from 10th January, 1827.
57	" M. Young	Ditto	Ccased from 1st January, 1839.
58	, E. Sewell	2nd June, 1823	Admitted to £50 from 21st May, 1840.
59	,, A. Sewell M. Sullivan .	Ditto	Censed from 28th January, 1842.
60 61	P.M. Hamis	6th October, 1823 17th May, 1824	Ceased from 29th May, 1839. Ceased from 19th March, 1827.
62	" F. M. Harris	Ditto	Ceased from 19th April, 1829.
63	" E. L. Harris	Ditto	Ceased from 22nd July, 1834.
64	"M. J. Harris	Ditto	Ceased from 20th September, 1835.
<u>'</u>			<u> </u>

(No. 9 (continued).

	T		1	
No.		Names.	When Admitted.	Remarks.
65	Mi	s E. E. Harris	17th May, 1824	Ceased from 10th February, 1837.
66	,,	L. M. Maidman	30th August, 1824	Ceased from 17th ()ctober, 1831.
67	"	E. Maidman	Ditto	Ceased from 22nd June, 1834.
68	"	C. S. Fullerton	18th Sept., 1824	Admitted to £50 from 17th November, 1838, and ceased, by marriage; date not known. Annuity
69	"	C. M. Phillips	6th April, 1825	paid up to 30th June, 1845. Admitted to £50 from 3rd October, 1838.
70	"	F. G. Phillips	Ditto	Admitted to £50 from 15th October, 1840.
71	"	F. P. Kensington	13th May, 1825	Admitted to £50 from 7th October, 1838, and ceased, by marriage, from 23rd March, 1843.
72 73	, ,	M. R. Kensington	Ditto	Ceased from 3rd January, 1842.
74	"	E. Young	20th May, 1831 13th Dec., 1826	Admitted to £50 from 20th May, 1831, and died on the 3rd February, 1848. Admitted to £50 from 19th January, 1832, and
75	"	1 C V	Ditto	ceased, by marriage, from 24th July, 1839.
	"	L. C. I dung	Ditto	Admitted to £50 from 1st January, 1835, and ceased, by marriage, from 20th August, 1846.
76	"	M. E. Munro	24th May, 1827	Admitted to £50 from 3rd October, 1842, and ceased from 1st January, 1849, by being possessed of pro-
77	١,,	E. A. Lord	9th April, 1829	perty yielding income beyond the annuity. Died on the 30th April, 1830.
78	"	H. E. Smith	2nd June, 1831	Under the Subsidiary Rules from 30th March, 1847, and ceased, by marriage, from 25th September, 1851.
79	"	C. Cheape	16th ditto	Died on the 18th February, 1840.
80	"	E. Cheape	16th ditto	Under the Subsidiary Rules from 15th November, 1845, and ceased, by marriage, from 29th Decem-
81	, .	F. H. M. Macdonald.	6th July, 1832	ber, 1849. Ceased from 7th August, 1851.
82	"	A. E. Bannerman	lst Sept., 1832	Under the Subsidiary Rules from 31st May, 1843.
83	"	G. A. Robson	4th Sept., 1833	Ceased from 10th February, 1842.
84	"	E. S. Mason	2nd July, 1834	Admitted to £50 from 2nd November, 1841, and ceased, by marriage, from 1st November, 1843.
85	,,,	J. R. Richards	27th Nov., 1834	Admitted to £50 from 11th November, 1849.
86	99	M. H. L. Moore	13th January, 1836	Admitted to £50 from 13th January, 1836, and ceased, by marriage, from 14th March, 1837.
87	n	C. E. Moore	13th Dec., 1834	Admitted to £50 from 25th September, 1837.
88	"	S. M. A. Moore	Ditto	Admitted to £50 from 9th March, 1839.
89	"	H. C. R. Moore	Ditto	Admitted to £50 from 5th July, 1840, and ceased, by marriage, on the 2nd December, 1856.
90	,,	J. S. Moore	Ditto	Admitted to £50 from 1st September, 1843.
91	"	M. P. M. Bushby	30th January, 1835	Ceased from 3rd June, 1840.
92	"	H. Woolf	2nd March, 1836	Admitted to £50 from 3rd August, 1844.
93	ית	A. J. Wilson	2nd Sept., 1836	Admitted to £50 from 2nd September, 1836, and died on the 26th December, 1845.
94	"	E. Mortlock	13th Feb., 1837	Under the Subsidiary Rules from 15th September, 1838.
95 96	"	H. Mortlock C. Mortlock	Ditto Ditto	Under the Subsidiary Rules from 23rd September, 1842. Under the Subsidiary Rules from 19th May, 1844.
97	"	L. Mortlock	Ditto	Under the Subsidiary Rules from 10th February, 1848.
98	"	A. B. Mortlock	Ditto	Died on the 29th June, 1851.
99	17	M. H. Chinnery	20th May, 1837	Admitted to £50.
100 101	"	H. S. Stevenson M. A. P. Jarrett	2nd June, 1837 11th Sept., 1837	Under the Subsidiary Rules from 9th November, 1851. Under the Subsidiary Rules from 2nd October, 1837.
102	99))	L. A. M. Bushby	17th May, 1838	Under the Subsidiary Rules from 5th September, 1841.
103	"	A. F. Bushby	Ditto	Under the Subsidiary Rules from 2nd September, 1844.
104	17	J. S. Bushby	Ditto	Under the Subsidiary Rules from 16th August, 1851.
105	**	M. A. Shakespear	10th August, 1838	Admitted to £50 from 11th September, 1842, and died on the 16th April, 1849.
106	,,	B. G. Dumergue	16th January, 1839	Under the Subsidiary Rules from 6th April, 1857.
107 108	71	F. M. Taylor C. E. Taylor	4th February, 1839 Ditto	Under the Subsidiary Rules from 24th Nov., 1854. Under the Subsidiary Rules from 31st March, 1857.
109	"	J. W. Vibart	6th Nov., 1839	Ceased from 24th April, 1848.
110	n	H. C. Vibart	Ditto	Ceased.
111	n	M. Thomas	7th January, 1840	Under the Subsidiary Rules from 14th April, 1843, and ceased, by marriage, on the 16th Dec., 1853.
112	"	E. Thomas	Ditto	Under the Subsidiary Rules from 29th May, 1847, and ceased, by marriage, from 22nd August, 1849.

No. 9 (continued).

		110. 9 (601	
No.	Names.	When Admitted.	Remarks.
113 114	Miss J. E. Thomas	7th January, 1840	Ceased, by marriage, from 26th June, 1851.
115	" H. A. Thomas " F. E. Wrey	Ditto 30th May, 1840	Under the Subsidiary Rules from 8th June, 1856. Ceased from 30th August, 1840, from which date she was admitted to £50, and ceased, by marriage, from 31st July, 1845.
116 117	" E. E. Wetherell " A. C. Grant	1st March, 1842 25th May, 1842	Received donation in 1857. Ceased from 3rd Decumber, 1845, by being possessed
118 119	" E. E. Mollo	2nd Dec., 1842 17th March, 1845	of property yielding income beyond the annuity. Under the Subsidiary Rules, and ceased by marriage. Under the Subsidiary Rules from 24th October, 1852,
120	" E. Thomas	Ditto	and ceased, on 25th August, 1863, by marriage. Under the Subsidiary Rules from 31st August, 1857.
121	"E. E. Pringle	5th Sept., 1847	
122	" E. F. Bell	25th August, 1850	Under the Subsidiary Rules from 15th March, 1860.
123	" J. E. F. Bell	Ditto	Under the Subsidiary Rules on the 20th Sept., 1862.
124 125	" M. A. M. Bell	Ditto	Admissad sa Cto
126	"J. M. Heath "G. S. Cherry	28th January, 1851 26th ditto	Admitted to £50. Under the Subsidiary Rules from the 26th June, 1854, and ceased by being possessed of property
127	"C. Cherry	26th ditto	yielding income beyond the annuity. Under the Subsidiary Rules from 4th June, 1856, and ceased by being possessed of property yielding income beyond the annuity.
128	" L. E. Wright	30th Dec., 1851	Ceased, by marriage, on the 12th July, 1855, and received donation.
129	" K. P. Smith	let June, 1849	Admitted to £50 in 1857.
130	" J. C. Smith	Ditto	Received donation in 1861.
131 132	"E. C. Gleig	20th January, 1852	Under the Subsidiary Rules on the 16th Dec., 1854.
133	"M. J. Gleig	Ditto Ditto	Under the Subsidiary Rules on the 26th Jan., 1860. Under the Subsidiary Rules on the 15th Feb., 1861.
134	" A. F. Gleig	Ditto	Under the Subsidiary Rules on the 18th May, 1862.
135	" C. A. Gleig	Ditto	,
136	"A. Gleig	Ditto	
137	"E. Gleig	Ditto	
138 139	" A. Davidson	11th May, 1852 8th February, 1853	Under the Subsidiary Rules on the 24th December, 1853.
140 141	" E. L. Boileau	Ditto Ditto	Ceased, by marriage, in 1856, and received donation. Under the Subsidiary Rules on the 23rd November,
142 143	, H. E. Boilean	Ditto Ditto	1858. Under the Subsidiary Rules in December, 1862.
144	"A. U. Boileau	lst April, 1853	Cessed, by marriage, on the 18th August, 1853, and received donation.
145	" H. A. Swinton	24th October, 1853	Died.
146	" M. H. Wedderburn	12th May, 1854	
147	" C. E. Sandeman J. L. Tweedie	17th May, 1855	
148 149	A O Tournalia	27th August, 1855 Ditto	
150	" E. M. Babington	22nd April, 1852	Under the Subsidiary Rules from this date.
15l	" C. Haig	31st May, 1854	Under the Subsidiary Rules from this date, and died on the 23rd April, 1855.
152	" E. E. Daniell	7th March, 1856	
153	" E. M. Daniell	Ditto	
154 155	" S. M. Gostling " E. F. Morris	1st April, 1857 2nd August, 1858	Under the Subsidiary Rules on the 30th Jan., 1860.
156	" G I Marria	Ditto	Under the Subsidiary Rules on the 19th Sept., 1858.
157	"G. F. Woodgate	13th April, 1859	
158	" H. C. Woodgate	Ditto	
159	" C. A. N. Woodgate	Ditto	
160	" V. E. Dickinson	29th Nov., 1859	Under the Subsidiary Rules from this date.
161	" M. L. Monk	3rd March, 1859	Train de Substitute D. 1 de 31 de 1
162	" E. G. Monk	Ditto	Under the Subsidiary Rules from this date, and ceased, by marriage, in 1863.
163	" M. E. S. Lewin	28th July, 1858	

APPENDIX I.

No. 9 (continued).

No.	Names.	When Admitted.	Remarks.
164 165 166 167 168 169 170	Miss A. L. Lewin , K. M. Grenfell , E. D. Grenfell , G. D. Tod , A. M. Walker , A. C. Walker , E. Walker	28th July, 1858 22nd Feb., 1860 Ditto 14th Nov., 1861 24th July, 1862 Ditto Ditto	Under the Subsidiary Rules from this date.
105 65 170	Ceased. Now on the Fund.		

Abstract.

Years.	Number Admitted in each Year.	Number of Lapses in each Year.	Number on the Fund on 1st January in each Year.	Years.	Number Admitted in each Year.	Number of Lapses in each Year.	Number on the Fund on 1st January in each Year.
1791 1792 1793 1794 1795	2 2 	 2	2 2 4 2	1831 1832 1833 1834 1835	4 2 1 6	1 2 1	17 20 22 23 27
1796 1797 1798 1799 1800		 	2 2 2 2 2	1836 1837 1838 1839 1840	3 8 4 5 5	 2 3 2	27 30 36 40 42
1801 1802 1803 1804 1805 1806	5 2 5 2	 2 	2 7 7 7 12 14	1841 1842 1843 1844 1845 1846	 3 2	3 2 4	45 45 45 43 43 41
1807 1808 1809 1810 1811	5 6 4 5	1 1 1 2	14 14 18 23 26	1847 1848 1849 1850 1851	1 2 3 4	2 4 	40 41 39 37 40
1812 1813 1814 1815 1816	1 4 5	2 1 3 3 6	29 28 31 28 30	1852 1853 1854 1855 1856	9 7 2 3 2	1 2 2 2	40 48 53 55 56
1817 1818 1819 1820 1821	1 4 1	8 2 1 5	24 17 15 14 13	1857 1858 1859 1860 1861	1 4 6 2	1 3 1	56 56 60 66 65
1822 1823 1824 1825 1826	3 3 8 4 2	1 2 3 3	13 15 16 21 22	1862 1863 1864	3 170	1 2 On 1	65 67 st Oct,65
1827 1828 1829 1830	1 1 	3 1 4	23 21 21 21 21		105 65		

No. 10.—List of Sons admitted on the Fund from its commencement in 1787, showing Lapses by Death, &c., up to 30th April, 1863.

No.	Names.	When Admitted.	Remarks.
1	Mr. A. H. Davidson	20th Nov., 1791	Ceased from 30th May, 1798.
2	"G. R. Jervis	8th May, 1792	Ceased from 9th May, 1811.
3	, T. B. Jervis	Ditto	Ceased from 2nd August, 1813.
4	"J. S. Jervis	Ditto	Ceased from 8th November, 1814.
5	" Wm. D. Brodie	15th October, 1801	Ceased from 2nd July, 1818.
6 7	"G. A. Brodie	31st May, 1802	Ceased from 29th June, 1820.
8	"C. A. Thursby "G. W. Thompson	13th May, 1802	Ceased from 17th November, 1817.
9	" T T Th	18th April, 1804 Ditto	Ceased from 23rd January, 1810.
10	D F Dongold	5th February, 1805	Ceased from 9th December, 1822. Ceased from 16th January, 1816.
lii	T C Chase	Ditto	Ceased from 30th December, 1809.
12	, R. Chase	Ditto	Ceased from 20th August, 1815.
13	" H. Brown	30th Dec., 1808	Ceased from 14th December, 1820.
14	" J. R. Brown	Ditto	Ceased from 27th March, 1822.
15	" J. A. Brown	Ditto	Ceased from 18th March, 1827.
16	"C. Maxtone	24th March, 1809	Ceased from 15th September, 1809.
17	" J. Maxtone	Ditto	Ceased from 9th August, 1813.
18	"C. Westcott	8th May, 1809	Ceased from 8th May, 1803.
19	" R. H. Kinchant	24th August, 1809	Ceased from 7th January, 1823.
20	" J. N. R. Kinchant	Ditto	Ceased from 20th June, 1824.
21	" R. A. Slingby	6th October, 1809	Ceased from 1st January, 1827.
22	, Wm. R. Maidman	8th April, 1810	Ceased from 7th July, 1821.
23	, H. Taylor	lst Jan., 1811	
24 25	, Rt. Taylor	Ditto	Ceased from 1st January, 1817, by being possessed
26	"J. Taylor "Wm. Taylor	Ditto	of property yielding income beyond the annuity.
27	T Toulon	Ditto	
28	" Wm. C. Gordon	6th June, 1813	Ceased from 30th September, 1817.
29	" A. D. Gordon	Ditto	Ceased from 1st July, 1820, by being possessed of
1	"		property yielding income beyond the annuity.
30	"C. R. Smith	8th Dec., 1813	Ceased from 12th November, 1817.
31	"M. Watts	26th July, 1815	Ceased from 1st July, 1825.
32	"H. Watts	Ditto	Ceased from 26th January, 1829.
33	" W. C. Chinnery	22nd ditto	Ceased from 1st July, 1824.
34	, W. H. Bell	31st July, 1817	Ceased from 1st July, 1834.
35	, R. C. Bell	Ditto	Ceased from 22nd November, 1835.
36	"J. Pybus	27th January, 1820	Ceased from 16th January, 1838.
37 38	, G. Pybus	8th June, 1820	Ceased from 9th June, 1839.
39	, A. C. Spottiswoode , H. Spottiswoode	14th April, 1820 Ditto	Ceased from 26th February, 1824.
40	M Spottiemondo	Ditto	Ceased from 1st January, 1826. Ceased from 1st July, 1834.
41	"Hy. Spottiswoode	Ditto	Ceased from 1st July, 1835.
42	" H. Harington	14th Dec., 1821	Ceased from 8th June, 1822.
43	" Rt. H. H. Young	30th June, 1822	Ceased from 8th March, 1829.
44	" Wm. Young	Ditto	Ceased from 25th May, 1832.
45	" C. H. Young	Ditto	Ceased from 9th October, 1834.
46	" A. S. Young .	Ditto	Ceased from 1st January, 1835.
47	" E. Uhthoff	30th Dec., 1822	Ceased from 30th December, 1841.
48	, R. J. Sullivan	6th October, 1823	Ceased from 15th August, 1835.
49	" H. F. Sullivan	Ditto	Ceased from 6th January, 1838.
50	"T. J. P. Harris	17th May, 1824	Ceased from 10th July, 1830.
51 52	"G. A. Harris Wm. E. Fullerton	Ditto	Ceased from 1st July, 1831.
53	C I Fullerton	18th Sept., 1824	Ceased from 10th June, 1835.
54	" (1 Dhilline	Ditto 6th April, 1825	Ceased from 14th October, 1836. Ceased from 3rd December, 1841.
55	U D Kanaington	13th May, 1825	Ceased from 12th September, 1835.
56	C Versington	Ditto	Ceased from 1st January, 1838.
57	Wm I Voung	13th Dec., 1826	Ceased from 11th June, 1828.
58	" Wm. Dacre	23rd February, 1828	Ceased from 16th August, 1846.
59	, A. O. Lord	9th April, 1829	Ceased from 4th January, 1838.
60	" W. E. F. Hargrave	lst March, 1830	Ceased from 21st April, 1834.
61	"J. A. Smith	2nd June, 1831	Ceased from 18th February, 1848.
62	" J. Macdonald	16th June, 1832	Ceased from 23rd February, 1847.

No. 10 (continued).

No.			No. 10 (co	ntinued).
St. Commonstration	No.	Names.	When Admitted.	Remarks.
1	63	Mr. C. E. W. C. Macdonald	16th June 1832	Cassed from let Tennary 1848
Ditto Ditt				
Ditto Dead, date not known; annuity paid up to 31 Dead, date not known; annuity and the paid to a	65	1 M D		
68	66	D D O D	Ditto	Dead, date not known; annuity paid up to 31st
Cased from 1st February, 1847. Cased from 28th May, 1849.	67	" F. A. W. Robson	4th Sept., 1833	
T. H. H. Gahagan Ditto W. M. L. Mason C. W. Mason Ditto Ditto Ditto Ditto C. W. Moolf Ditto Ditto Ditto C. W. Moolf Ditto Ditto Ditto C. W. Moolf Ditto Ditt	1			
72				
Total Color Total Color		117 7 3/		
Total Color		CDM		
Tell		C W Marrie		
75	74	13 77 7 34		
77		" R. A. Moore	Ditto	Ceased from 30th May, 1845.
78				
79		" IF Weels		
Rough Ditto Ditt		TP 33716		
Sir J. Home, Bart. 12th ditto Ditto Ditto Sir J. Home Cased from 4th August, 1848. Cased from 7th December, 1851. Cased from 7th December, 1845; readmitted to £8 F. Stevenson Ditto Cased.	A 32716			
R. Mortlock Ditto Ditto Stevenson Ditto Ditto Ceased				
Received donation in 1858. Secured donation in 1859.		Mr. G. Home	Ditto	Ceased from 23rd September, 1851.
Received donation in 1858. Ceased. Cease	83	" H. Mortlock	13th February, 1837	
State	81	E I Mortlock	Dieso	
Received donation in 1858. Received donat		T 04		
88 "Wm. J. Bushby Ditto Ceased from 13th November, 1847. 89 "E. W. Bushby Ditto Ceased. 90 "A. J. Vibart 6th Nov., 1839 Ceased. 91 "H. M. Vibart Ditto Received donation in 1856. 92 "J. C. Thomas 7th January, 1840 Received donation in 1858. 93 "H. C. Dumergue 22nd April, 1840 Ceased. 95 "F. M. Newbery 27th August, 1842 Ceased. 96 "E. Newbery Ditto Received donation in 1859. 97 "R. E. Ward 6th May, 1843 Received donation in 1860. 98 "S. J. H. C. Ward 15th June, 1843 Received donation in 1858. 100 "H. C. Hallett Ditto Received donation in 1858. 101 "W. Hallett Ditto Received donation in 1858. 102 "A. C. Thomas 17th March, 1845 103 "J. Pringle 15th Sept., 1847 104 "A. S. Bury 11th May, 1848 105 "W. F. Bury 27th ditto 106 "J. A. R. Bell 25th August, 1850 <th>86</th> <th>" 10 O</th> <th></th> <th></th>	86	" 10 O		
R. W. Bushby				l
90			_ :: : : : :	
91				
92		17 34 37'1		
93		" TO m		
95	1	" H. C. Dumergue		
96		F M M		
97				
98		D D 737 1		
100		, S. J. H. C. Ward		Received donation.
101				
102		W Unlines		
103 ", J. Pringle 15th Sept., 1847 Died on the 21st October, 1860. 104 ", A. S. Bury 11th May, 1848 Died on the 21st October, 1860. 105 ", W. F. Bury 27th ditto 27th ditto 106 ", J. A. R. Bell 25th August, 1850		A C Thamas		
104	103	T Dela -1.		
106 , J. A. R. Bell 25th August, 1850		" A. S. Bury	11th May, 1848	·
	1 -	TADD'II		
7 Owers 20th October, 1049 Accounted deligation.		H Charm		Received donation
108 , W. E. Wright 30th Dec., 1851		W P Walle		20001.54 doilgion.
109 , A. E. Cherry 3rd June, 1850		" A. E. Cherry	0.3 7	
110 , G. J. Gleig 20th January, 1852 Received donation.		" G. J. Gleig	20th January, 1852	
111 , J. H. Gleig Ditto Received donation. 112 C. F. Gleig Ditto Received donation.				
112 D. I. Deller 1010 D. vind 1 - 1000		D 1 D-11		
114 "A. D. O. Wedderburn 19th May, 1854		A TO O 117 11 1	19th May, 1854	
115 , D. G. Sandeman . 29th January, 1855		" D. G. Sandeman	29th January, 1855	
116 , A. S. A. Sandeman . Ditto			Ditto	•
117 , A. L. Tweedie 27th August, 1855 Ditto		C O M 11		
110 , G. S. I weedle Ditto 119 , L. C. D. L. Daniell 7th March, 1856 Received donation in 1858.				Received donation in 1858.
120 , M. W. J. Daniell Ditto Ceased.	120	" M. W. J. Daniell		Censed.
121 , E. C. Daniell Ditto Received donation.				Received donation.
122 ,, L A. J. Daniell . Ditto 123 C. H. Gostling 1st April. 1857		. A TT A .!!		
104 " B B M		D D 14		Received donation in 1863
n, E. E. Morris 2nd August, 1853 Received donation in 1803.		,, an 41. ATAULLIS. ,	Zau August, 1005	1 1000.

No. 10 (continued).

No.	Names.	When Admitted.	Remarks.
125 126 127 128 129 130 131	Mr. M. A. Morris " H. B. Woodgate " H. H. Monk " J. G. A. Monk " H. C. M. Lewin " R. S. Lewin " D. Walker	13th April, 1859	Ceased. Received donation in 1861.
113 18 131	Ceased. Now on the Fund.		

Abstract.

Years.	Number admitted in each year.	Number of lapses in each year.	Number on the Fund on 1st January in each year.	Years.	Number admitted in each year.	Number of lapses in each year.	Number on the Fund on 1st January in each year.
1791	1			1838	3	5	32
1792	3		1 1	1839	2	ì	30
1798		i	4	1840	3	2	31
1801	1		3	1841		2 2	32
1802	2		4	1842	2	2	30
1804	2 2 3		6	1843	5	•.	30
1805	3		8	1844		2	35
1808	3		11	1845	i	1	33
1809	6	3	14	1846		1	33
1810	1	1	17	1847	1	5	32
1811	5	1	17	1848	2	4	28
1813	3	2	21	1849	1	4	26
1814		. 1	22	1850	2		23
1815	3	1	21	1851	1	2	25
1816		1	23	1852	3	4	24
1817	2	8	22	1853	1	2	23
1818		1	16	1854	1		22
1820	6	3	15	1855	4	2	23
1821	1	1	18	1856	4	1	25
1822	5	3	18	1857	1	1	28
1823	2	1	20	1858		7	28
1824	4	3	21	1859	3	2	25
1825	3	1	22	1860		4	26
1826	1	1	24	1861	• •	2	22
1827	1 .	2	24	1862	1	2	20
1828	1 1	1	22	1863	• •	1	19
1829	1	2 1	22	1863		On 1	st Oct., 18
1830	ļį	1	21	ľ			
1831 1832	1	ī	21				
	5	1	21		131	113	
1833 1834	4 5	• ;	25		113		l
1834		4	29				
1835	· '	7	30				
1836	7	2	23		18		·
1091	1 1	• •	28				

No. 11. Charity Branch.—Statement showing the Amounts of Petty Charges incurred on account of Office Establishment, &c., for the last Fifteen Years, with an Average for One Year.

Years.		Yeara. Petty Charges. Amount.		Years	Petty Charges. Amount.	
				Rs. a. p. 3,447 11 2		Rs. a. p.
1848		• •			1859	3,557 3 2
1849		٠.		3,454 10 0	1860	3,393 0 8
1850				3,731 13 7	1861	6, 4 08 7 1
1851				3,555 13 5	1862	3,167 3 6
1852				3,578 12 2		<u>.</u>
1853				6,014 8 7		
1854		• •		3,539 13 6	Total Rupees	68,428 15 3
1855				9,733 13 11	Total Rupees	00,120 10 0
1856		• • •		8,011 1 7	-	
1857	• •	• •		3,468 2 l	1	
1858	• •	• •	• • •	3,366 12 10	Average for one year	4,561 14 10

No. 12.—Statement showing the Amounts of Assistance granted to Sick Civil Servants, carried to the head of "Profit and Loss."

	Years.			Amount writ				Years			Amount wr		
1801 1803 1805 1807				Rs. 6,859 1,312 18,381 7,875	8 8 2 0	P. 7 7 0 0	1837 1838 1839 1841				Rs. 3,218 5,250 2,202 4,144	8. 4 0 12 9	p. 7 0 6 8
1810 1816 1817 1818		•••		2,625 12,250 35,437 9,187	0 0 8 8	0 0 0	1842 1845 1847 1848	• • • • • • • • • • • • • • • • • • • •		• • •	2,187 4,204 9,187 4,740	8 5 8 0	0 5 0
1819 1820 1826 1827			•••	6,562 15,492 3,937 13,125	8 9 8 0	0 4 0 0	1849 1858 1859 1860		:: •	•••	2,625 2,625 2,625 2,625 2,257	0 0 0 8	0 0 0
1828 1830 1832 1833				10,500 45,532 2,625 5,479	0 5 0 4	0 3 0 9	1861 1862			• •	2,625 2,651	0 11	0 2
1834 1835		•••	• •	3,544 3,937	5 8	9		I	Lupees		262,208	7	0

No. 13.—List of Annuitants under the Subsidiary Rules on 1st May, 1863, with their Ages, &c.

No.	Names.	When Admitted.	Age on lst May, 1868.	Amount of Pension paid.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Miss M. A. P. Jarrett " E. Mortlock " L. A. M. Bushby " H. Mortlock " A. E. Bannerman " C. Mortlock " A. F. Bushby " L. Mortlock " J. S. Bushby " H. S. Stevenson " E. M. Babington " C. E. Thomas " M. E. Boileau " F. M. Taylor " E. C. Gleig " M. J. Gleig " M. J. Gleig	2nd October, 1837	Years ms. days. 44 6 30 43 7 16 40 7 26 39 7 8 38 11 2 37 11 13 37 7 29 34 2 19 30 8 16 30 5 22 50 4 12 29 6 8 28 4 8 27 5 7 27 4 6 26 3 6	£ z. d. 91 4 11 100 0 0 94 0 0 100 0 0 100 0 0 100 0 0 94 0 0 100 0 0 94 0 0 100 0 0 4100 0 0 100 0 0 17 15 8 17 15 8
17 18 19 20 21 22 23 24 25 26 27 28 29	## H. A. Thomas. ## C. E. Taylor ## B. G. Dumergue ## E. Thomas ## G. S. Morris ## S. A. Boileau ## E. G. Monk ## V. E. Dickinson ## E. F. Morris ## E. F. Bell ## C. E. Gleig ## A. F. Gleig ## A. M. Walker ## J. E. F. Bell	6th April, 1857 31st August, 1857 19th September, 1858 23rd November, 1858 3rd March, 1859 29th November, 1859 30th January, 1860 15th March, 1860 15th February, 1861 18th May, 1862 24th July, 1862 20th September, 1862	25 10 23 25 1 1 25 0 25 24 8 1 23 7 12 23 5 8 26 1 9 28 9 14 22 3 2 22 1 17 21 2 14 19 11 14 26 7 24 19 7 11	100 0 0 100 0 0 91 0 0 100 0 0 100 0 0 100 0 0 100 0 0 100 0 0 100 0 0 17 15 8 100 0 0 100 0 0
2 29	" H. A. Boileau	7th December, 1862	. 19 4 25 Total £	2,705 12 7

^{*} Since Married.

No. 14.—Memorandum showing the Number of Members in the Service on 1st January in each year, commencing from 1st January, 1850.

1850			 	 	192
1851			 	 	191
1852			 	 	188
1853			 	 	186
1854			 	 	184
1855			 	 	181
1856			 	 	187
1857			 	 	181
1858			 	 	187
1859			 	 	181
1860			 	 	170
1861			 	 	167
1862			 	 	153
1863			 	 	156
Un to 3	Oth Se	ptember		 	155

Detailed Memorandum for the foregoing one.

	_			Number	N	UMBER OF LAPSE	S IN RACH YEAR		Number on
	Years	.		Admitted in each Year.	By Death.	By Retirement.	By Resignation.	By Removal.	lst January in each Year.
1850				7	4	4			192
1851				7	2	5 3	2	1	191
1852				4	2)	1	188
185 3				5 5	2	5			186
1854					4	4	l		184
1855				15	3	5	1 1		181
1856				2	4	3	1 1		187
1857		• •		12	2	4			181
1858			• •	4	5	3	1	1	187
1859					1	8	1	1	181
1860				6	2	8 6 9		1	170
1861				1	3		3		167
1862				15	1	11			153
1863				5		6			156
Up to 1863		Septemb 	er, }		••				155

No. 15.—Statement showing the Receipts and Disbursements of the Civil Fund Charity and Subsidiary Branches from the Year 1831 to 1861, both inclusive.

Years.	Capital on		REGELTS	É			Disbusarkints	NEW ENTE.		
	let January in each Year.	Charity Branch.		Subsidiary Branch.		Total.	Charity Branch.	Subsidiary Branch.	Total.	Surplus
	Rs. 8. 12	<u>!</u>	مة	Rs. g.	ė,	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. R.
1831	4	2,04,323	23		31	9		:	1,13,695 7 4	1,13,241 12
1832	0	1,98,142		_	4	ı,	_	:	_	1,10,343 4
1833	٠,	2,25,268			2	2,36,385 3 2	_	:	1,15,676 8 5	1,20,708 10
1834	15	9 2.29,431 10	_	9,991 3	40	13		;	1,41,465 3 6	97.957 10
1835	2	2,14,879			03	•	_		7	48,361 11
1836	-0			10.525 14	7	' =			. –	65,961 10
1837	0	2,31,104	9	•	. «	3.49.674 14 2	2.57,618 15 6	: ;	2,57,618 15 6	85,055 14
1838		2.65,701			10	2.93,808 3 8		_	2,15,283 14 9	78,524 4
1839	4	2,49,177 1	8	31,572 12	က	8		7	0	1,03,225 8
1840	12	2,33,654			-	9	_	=	4	38,987 2
1841	14		80	30,752	_	2,99,087 11 4	_	1,821 2 4	1,79,772 1 3	1,19,315 10
1842	8		∞		63	2,93,509 5 10		2,665 9 5	C)	97,839 3
1843	12	_	0	44,740 13	0	14	_	0	2,03,210 14 7	1,07,324 15
1844	Ξ		*		9		_	5,621 0 7	2,04,948 9 4	94,384 15
1845	Ξ		-	46,558 10	®	1	_	12	2,20,816 13 8	89,634 14
1846	6		=	52,305 4	9	0	1,68,551 6	6,868 1 3	7	1,36,216 8
1847			œ	57,918 10	&	2,94,435 12 4	1,85,519 2 1	_	1,93,401 10 0	1,01,034 2
1848	4		7	55,590 4	2	3,22,414 14 5	_	∞	œ	1,30,056 5
1849	9	3 2,57,406 14	9		4	0	1,73,860 7	9,017 14 9	1,82,878 6 6	1,31,429 10
1850	4		m		C 1		_	12	- -	1,49,424 0
1851	2		*	71,236 5	<u>_</u>	7	_		9	1,50,867 4
1852	o	3 2,79,085 3		75,792 12	6	3,54,878 0 2	_	8,812 8 4	2,00,838 7 9	1,54,039 8
1853	-	2,91,730	 2	77,110 9	•	9		10,600 2 4	∞ ,	
1854	9		4		07	3,79,027 11 6	1,91,241 13 2		7	1,74,617 12
1855			4	89,895 2	&	7		14,392 3 7	1,99,308 9 2	2,25,382 4
1856	1 0		_		_	4,03,863 13 8	_	2	9	2,01,088 7
1857	12		٠,		က	_	_		•	2,12,640 13
1858	6	3,41,565	6		0	4	-	⊘ 1	2,33,632 8 2	2,17,342 1
1859	2	_	6	1,15,855 12	-	14		19,367 9 11	2,14,874 5 0	2,55,098 9
1860	*	3,53,642	6		7	4,84,125 4 8	2,14,065	•	2,36,088 0 1	2,45,037 4
1861 1862	55,65,541 9 4 57,68,857 10 9	3,51,952 2	e	1,14,238 13	91	4,66,191 0 1	2,41,401 10 8	21,473 4 0	2,62,874 14 8	2,03,316 1
				1	<u> </u>					l
		83,78,515 1	2	18,60,023 2	e -	102,88,538 4 1	57,70,106 3 4	2,33,239 10 7	60,03,345 13 11	42,35,192 6

No. 16.—Statement of Passage-money granted to Widows and Children for the last Eight Years, from 1855 to 1862, both inclusive, and the Average for One Year.

	A	verage i	or one	year			£300
						8)	2,400
1862	• •	• •	• •	• •	• •	• •	360
1861							300
1860	•••					• •	300
1859						• •	240
1858			••		•••		_
1857		• • •	• • •	• • •	• • •		300
1856		• • •			• • •		480
1855							£ 420

No. 17.—Statement showing the Subscriptions actually received by the Civil Service Annuity Fund of 1825, and by the Annuity Fund of 1818, from the official Year 1825–26 to 1862–63, at 3\frac{3}{4} per Cent. and at 4 per Cent., on the same allowances on which Subscriptions to the Civil Fund are chargeable.

Years.	Subscription at 4 per Cent. to the Civil Service Annuity Fund of 1825.	Subscription at 34 per Cent. to the Annuity Fund of 1818.	Years.	Subscription at 4 per Cent. to the Civil Service Annulty Fund of 1825.	Subscription at 3‡ per Cent. to the Annuity Fund of 1818.
1825-26	1,24,722 9 8 1,34,230 7 1 1,33,388 14 2 1,35,423 14 7 1,34,574 2 4 1,21,980 8 5 1,27,113 7 9 1,31,158 9 6 1,26,215 7 9 1,27,017 12 10 1,25,380 12 11 1,24,173 13 0 1,22,615 11 5 1,21,938 14 11 1,18,476 0 9 1,15,469 1 8	Rs. a. d. 10,259 11 1 9,517 1 2 8,829 11 10 4,484 11 2 2,142 10 6 3,108 0 8 36,603 3 10 17,661 8 7 14,378 3 0 13,442 9 11,259 0 6 11,669 1 1 10,597 0 11 11,406 15 7 11,346 15 7 11,546 8 10 12,446 11 10	1847-48	99,103 2 3 98,944 12 4 98,802 0 0 99,936 3 7 1,01,471 13 3 1,03,090 0 9 99,611 3 9 1,08,052 14 3 1,00,132 12 10 1,08,763 5 1 1,16,231 11 11 1,06,539 6 4 1,13,112 5 1 1,03,856 13 2	Rs. a. p. 12,555 7 8 12,706 8 1 12,964 7 10 13,501 15 3 11,638 2 0 10,593 0 4 10,349 6 9 9,020 10 4 5,716 7 5 7,038 1 10 4,817 8 8 4,500 0 0 3,601 0 2 235 15 4
1842–43	1,09,766 10 2 1,05,365 4 10	13,311 15 4 12,470 9 11 11,197 10 1	Total	43,38,378 0 11	3,82,344 5 0
1845–46 1846–47	100004 4 33	11,529 11 11 12,294 15 2	Average for one Year }	1,14,167 13 6	10,061 11 1

No. 18.—Estimate of Subscription to the Civil Fund, under the Provident Scheme, for One Year, calculated on the Salaries and Allowances to which each Gentleman was entitled for May, 1863.

N.B.—The Subscribers who are marked with an Asterisk (Married, Single, and Widowers with Families) have completed the term of 16 Years' Subscription to the Charity Fund, and their Subscriptions at 2½ and 1 per cent., entered in the Columns 2 and 3, will therefore bear 4 per cent. and all the rest 8 per cent. interest.

(1)	(2)	(3)	(4)	(5)	(6)
Age.	No. in List 6.	Names.	Amount of Salary to which entitled for May, 1863.	Subscription at 2½ per Cent.	Subscription at 1 per Cent.
55	1	Hon. T. L. Strange	Rs. a. p. Retired on an	Rs. a. p. d from 2nd Ma	Rs. a. p. y, 1863.
52	2	Hon. E. Maltby	5,333 5 4	120 0 0	
55 53	3 4	Hon. T. Pycroft *M. Wm. Elliot, Esq Adherent to the old Fund	5,333 5 4 2,333 5 4		
51	5	Hon. H. D. Phillips "M.	4,083 5 4	91 14 0	
51	6	Hon. H. Frere *M.	4,083 5 4	91 14 0	
51	7	J. Rohde, Esq. *M.	2,500 0 0	56 4 0	
51 50	8 9	E. Story, Esq. Adherent to the old Fund G. A. Harris, Esq. *M.	2,333 5 4 2,333 5 4	52 8 0	
51	10	G. A. Harris, Esq. *M. T. J. P. Harris, Esq. *M.	2,333 5 4	52 8 0	
50	ii	Hon. C. Pelly *M.	4,000 0 0	90 0 0	
50	12	S. D. Birch, Esq *M.	3,000 0 0	67 8 0	
49	13	S. N. Ward, Esq *M.	2,333 5 4	52 8 0	
50 51	14 15	H. A. Brett, Esq. *M.	3,408 5 4 833 5 4	76 11 0 18 12 0	
50	16	T. Onslow, Esq	1,505 6 0	33 13 11	
48	17	C. J. Shubrick, Esq	2,333 5 4	52 8 0	l
48	18	J. Silver, Esq. *M.	2,333 5 4	52 8 0	
49	19	H. Wood, Esq *Widower with Family	416 10 8	9 6 0	
48	20 21	T. Clarke, Esq	3,016 10 8	67 14 0 22 0 3	
47 48	22	B. Cunliffe, Esq	978 7 11 2,333 5 4	22 0 3 52 8 0	
46	23	C. W. Reade, Esq	2,333 5 4	52 8 0	1
46	24	Wm. Fisher, Esq *W. with F.	2,800 0 0	63 0 0	
45	25	R. R. Cotton, Esq *M.	2,333 5 4	52 8 0	l
43	26 27	G. S. Forbes, Esq. Adherent to the old Fund	2,850 0 0	10.10.0	
43 42	28	F. Lushington, Esq	833 5 4 833 5 4	18 12 0 18 12 0	
46	29	A. Hathaway, Esq	2,333 5 4	52 8 0	
42	30	J. W. Cherry, Esq *W. with F.	2,333 5 4	52 8 0	
42	31	G. H. Ellis, Esq *M.	2,333 5 4	52 8 0	
43	32	E. G. R. Fane, Esq	833 5 4		8 5 4
43	33 34	J. Ratliff, Esq	2,333 5 4	52 8 0 18 12 0	
45 43	35	J. G. Goldie, Esq	833 5 4 2,333 5 4	18 12 0 52 8 0	
43	36	V. H. Levinge, Esq	2,333 5 4	02 0 0	23 5 4
44	37	A. W. Phillips, Esq *M.	2,333 5 4	52 8 0	20 0 1
43	38	H. Newill, Esq *W. with F.	833 5 4	18 12 0]
42	39	G. N. Taylor, Esq *M.	2,500 0 0	56 4 0	
42 42	40 41	J. Fraser, Esq	2,333 5 4 833 5 4	52 8 0 18 12 0	
40	42	NV NC (1-1-1) Th	2,583 5 4	58 2 0	
41	43	W. Hodgson, Esq	525 0 0	11 13 0	
43	44	Hon. D. Arbuthnott *M.	2,333 5 4	52 8 0	
41	45	A. Wedderburn, Esq	2,333 5 4	52 8 0	
40 40	46 47	J. L. Lushington, Esq	3,050 0 0 4,166 10 8	68 10 0 93 12 0	
42	48	T TIT D DL. TI #0	4,166 10 8 2,333 5 4	00 12 0	23 5 4
40	49	E. W. Bird, Esq *M.	2,333 5 4	52 8 0	20 0 1
40	50	J. D. Sim, Esq *M.	3,333 5 4	75 0 0	
40	51	W. Robinson, Esq *M.	2,500 0 0	56 4 0	
42	52	P. Grant, Esq *M.	2,333 5 4	52 8 0 18 12 0	
39 42	53 54	G. Thornhill, Esq M. M. J. Walhouse, Esq	833 5 4 2,333 5 4	18 12 0 52 8 0	
38	55	E. R. McDonell, Esq	833 5 4	18 12 0	l
39	56	C. F. Chamier, Esq	2,487 8 0	55 15 6	
39	50	C. r. Chamier, Esq *M.	Z,48/ 8 U	55 15 6	

No. 18 (continued).

(1)	(2)	(3)	(4)	(5)	(6)
Ago.	No. in List 6.	Names.	Amount of Salary to which entitled	Subscription at 2½ per Cent.	Subscription' at 1 per Cent.
			for May, 1863.		
			Rs. a. p.	Rs. a. p.	Rs. a. p.
38 37	57 58	L. C. Innes, Esq	. 2,333 5 4	52 8 0	
38	59	F. S. Child, Esq		52 8 0 52 8 0	
40	60	A. W. Sullivan, Esq *M		52 8 0	
39 37	61 62	H. G. Smith, Esq M		36 0 0	
39	63	C. A. Roberts, Esq	1,166 10 8 1,166 10 8	26 4 0 26 4 0	
37	64	Hon. R. S. Ellis *M		52 8 0	
36 37	65	E. B. Foord, Esq		36 0 0	
38	66 67	C. Collett, Esq		52 8 0 52 8 0	
36	68	R. E. Master, Esq			17 14 - 1
36	69	W. Hudleston, Esq M		45 0 0	
39	70 71	W. S. Nesbitt, Esq		31 8 0 32 13 0	i
37	72	B. Pauncefote, Esq		9 6 0	
35	73	G. L. Morris, Esq M	. 1,600 0 0	36 0 0	
38 36	74 75	C. R. Pelly, Esq M		41 4 0	
36	75 76	J. R. Kindersley, Esq		9 6 0 32 13 0	
35	77	Wm. Holloway, Esq M	'	84 6 0	
35	78	W. T. Blair, Ésq		36 6 0	
36 34	79 80	H. M. S. Graeme, Esq		19 11 0 32 13 0	ŀ
34	81	G. Banbury, Esq		26 4 0	
36	82	C. N. Pochin, Esq W. with I	. 416 10 8	9 6 0	
33	83	R. B. Swinton, Esq M		41 4 0	
33	84 85	J. W. Breeks, Esq		16 14 0	
33	86	L. Forbes, Esq		9 6 0	
31	87	R. A. Dalyell, Esq S		33 12 0	
32 32	88 89	H. E. Sullivan, Esq M. J. R. Cockerell, Esq		36 0 0 9 6 0	
32	90	J. R. Cockerell, Esq		36 6 0	
34	91	E. C. G. Thomas, Esq	. 416 10 8	960	
32 32	92	C. H. Ames, Esq M	1	9 6 0	
31	93 94	R. K. Puckle, Esq		27 0 0 27 0 0	
31	95	R. Davidson, Esq.		31 8 0	
32	96	G. Vans Agnew, Esq	. 1,166 10 8	26 4 0	
30 29	97	W. C. Sim, Esq M. F. B. Molony, Esq M.		26 4 0	
29	99	F. B. Molony, Esq		26 4 0 31 8 0	
32	100	C. T. Longley, Esq M	. 1,166 10 8	26 4 0	
29	101	C. G. Master, Esq M		29 4 0	
28 28	102 103	E. F. Eliott, Esq		26 4 0 27 0 0	
30	104	H. S. Thomas, Esq		26 4 0	
27	105	J. A. C. Boswell, Esq	.		
27 28	106 107	317 To 171 Ti	966 10 8	21 12 0	
28	108	G. R. Sharpe, Esq.		40 8 0	
27	109	W. Nisbet, Esq.	733 5 4	16 8 0	
27 28	110	F. M. Kindersley, Esq		21 12 0	
28	111	F. C. Carr, Esq		22 12 9 9 6 0	
26	113	A. McGregor, Esq		9 6 0	
28	114	J. W. Reid, Esq M	. 966 10 8	21 12 0	
30 27	115 116	W. S. Whiteside, Esq		26 4 0 21 12 0	
26	117	W. H. Kerr, Esq.		23 10 0	
l					

No. 18 (continued).

(1)	(2)	(3)		(4)	(5)	(6)
Age.	No. in List 6.	Names.		Amount of Salary to which entitled for May, 1863.	Subscription at 24 per Cent.	Subscription at 1 per Cent.
26 28 25 27 28 24 25 25 25 25 25 25 25 25 25 27 24 25 25 27 24 25 27 24 27 25 25 27 24 27 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	118 119 120 121 122 123 124 125 126 127 128 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 155 156	C. G. Plumer, Esq. D. Williams, Esq. Adherent to the old Fund. J. C. St. Clair O. B. Irvine, Esq. R. J. Melville, Esq. A. R. Hutchins, Esq. J. H. Garstin, Esq. J. H. Garstin, Esq. J. R. Arbuthnot, Esq. G. D. Leman, Esq. J. R. Arbuthnot, Esq. G. D. Leman, Esq. J. C. Hannyngton, Esq. P. P. Hutchins, Esq. V. F. Hathaway, Esq. C. G. Walker, Esq. J. Grose, Esq. W. Wilson, Esq. W. Wilson, Esq. V. W. S. Foster, Esq. J. H. Nelson, Esq. J. H. Nelson, Esq. J. H. Nelson, Esq. J. H. Nelson, Esq. J. H. Woodroffe, Esq. J. H. Woodroffe, Esq. J. H. Daniell, Esq. J. R. Daniell, Esq. H. J. Stokes, Esq. F. Brandt, Esq. F. R. H. Sharp, Esq. J. F. Price, Esq. F. R. H. Sharp, Esq. J. F. Price, Esq. W. S. Lilley, Esq. W. S. Lilley, Esq. W. H. Comyn, Esq. W. H. Comyn, Esq. H. P. Gordon, Esq.	พีพีลพีลลลลลลลุกรักพีลลลลลลลลุกรกรกรกรรม	Ra. a. p. 733 5 4 733 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ra. a. p. 16 8 0 7 14 0 16 8 0 12 6 0 16 8 0 12 6 8 0 16 8 0 16 8 0 16 8 0 16 8 0 16 8 0 17 14 0 18 6 0 7 14 0 18 6 0 7 14 0	Ra. a. p.
21	159	B. Horsbrugh, Esq	S. ne m	300 0 0 onth	4,723 0 10	72 14 1
		Do. do. for one year			56,676 10 0	874 9 0 56,676 10 0
					Total Rs.	57,551 3 0

No. 19.—List of Daughters of Retired Members for whom the Benefits of the Subsidiary Rules have been secured, and who are still Living, and Unmarried, so far as is known in the Fund Office.

Names of Subscribers.	Daughters.	Dates of Birth.	Names of Subscribers.	Daughters.	Dates of Birth.
D. Eliott, Esq	C. F. E.	8th January, 1844.	A. F. Bruce, Esq	M. A. C.	13th April, 1843.
A. Robertson, Esq	M. F.	20th February, 1830.	S. Crawford, Esq	E. M.	13th Sept., 1842.
· -	1.	22nd August, 1840.	H. Stokes, Esq	E.	29th October, 1843
	M. E.	22nd January, 1846.		S. E.	3rd March, 1846.
G. D. Drury, Esq.	M. A.	24th December, 1853.		M. C.	24th June, 1855.
J. A. Hudleston, Esq.	H.	7th October, 1851.	D D Danker Bee	E. R.	3rd July, 1858.
G. J. Waters, Esq	C. M. H. M.	23rd May, 1838. 7th July, 1839.	R. D. Parker, Esq	M. E. J. C. J.	1st June, 1845. 8th August, 1844.
	A. E.	13th August, 1841.	F. B. Elton, Esq	C. P.	16th January, 1847
	E. R.G.	11th August, 1847.	i	C. L.	25th March, 1848.
	G. M.	10th April, 1851.		I. M.	21st May, 1850.
	A.R.M.	25th April, 1853.		E. M.	14th October, 1851
	L. F.	27th April, 1855.		G. C.	lst April, 1859.
C. R. Baynes, Esq	B	15th October, 1831.	Walter Elliot, Esq	D. H.	10th July, 1841.
	J. E.	14th April, 1835.		C. E.	14th April, 1851.
	M. A.	4th April, 1846.	G. S. Hooper, Esq	A. C.	7th June, 1846.
W.E. Underwood, Esq.	C. M. D. E.	10th May, 1847. 11th November, 1837	F. Anderson, Esq	S. H.	29th May, 1847. 29th May, 1852.
W.D. Oliuci wood, Esq.	E. C.	2nd October, 1845.		S. 11.	18th May, 1856.
J. F. Thomas, Esq	L. A.	23rd May, 1828.	J. Bird, Esq	A. C.	29th Nov., 1847.
,,,,,	K.	24th May, 1838.	A. S. Mathison, Esq.	C. J. G.	29th October, 1848.
E. Smalley, Esq	A.	13th October, 1845.	C. J. Bird, Esq	E. F.	16th April, 1859.
Sir T. U.Stonhouse, Bt.	E.C.N.	9th April, 1837.		F. P.	20th Feb., 1861.
	L. L. P.	14th February, 1840.	E. B. Glass, Esq	R.O.L.	29th Nov., 1853.
H. Chamier, Esq	H.	7th April, 1841.	J. D. Bourdillon, Esq.	٠٠. ا	13th March, 1858.
H. G. Keene, Esq	J. A.	24th October, 1826.		C.	9th August, 1859.
M. Lewin, Esq	K. L. E.	29th December, 1830. 3rd April, 1823.	T. W. Goodwyn, Esq.	E. S. E. B.	14th Jan., 1861. 3rd June, 1846.
Mr. Dewin, Dad.	М. М.	18th November, 1833.	1. 17. Goodwyn, 138q.	3. E. D.	29th May, 1848.
A. P. Onslow, Esq	G. I.	18th August, 1834.	G. T. Beauchamp, Esq.	M. E.	23rd October, 1838.
, 1	M. E.	3rd May, 1839.		E. B.	11th June, 1843.
	E. H.	28th May, 1845.		A. M.	21st Sept., 1844.
	S. H.	3rd March, 1850.	F. N. Maltby, Esq	M.H.M.	7th Feb., 1851.
R. W. Chatfield, Esq.	E. A.	4th October, 1837.	W. A. Morehead, Esq.	M. G.	12th Nov., 1830.
J. G. S. Bruere, Esq.	A. L.	13th April, 1835.		C. L.	10th March, 1836.
	A. J. A. M.	28th May, 1838.	C Whittingham For	G. C.	8th Dec., 1840. 13th April, 1851.
	F. B. M.	4th July, 1844. 6th March, 1848.	C. Whittingham, Esq. F. H. Crozier, Esq.		29th July, 1847.
A. Freese, Esq	H. J.	15th February, 1836.	1. 11. Oromor, maq	E. C.	27th August, 1848.
	A. I. C.	7th October, 1844.		G. J.	29th March, 1853.
George Bird, Esq.	A. P.	15th June, 1836.		M. A.	25th July, 1854.
	L. H.	27th March, 1844.	W. M. Molle, Esq	G. F.	17th July, 1848.
	<u>A</u> .	3rd March, 1851.		L. C.	lst Nov., 1850.
	F	29th July, 1855.	J. J. Cotton, Esq	J. E.	17th October, 1849.
I O Tumbull Per	L. M.	24th January, 1860.		M.R.P.	16th Jan., 1852.
J. G. Turnbull, Esq G. M. Ogilvie, Esq	C. M. Z. M.	17th September, 1838. 12th June, 1838.		P. L. M. S. C.	1st Feb., 1855. 9th Feb., 1857.
O. THE ORNAIG TRAIL	E. M.	19th January, 1840.	W. H. Bayley, Esq.	L. S.	4th Feb., 1837.
W. Douglas, Esq	S. M	23rd November, 1838.		H. E.	2nd Jan., 1838.
- 0 - , - 1 - 1	C. A.	25th August, 1840.	İ	A. F.	31st March, 1839.
į	A. E.	28th August, 1843.	Wm. Knox, Esq	F. E.	16th October, 1854.
	L.	29th September, 1854.		E. A.	25th March, 1857.
H. Morris, Esq	R.	11th March, 1838.	A. Hall, Esq	C.	7th Dec., 1846.
D M T	, I	Died, 1846.		E.	31st May, 1848.
F. M. Lewin, Esq	M.	1st March, 1840.		A.	23rd August, 1853.
	D. S. J. T. B.	15th July, 1843. 18th May, 1845.		E. E.	16th Sept., 1854. 26th October, 1858.
R. T. Porter, Esq.	A. T.	21st August, 1841.		F.	23rd Dec., 1859.
4- I Virul, 1254	L. F.	5th July, 1844.		D.	7th Jan., 1863.
	E. M.	25th October, 1847.	F. Copleston, Esq	H. C.	16th August, 1836.
W. A. D. Inglis, Esq.		21st June, 1841.		E. L.	15th March, 1854.
W. C. Ogilvie, Esq	E. L.	20th January, 1843.	W. H. Arbuthnot, Esq.		20th April, 1841
		19th February, 1849.			(see Circular).
	M. L.	11th September, 1853.			
	H.	7th July, 1856.	i i	1	

No. 20.—Memorandum showing all Retirements on the Annuity Fund of 1825, of Civilians of the Madras Civil Service, from 1st May, 1825, to 1st October, 1863, with the Total Number of Years of their Service, and the Average Number of Years' Service for one Annuitant.

(1)	(2)	(\$)	(4)	(5)	(6)
`	\-'	\"'	1-7	No. of	'''
			1	years' Service	
No.	Names of Annuitants.	Date of commence-	Date of commence-	at the	Remarks.
		ment of Service.	ment of Annuity.	date of	
				Retire- ment.	
				men.	
1	J. S. Sullivan	1st Sept. 1796	lst May, 1826	30	Died 14th Dec., 1837.
2	G. Gowan	27th July, 1797	1st May, 1826	29	Died 25th May, 1856.
3	A. Wilson	31st July, 1799	lst May, 1826	27	2001 2001 223,7 1000.
4	W. Chaplin	31st July, 1799	1st July, 1826	27	Died 30th April, 1843.
5	P. R. Cazalet	27th July, 1797	lst May, 1827	30	Died 27th Jan., 1839.
6	E. Powney	19th Aug., 1799	lst May, 1828	29	Died 23rd Jan., 1855.
7	Hon. A. H. Cole	12th July, 1801	lst May, 1829	28	Died 16th June, 1844.
8	John Cotton	12th July, 1801	lst May, 1830	29	Died 4th Dec., 1861.
10	James Vaughan	3rd Feb., 1802	lst May, 1830	28	Died 30th April, 1833.
111	G. J. Hadon	1st Sept., 1804	lst May, 1830	25 25	Died 20th April 1935
12	J. McKerrell J. H. D. Ogilvie	15th Feb., 1805 28th May, 1789	lst May, 1830 lst May, 1831	42	Died 30th April, 1835. Died 10th Mar., 1851.
13	U- I C V M	12th Dec., 1792	lst May, 1831	39	Died 30th April, 1835.
14	C. Hyde	13th April, 1798	lst May, 1831	33	Died in 1862.
15	J. O. Tod	25th May, 1798	lst May, 1831	33	Died 30th April, 1839.
16	F. A. Grant	27th July, 1789	1st July, 1832	43	Died 30th April, 1843.
17	W. Sheffield	28th Aug., 1800	lst May, 1832	32	Died 24th Feb., 1859.
18	D. Hill	1st Sept., 1804	lst May, 1832	28	
19	J. Gwatkin	27th June, 1806	1st May, 1832	26	Died 10th July, 1855.
20	James Taylor	2nd Sept., 1795	lst May, 1833	38	Died in 1852.
21	T. Newnham	31st July, 1799	lat May, 1833	34	Died 29th Sept., 1861.
22 23	J. Babington	1st Sept., 1804 3rd July, 1807	let May, 1833	29 26	Died 22nd April, 1852.
24	T Inmet	9th April, 1805	1st May, 1833 1st May, 1834	29	Died 25th May, 1860. Died 11th Sept., 1837.
25	W. Montgomerie	1st Sept., 1804	1st May, 1834	30	Died 23rd Oct., 1852.
26	H. Vibart	1st Sept., 1804	lst May, 1834	30	Died 5th Nov., 1839.
27	E. H. Woodcock	27th June, 1806	lst May, 1834	28	,
28	C. Harris	27th July, 1789	1st May, 1835	46	Died 12th Jan., 1840.
29	John Stokes	3rd July, 1807	1st May, 1835	28	
30	B. Cunliffe	3rd Aug., 1808	lst May, 1835	27	Died 11th Dec., 1857.
31	W. Oliver	24th July, 1801	lst May, 1836	35	Died 2nd Aug., 1846.
32	S. Nicholls	30th Jan., 1806	lst May, 1836	30 28	Died 22nd Aug., 1857.
34	II 6 C	6th Feb., 1808 20th Jan., 1797	lst May, 1836 lst May, 1837	40	Died 14th July, 1850.
35	T. Daniell	10th March, 1797	1st May, 1837	40	Died 25th Aug., 1842.
36	J. A. Casamaijor	8th July, 1802	lst May, 1837	34	
37	J. C. Whish	11th Jan., 1809	1st July, 1837	28	Died 22nd Nov., 1837.
38	N. Webb	4th March, 1778	lst May, 1838	60	Died 5th Aug., 1838.
39	G. E. Russell	6th Oct., 1802	lst May, 1838	35	
40	C. Roberts	3rd July, 1807	lst May, 1838	31	Died 31st July, 1850.
41	H. Baskerville (late Vivcash)	22nd Jan., 1812	lst May, 1838	26	
42	A. E. R. McDonell E. B. Wrev	3rd July, 1807	1st May, 1839	32	Diad 80th Man 1840
44	I G T	22nd Jan., 1812	lst May, 1839	27 34	Died 30th May, 1840.
45	J. B. G. P. Paske	23rd Oct., 1805 16th Jan., 1807	lst May, 1840 1st May, 1840	33	Died 3rd Aug., 1859.
46	Wm. Hudleston	28th Feb., 1811	1st May, 1840	29	Died 29th June, 1855.
47	James Haig	11th Jan., 1809	1st July, 1840	31	Died 31st May, 1834.
48	J. M. Macleod	10th April, 1811	lst May, 1841	30	,,,
49	J. Sullivan	28th Sept., 1803	lst May, 1841	37	Died 16th Jan., 1855.
50	A. Crawley	11th Jan., 1814	lst May, 1841	27	Died 10th July, 1849.
51	A. D. Campbell	lst Dec., 1807	7th May, 1842	34	Died 23rd April, 1857.
52	H. Montgomerie	5th Jan., 1813	12th May, 1842	29	D: 1104 T. 1000
53	W. B. Anderson	lith July, 1815	22nd May, 1842	27	Died 16th July, 1863.
54 55	G. M. Ogilvie	25th Jan., 1813	lst May, 1842	29	Died 8th Mar., 1844.
56	C. M. Lushington	10th March, 1802	let May, 1843	41 28	Dieu om mar., 1044.
	5. 20 CONON	11th July, 1815	lst May, 1843	20	
			1	L	·

No. 20 (continued).

	No. 20 (continued).								
(1)	(2)	(3)	(4)	(5)	(6)				
`′	`~'	(5)	`*'	No. of	''				
1	1			years'					
No.	Names of Annuitants.	Date of commence-	Date of commence-	Service at the	Remarks.				
1		ment of Service.	ment of Annuity.	date of					
				Retire- ment.					
			ļ						
57	N. W. Kindersley	7th Sept., 1814	2nd June, 1844	30	Died 3rd Dec., 1844				
58	Robert Clerk	30th June, 1816	lst May, 1844	28	2.00 0.0 200, 1011				
59	Re. Grant	26th June, 1817	5th June, 1844	27					
60	J. D. Gleig.	16th Feb., 1814	lst May, 1845	31	Died 20th Jan., 1852				
61 62	G. J. Casamaijor	3rd Jan., 1811	lst May, 1845	34 32	Died 29th May, 1849				
63	John Bird	9th April, 1813 2nd Feb., 1804	lst May, 1845 lst July, 1845	41	Died 30th Aug., 1851				
64	J. Paternoster	lst Feb., 1815	lst May, 1846	31					
65	F. F. Clementson	26th June, 1817	lst May, 1846	29					
66	J. C. Morris	27th July, 1818	2nd July, 1846	28	Died 2nd Aug., 1858				
67 68	J. Blackburn H. M. Blair	11th July, 1815	2nd July, 1847	32 29	Died 17th June, 1850				
69	F. M. Lewin	27th July, 1818 27th July, 1818	1st May, 1847 2nd July, 1847	29 29					
70	G. J. Waters	lst March, 1811	lst May, 1848	37					
71	H. Chamier	13th Jan., 1813	lst May, 1848	35					
72	M. Lewin	lst Feb., 1815	2nd July, 1848	33	Dial 00ak A				
73 74	Wm. Lavie W. H. Babington	13th Sept., 1821 20th June, 1821	lst May, 1848 lst July, 1849	27 28	Died 28th April, 1862				
75	R. A. Bannerman	20th June, 1821	7th June, 1849	28	Died 29th June, 1851				
76	H. Dickenson	11th Jan., 1809	lst May, 1850	41	Died 29th Nov., 1859				
77	M. D. Cockburn	26th Feb., 1808	lst May, 1850	42					
78	A. Maclean G. D. Drury	3rd July, 1817	lst May, 1850	33 37					
80	T. E. J. Boileau	25th Jan., 1813 1st Feb., 1815	lst July, 1850 lst May, 1851	36	Died 8th Feb., 1853				
81	G. Bird	25th July, 1820	lst May, 1851	31					
82	A. Freese	20th Jan., 1821	lst July, 1851	30					
83	A. Mellor	30th June, 1824	lst May, 1851	27					
85	A. F. Bruce J. C. Wroughton	3rd July, 1817 3rd July, 1817	lst July, 1852 lst May, 1852	35 35	Died 30th Nov., 1854				
86	H. Morris	10th Sept., 1823	lst July, 1852	29	2100 00111 11011, 1001				
87	W. D. Davis	lst Feb., 1815	1st May, 1853	38					
88	J. Walker	5th Feb., 1823	let May, 1853	30	Died 27th Sept., 1862				
90	S. Crawford W. Douglas	11th Feb., 1824 6th Oct., 1824	lst July, 1853 lst July, 1853	29 29					
91	C. P. Brown	29th March, 1817	lst May, 1854	37					
92	T. L. Blane	12th April, 1826	lst May, 1854	28					
93	W. A. Forsyth	10th Aug., 1826	lst May, 1854	27					
94	A. Robertson J. A. Hudleston	22nd Jan., 1817	lst May, 1855	38 38					
96	R. T. Porter	7th Jan., 1817 29th June, 1829	lst May, 1855 lst May, 1855	30					
97	H. Stokes	25th Aug., 1826	lst May, 1856	29					
98	A. W. D. Inglis	21st Feb., 1827	1st May, 1856	29					
99 100	Sir T. V. Stonhouse, Bt F. Anderson	30th Dec., 1815	lst May, 1857	41					
101	J. F. Bishop	30th Sept., 1826 20th July, 1827	lst May, 1857 1st May, 1857	31 30					
102	Daniel Eliott	29th Jan., 1817	lst May, 1858	41					
103	Sir H. C. Montgomery, Bt.	18th Feb., 1825	lst May, 1858	33					
104 105	T. Prendergast	23rd June, 1826	1st May, 1858	32					
105	T. A. Anstruther	21st May, 1828 19th Nov., 1828	lst May, 1859 lst May, 1859	31 30	!				
107	R. D. Parker	6th Jan., 1829	1st May, 1859	30					
108	S. Scott	16th Jan., 1829	lst May, 1859	30					
109	T. B. Roupell	13th Jan., 1830	lst May, 1859	29					
1110	C. J. Bird	7th July, 1830 7th July, 1830	lst May, 1859 lst May, 1859	29 29					
1112	G. S. Hooper	29th Jan., 1817	1st May, 1860	43	,				
113	J. Goldingham	26th Jan., 1820	lst May, 1860	40					
114	W. E. Underwood	2nd June, 1823	1st May, 1860	37	,				
115	F. B. Elton	7th July, 1830 7th July, 1830	lst May, 1860	30 30					
117	J. D. Bourdillon	28th Jan., 1829	lst May, 1860 lst May, 1861	30 32	'				
1		_ ,,							

No. 20 (continued).

(1)	(2)	(3)	(4)	(5)	(6)
No.	Names of Annuitants.	Date of commence- ment of Service.	Date of commence- ment of Annuity.	No. of years' Service at the date of Retire- ment.	Remarks.
118	T. W. Goodwyn	12th Jan., 1831	lst May, 1861	30	
119	M. Murray	6th July, 1831	1st May, 1861	30	
120	E. B. Thomas	9th Feb., 1825	lst May, 1862	37	
121	F. N. Maltby	12th Jan., 1831	lst May, 1862	31	
122	G. T. Beauchamp	12th Jan., 1831	lst May, 1862	31	
123	W. A. Morehead	27th April, 1825	29th Oct, 1862	37	
124	R. H. Williamson	22nd July, 1829	lst May, 1863	33	
125	H. Forbes	12th Jan., 1831	10th May, 1862	31	
126	C. Whittingham	9th Nov., 1831	18th Dec., 1861	30	
127	F. H. Crozier	18th Jan., 1832	13th May, 1862	30	i
128	J. J. Cotton	18th Jan., 1832	13th April, 1862	30	
129	W. M. Molle	18th Jan., 1832	23rd July, 1861	29	
130	F. Copleston	18th Jan., 1832	1st Dec., 1862	30	
131	T. B. A. Conway	6th July, 1831	13th July, 1861	30	
132	W. H. Bayley	10th July, 1832	10th June, 1861	29	
133	A. Hall	18th July, 1832	25th Nov., 1862	30	
134	P. Irvine	16th Jan., 1833	28th April, 1862	29	
135	Wm. Knox	28th Jan., 1835	27th Dec., 1861	26	
136	R. W. Chatfield	18th July, 1832	1st May, 1863	30	
137	T. L. Strange	6th Sept., 1826	2nd May, 1863	36	
138	B. Cunliffe	15th Jan., 1834	14th May, 1863	29	
139	A. Purvis	18th July, 1832	1st June, 1863	31	
140	C. J. Shubrick	18th July, 1832	28th July, 1863	31	

Total period of Service of 140 Annuitants, 4,468 years. On an average to each Annuitant of 31 years, 10 months, and 29 days.

No. 21.—Estimate of Donations on account of Daughters under the operation of the Provident Scheme for one Year, based on the actual Admissions to the Subsidiary Benefits during the interval 1850-51 to 1862-63.

	Number secured for it each Year.						
1850-51							15
1851-52			٠.				17
1852-53							14
1853-54							12
1854-55							17
1855-56							19
1856-57							16
1 857 –58							18
1858-59							9
1859-60							17
186061							17
1861-62			• •				11
186 2–63	••	••	••	• •	• •	••	11
	Total	••					193
Av	erage for	one ye	ar				15

 $15 \times 500 = Rs.$ 7,500, estimated donation for one year on account of daughters. Of the above donations three-fifths will bear 8 per cent. interest, and two-fifths will bear 4 per cent. interest.

No. 22.—List of Civil Servants who Died from 1825–26 to 1863–64, whilst in the Service, distinguishing those whose Families were admitted on the Fund from those whose Families never applied for its Benefits.

(1)		2)				(3)	(4)
No.	Na	mes.				Date of Decease.	Whether the Family was admitted on the Charity Fund or not.
1	G. R. Gostling, Esq.					1825-26	Not admitted.
2	G. F. Cherry, Esq.					1826–27	Ditto.
3	H. Fetherston, Esq.			• •		Ditto	Ditto.
4	S. Ibbetson, Esq.	• •		• •	• • •	Ditto	Ditto.
5	J. D. Newbolt, Esq.	• •	• •	••		Ditto	Admitted. Ditto.
6	J. Dacre, Esq	• •	• •	• •	• • •	1827–28 Ditto	Not admitted.
7 8	E. C. Greenway, Esq. J. A. Munro, Esq.	• •	• •	• •		Ditto	Admitted.
9	A. Wilmot, Esq.	• •	• •	• •		Ditto	Not admitted.
10	S. C. Clarke, Esq.	• •	• •	• •	::	1828-29	Ditto.
ii	F. Holland, Esq.		• • •	• • •		Ditto	Ditto.
12	A. Maitland, Esq.					Ditto	Ditto.
13	R. Peter, Esq					Ditto	Ditto.
14	H. Lord, Esq	• •	• •	• •		Ditto	Admitted.
15	H. Williams, Esq.	••	••			1829-30	Not admitted.
16	E. R. Hargrave, Esq.	••	• •	••	•••	Ditto 1830-31	Admitted. Not admitted.
17 18	Js. Cochrane, Esq.	• •	••	• •		Ditto	Ditto.
19	S. Money, Esq G. W. Saunders, Esq.	••	• •	• •		Ditto	Admitted.
20	C. J. Brown, Esq.	• •	••	• • •		1831-32	Not admitted.
21	R. Clive, Esq	••	• • •	• • •		Ditto	Ditto.
22	A. Cheape, Esq			• • •		Ditto	Admitted.
23	J. W. Russell, Esq.					Ditto	Not admitted.
24	F. A. Savage, Esq.					Ditto	Ditto.
25	S. Smith, Esq	• •	• •	• •	• • •	Ditto	Admitted.
26	C. A. Thompson, Esq.	• •	• •	• •		Ditto	Not admitted. Admitted.
27	D. Bannerman, Esq.	• •	• •	• •	- • •	1832 –33 Ditto	Not admitted.
28 29	J. B. Fraser, Esq. W. G. Home, Esq.	• •	• •	••	• • •	Ditto	Ditto.
30	C. E. McDonald, Esq.	• •	••	• • •		Ditto	Admitted.
31	W. H. Parry, Esq.	• •	• • •	• • •		Ditto	Not admitted.
32	H. Taylor, Esq		•••	•••		Ditto	Ditto.
33	C. M. Whish, Esq.			• •		Ditto	Ditto.
34	F. A. West, Esq.			٠.		Ditto	Ditto.
35	J. Blanshard, Esq.				•••	1833-34	Ditto.
36	N. S. Cameron, Esq.	• •	• •]	Ditto	Ditto.
37	A. J. Drummond, Esq.		••	• •		Ditto Ditto	Ditto. Admitted.
3 8 39	T. Gahagan, Esq. G. S. Gibbs, Esq.	• •	• •	• •		Ditto	Not admitted.
40	J. Hanbury, Esq.	• •	• •	• •	٠ ا	Ditto	Ditto.
41	J. Mitchell, Esq.	• •	••	••		Ditto	Ditto.
42	F. A. Robson, Esq.		• • • • • • • • • • • • • • • • • • • •	•••		Ditto	Admitted.
43	C. A. Bushby, Esq.	• •				1834- 3 5	Ditto.
44	R. Cathcart, Esq.					Ditto	Not admitted.
45	A. Cole, Esq	• •	• •	• •	[Ditto	Ditto.
46	F. Hall, Esq.	• •	• •	• •	[Ditto	Ditto.
47	C. R. H. Keate, Esq.	• •	• •	• •		Ditto	Ditto. Admitted.
48 49	G. Moore, Esq	••	• •	• •		Ditto Ditto	Ditto.
50	W. Mason, Esq J. Nisbet, Esq	••	• •	• •	:	Ditto	Not admitted.
51	R. Rickards, Esq.	••	• • •	•	:.l	Ditto	Admitted.
52	G. P. Taylor, Esq.		• •			Ditto	Not admitted.
53	J. Fraser, Esq			• •		Ditto	Ditto.
54	Sir J. Home, Bart.					18 3 5–36	Admitted.
55	M. Moore, Esq	• •	• •	• •		Ditto	Not admitted.
56	C. P. Skelton, Esq.	• •	• •	• •		Ditto	Ditto.
57	Wm. Brown, Esq.	• •	• •	• •	• • •	1837–38 Ditto	Ditto.
58 59	C. Dumergue, Esq. C. E. Oakes, Esq.	••	••	• •		Ditto	Admitted.

No. 22 (continued).

(I)	(2)			(3)	(4)
No.	Names.			Date of Decease.	Whether the Family was admitted on the Charity Fund or not.
60	J. A. R. Stevenson, Esq.			1837-38	Admitted.
61		·· ··		1838-39	Ditto.
62		••	•	Ditto	Ditto. Ditto.
63 64	ไทรยักง ที	• • • • • • • • • • • • • • • • • • • •	• • •	Ditto Ditto	Not admitted.
65	117 A 01.1	•• ••		Ditto	Admitted.
66	II D D	· · · · · · · · · · · · · · · · · · ·		1839-40	Ditto.
67				Ditto	Not admitted.
68	1 m a m 1 m	••		Ditto	Ditto.
69	T 771 173"			Ditto	Admitted.
70				1840-41	Not admitted.
71				Ditto	Ditto.
72		• • • •		1841-42	Ditto.
73		••		Ditto	Ditto.
74		• • • • • • • • • • • • • • • • • • • •	- 1	Ditto	Admitted. Not admitted.
76	D 04 P	••	- :	Ditto 1842–43	Admitted.
77	TR 36.1. Th	• • • • • • • • • • • • • • • • • • • •	- 1	Ditto	Ditto.
78	117 11 A M	•• ••		Ditto	Not admitted.
79	TO NO TO	• • • • • • • • • • • • • • • • • • • •		Ditto	Admitted.
80	T 17			Ditto	Not admitted.
81	ביו וביינים יו			Ditto	Admitted.
82				1843-44	Not admitted.
83		••		Ditto	Admitted.
84		••		1844-45	Not admitted.
85		• • • • • • • • • • • • • • • • • • • •		Ditto	Admitted.
86		• • • • • • • • • • • • • • • • • • • •		1845-46	Not admitted.
87 88		• • • • • • • • • • • • • • • • • • • •		Ditto 1846–47	Ditto. Ditto.
89	l n n a m ' *n .	· · · · ·	- 1	Ditto	Ditto.
90	O 70 17 10 "	•• ••		Ditto	Admitted.
91	l n n t: i n	• • • •		Ditto	Not admitted.
92	W. A. Neave, Esq	• • • • •		Ditto	Ditto.
93	D 11 1 12			1847-48	Ditto.
94				Ditto	Admitted.
95		• • • • • • • • • • • • • • • • • • • •		1848-49	Ditto.
96		• • • • • • • • • • • • • • • • • • • •		Ditto	Ditto.
97	J. A. Hunter, Esq	• • • • • • • • • • • • • • • • • • • •	• • •	Ditto	Not admitted.
98	A. Brooke, Esq	• • • • • • • • • • • • • • • • • • • •	• • •	1849–50 Ditto	Ditto. Admitted.
99 100	A. J. Cherry, Esq J. E. Chester, Esq	• • • • • • • • • • • • • • • • • • • •		Ditto	Not admitted.
101	TAY Transmission The			Ditto	Admitted.
102	J. Haggard, Esq	• • • • • • • • • • • • • • • • • • •		Ditto	Not admitted.
103	W. E. Lockhart, Esq			Ditto	Admitted.
104	G. A. Smith, Esq	••		Ditto	Ditto.
105	J. H. Bell, Ésq			1850-51	Ditto.
106	J. Horsley, Esq	• • • • • • • • • • • • • • • • • • • •		1851-52	Not admitted.
107	E. C. Lovell, Esq	• •		Ditto	Ditto.
108		• • • • • • • • • • • • • • • • • • • •		Ditto	Admitted. Ditto.
109		•• ••	• • •	1852–53	Ditto. Ditto.
110	O M Contain Pro-	• • • •		Ditto 1853–54	Ditto.
112	S. M. Anderson, Esq			Ditto	Ditto.
113	F. S. W. Cator, Esq			Ditto	Not admitted.
114	J. H. Cochrane, Esq	• • • • • • • • • • • • • • • • • • • •		Ditto	Ditto.
115	J. A. Wedderburn, Esq.			1854-55	Admitted.
116	A. S. Sandeman, Esq			Ditto	Ditto.
117	A. J. Tweedie, Esq	••		1855–56	Ditto.
118	H. Conolly, Esq	•• ••		Ditto	Not admitted.
119	L. D. Daniell, Esq	••	• • •	Ditto	Admitted.
120	R. Horsley, Esq	•• ••	• • •	1856– <i>5</i> 7	Not admitted.
l	<u> </u>				L

No. 22 (continued).

(1)	(2)	(3)	(4)
No.	Names.	Date of Decease.	Whether the Family was admitted on the Charity Fund or not.
121 122 123 124 125 126 127 128 129	C. H. Woodgate, Esq. G. S. Greenway, Esq. C. P. Gostling, Esq. J. R. Gordon, Esq. R. J. Sullivan, Esq. H. S. Alexander, Esq. T. D. Lushington, Esq. R. C. Lewin, Esq. D. Mayne, Esq. M. Norman, Esq.	 1856–57 Ditto Ditto 1857–58 Ditto Ditto 1858–59 Ditto Ditto 1858–60	Admitted. Not admitted. Admitted. Not admitted. Admitted. Not admitted. Not admitted. Ditto. Admitted. Ditto. Not admitted.
131 132 133 134 135 136 137	E. D. Binny, Esq. St. L. M. Grenfell, Esq. G. F. Fullerton, Esq. W. E. Cochrane, Esq. G. B. Tod, Esq. S. Thompson, Esq. F. W. Morris, Esq.	Ditto Ditto 1861–62 Ditto Ditto Ditto 1863–64	Ditto. Admitted. Ditto. Ditto. Ditto. Oitto. Admitted. Admitted.

No. 23.—List of Deceased Annuitants, distinguishing those whose Families were admitted on the Fund from those whose Families never applied for its Benefits.

No. Names. Date of Decesses. Date of the Charity Fund, or not.						,		I
No. Names Date of Decesses Decesses On the Charity Fund, or not.	(1)	((2)				(3)	(4)
Total	No.	Na	mes.					was Admitted on the Charity Fund,
2	1	R. Hughes, Esq.					1803	Not admitted.
T. Snodgrass, Esq. 1834								
B. Tarin, Esq. 1839		G. Thompson, Esq.				1		
R. Woolf, Esq. 1836 Admitted. Not admi	_	T. Snodgrass, Esq.		• •	••			
Wm. Webb, Esq. 1807					••	- 1		
B					••			
9 J. H. Shardon, Esq. 1810 Ditto. 10 Hon. B. Cockrane 1826 Ditto. 11 J. Mitford, Esq. 1834 Ditto. 12 J. Chamier, Esq. 1831 Ditto. 13 C. N. White, Esq. 1833 Ditto. 14 W. Gordon, Esq. 1833 Ditto. 15 W. Jones, Esq. 1833 Ditto. 16 T. Cockburn, Esq. 1850 Ditto. 17 N. E. Kindersley, Esq. 1831 Ditto. 18 B. Branfill, Esq. 1841 Ditto. 19 R. Clerk, Esq. 1815 Ditto. 20 R. Darwall, Esq. 1813 Ditto. 21 R. Malcolm, Esq. 1813 Ditto. 22 R. Dillon, Esq. 1813 Ditto. 22 R. Dillon, Esq. 1813 Ditto. 23 D. Ince, Esq. 1822 Ditto. 24 C. Baker, Esq. 1839 Ditto. 25 Sir S. Young, Bt. 1826 Not admitted. 26 E. Atkinson, Esq. 1836 Admitted. 27 M. Dick, Esq. 1835 Ditto. 28 H. Wilson, Esq. 1835 Admitted. 29 A. Mackensie, Esq. 1835 Admitted. 30 J. Wallace, Esq. 1847 Ditto. 30 J. Wallace, Esq. 1847 Ditto. 31 A. Falconar, Esq. 1847 Ditto. 32 J. H. Casamajjor, Esq. 1834 Ditto. 33 T. Oakes, Esq. 1834 Ditto. 34 W. Balfour, Esq. 1835 Ditto. 35 T. Anstery, Esq. 1835 Ditto. 36 G. Reade, Esq. 1835 Ditto. 37 T. N. Aufferer, Esq. 1843 Ditto. 38 J. Strange, Esq. 1843 Ditto. 39 G. Reade, Esq. 1843 Ditto. 30 J. Wallace, Esq. 1844 Ditto. 31 J. Reade, Esq. 1843 Ditto. 34 W. Balfour, Esq. 1843 Ditto. 35 T. Anstery, Esq. 1843 Ditto. 36 G. Reade, Esq. 1844 Ditto. 37 T. N. Aufferer, Esq. 1845 Ditto. 38 J. Strange, Esq. 1843 Ditto. 39 G. Buchan, Esq. 1843 Ditto. 30 J. Wallace, Esq. 1844 Ditto. 31 G. Coleman, Esq. 1843 Ditto. 34 W. Balfour, Esq. 1844 Ditto. 35 T. Anstery, Esq. 1845 Ditto. 36 G. Reade, Esq. 1846 Ditto. 37 T. N. Aufferer, Esq. 1847 Ditto. 38 J. Strange, Esq. 1848 Ditto. 39 G. Buchan, Esq. 1849 Ditto. 30 J. Strange, Esq. 1840 Ditto. 31 Ditto. 32 J. H. Casamaijor, Esq. 1843 Ditto. 34 W. Balfour, Esq. 1844 Ditto. 35 T. Short, Feq. 1845 Ditto. 36 G. Strachey, Esq. 1847 Ditto. 37 Ditto. 38 J. Strange, Esq. 1848 Ditto. 38 J. Strange, Esq. 1849 Ditto. 39 G. Buchan, Esq. 1849 Ditto. 39 G. Buchan, Esq. 1849 Ditto. 39 G. Buchan, Esq. 1849 Ditto. 39 G. Buchan, Esq. 1849 Ditto. 39 G. Buchan, Esq. 1849 Ditto. 39 G. Buchan, Esq. 1849 Ditto. 39 G. Buchan, Esq. 1849					•••	- 1	1805	Ditto.
10 Hon. B. Cochrane 1826 Ditto.								
12		Hon. B. Cochrane			• •			
C. N. White, Esq. 1839 Ditto.					• •			
14 W. Gordon, Esq. 1833 Ditto.					• •	- 1		
W. Jones, Esq. 1812				• •	• •	- 1		
T. Cockburn, Esq. 1850 Ditto.					• •			
N. E. Kindersley, Esq. 1831 Ditto.					• •	- 1		Ditto.
18							1831	
20 R. Darwall, Esq. 1813 Ditto.	18			• •		- 1		
R. Malcolm, Esq. 1813 Ditto.			• •					
R. Dillon, Esq. 1818 Ditto.			• •	• •	• •			
D. Ince, Esq. 1822 Ditto. Ditto.								
C. Baker, Esq. 1839		R. Dillon, Esq				- 1		
Sir S. Young, Bt. 1826		C Raker Esq.			••	1		
26 E. Atkinson, Esq. 1826 Not admitted. 27 M. Dick, Esq. 1836 Admitted. 28 H. Wilson, Esq. 1852 Not admitted. 29 A. Mackenzie, Esq. 1846 Ditto. 30 J. Wallace, Esq. 1847 Ditto. 31 A. Falconar, Esq. 1815 Ditto. 32 J. H. Casamaijor, Esq. 1834 Ditto. 32 J. H. Casamaijor, Esq. 1834 Ditto. 34 W. Balfour, Esq. 1837 Ditto. 34 W. Balfour, Esq. 1837 Ditto. 35 T. Anstey, Esq. 1825 Ditto. 36 G. Reade, Esq. 1825 Ditto. 37 T. N. Aufrere, Esq. 1843 Ditto. 38 J. Strange, Esq. 1840 Ditto. 39 G. Buchan, Esq. 1843 Ditto. 40 J. Reade, Esq. 1843 Ditto. 41 G. Coleman, Esq. 1842 Admitted.		Sir S. Young, Bt.				- 1		Admitted.
M. Dick, Esq. 1833 Ditto.		E. Atkinson, Esq.					1826	
A. Mackennie, Esq. 1852 Not admitted.								
1846 Ditto. Dit				• •				
31					• •			
32						- 1		
T. Oakes, Esq. 1834 Ditto.						- 1		
34 W. Balfour, Esq. 1843 Ditto. 35 T. Anstey, Esq. 1843 Ditto. 36 G. Reade, Esq. 1825 Ditto. 37 T. N. Aufrere, Esq. 1835 Ditto. 38 J. Strange, Esq. 1840 Ditto. 39 G. Buchan, Esq. 1856 Ditto. 40 J. Reade, Esq. 1843 Ditto. 41 G. Coleman, Esq. 1843 Ditto. 41 G. Coleman, Esq. 1842 Admitted. 42 C. Wetherell, Esq. 1842 Admitted. 43 T. Townsend, Esq. 1861 Not admitted. 44 R. Alexander, Esq. 1861 Admitted. 45 S. Skinner, Esq. 1851 Not admitted. 46 G. F. Travers, Esq. 1851 Not admitted. 47 W. Hawkins, Esq. 1857 Ditto. 48 J. Hodgson, Esq. 1857 Admitted. 50 G. Strachey, Esq. 1851 Not				••	• • •			
T. Anstey, Esq. 1843 Ditto.						1	1837	
36 G. Reade, Esq. 1825 Ditto. 37 T. N. Aufrere, Esq. 1835 Ditto. 38 J. Strange, Esq. 1840 Ditto. 39 G. Buchan, Esq. 1843 Ditto. 40 J. Reade, Esq. 1843 Ditto. 41 G. Coleman, Esq. 1842 Admitted. 42 C. Wetherell, Esq. 1842 Admitted. 43 T. Townsend, Esq. 1861 Not admitted. 44 R. Alexander, Esq. 1861 Admitted. 45 S. Skinner, Esq. 1854 Admitted. 45 S. Skinner, Esq. 1854 Not admitted. 47 W. Hawkins, Esq. 1836 Ditto. 48 J. Hodgson, Esq. 1857 Ditto. 49 W. E. Wright, Esq. 1851 Admitted. 50 G. Strachey, Esq. 1849 Not admitted. 51 F. Richardson, Esq. 1856 Ditto. 52 J. S. Savory, Esq. 1857	35							
1. N. Aller, Seq. 1840 Ditto.								1
39 G. Buchan, Esq. 1843 Ditto.				• •	• •			
J. Reade, Esq. 1843 Ditto.					• •	1		
1857 Ditto.					••			
42 C. Wetherell, Esq. 1842 Admitted. 43 T. Townsend, Esq. 1862 Not admitted. 44 R. Alexander, Esq. 1861 Ditto. 45 S. Skinner, Esq. 1854 Admitted. 46 G. F. Travers, Esq. 1851 Not admitted. 47 W. Hawkins, Esq. 1836 Ditto. 48 J. Hodgson, Esq. 1857 Ditto. 49 W. E. Wright, Esq. 1851 Admitted. 50 G. Strachey, Esq. 1849 Not admitted. 51 F. Richardson, Esq. 1856 Ditto. 52 J. S. Savory, Esq. 1857 Ditto. 53 G. Paske, Esq. 1822 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1852 Ditto. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.	-							
43 T. Townsend, Esq. 1822 Not admitted. 44 R. Alexander, Esq. 1861 Ditto. 45 S. Skinner, Esq. 1851 Not admitted. 46 G. F. Travers, Esq. 1851 Not admitted. 47 W. Hawkins, Esq. 1836 Ditto. 48 J. Hodgson, Esq. 1857 Ditto. 49 W. E. Wright, Esq. 1841 Not admitted. 50 G. Strachey, Esq. 1849 Not admitted. 51 F. Richardson, Esq. 1856 Ditto. 52 J. S. Savory, Esq. 1857 Ditto. 53 G. Paske, Esq. 1822 Ditto. 53 G. Paske, Esq. 1839 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1842 Admitted. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.					• • •			
44 R. Alexander, Esq. 1861 Ditto. 45 S. Skinner, Esq. 1854 Admitted. 46 G. F. Travers, Esq. 1851 Not admitted. 47 W. Hawkins, Esq. 1857 Ditto. 48 J. Hodgson, Esq. 1857 Admitted. 49 W. E. Wright, Esq. 1851 Admitted. 50 G. Strachey, Esq. 1856 Ditto. 51 F. Richardson, Esq. 1856 Ditto. 52 J. S. Savory, Esq. 1857 Ditto. 53 G. Paske, Esq. 1822 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1852 Ditto. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.								
1851 Not admitted. 1852 1854 Not admitted. W. Hawkina, Esq. 1856 Ditto. 1857 Ditto. 1857 Admitted. Not admitted. Strackey, Esq. 1857 Ditto. Not admitted. Not admitted. Not admitted. Not admitted. Not admitted. Strackey, Esq. 1856 Ditto. Ditt				• •	• •			
47 W. Hawkins, Esq. 1836 Ditto. 48 J. Hodgson, Esq. 1857 Admitted. 49 W. E. Wright, Esq. 1851 Admitted. 50 G. Strachey, Esq. 1849 Not admitted. 51 F. Richardson, Esq. 1856 Ditto. 52 J. S. Savory, Esq. 1857 Ditto. 53 G. Paske, Esq. 1822 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1852 Ditto. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.			••		• •	- 1		
W. Hawkin, 184. 1857 Ditto.				• •	• •	- 1		
49 W. E. Wright, Esq. 1851 Admitted. 50 G. Strachey, Esq. 1856 Ditto. 51 F. Richardson, Esq. 1857 Ditto. 52 J. S. Savory, Esq. 1857 Ditto. 53 G. Paske, Esq. 1822 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1852 Ditto. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.	-			• •	• •			
50 G. Strachey, Esq. 1849 Not admitted. 51 F. Richardson, Esq. 1856 Ditto. 52 J. S. Savory, Esq. 1857 Ditto. 53 G. Paske, Esq. 1822 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1852 Ditto. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.		W E Wright Esq.	• •	• • •	••	- ::1		
51 F. Richardson, Esq. 1856 Ditto. 52 J. S. Savory, Esq. 1857 Ditto. 53 G. Paske, Esq. 1822 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1852 Ditto. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.		G. Strachev. Esq.						
52 J. S. Savory, Ésq. 1857 Ditto. 53 G. Paske, Esq. 1822 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1852 Ditto. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.						- 1	1856	
53 G. Paske, Ésq. 1822 Ditto. 54 J. D. Alexander, Esq. 1839 Ditto. 55 C. Woodcock, Esq. 1852 Ditto. 56 R. Sherson, Esq. 1842 Admitted. 57 S. Boutflour, Esq. 1830 Ditto.						- 1		
5.5 C. Woodcock, Esq. 1852 Ditto.		G. Paske, Esq						
56 R. Sherson, Esq				• •	• •			
57 S. Boutflour, Esq				• •	• •			
57 S. Bouthour, 134.	-			• •	• •			
On the test and district to the second secon		Sir R. T. Farmhar R		• •	• •			
		Za ze. z. zmyunut, D		• •	• •			

No. 23 (continued).

(1)	(2)				(3)	(4)
No.	Nan	mes.				Date of Decease.	Whether the Family was Admitted on the Charity Fund, or not.
59	G. Straton, Esq.					1853	Not admitted.
60	J. Hepburn, Esq.					1845	Ditto.
61	J. Balfour, Esq.	• •	• •			1845	Ditto.
62	R. Fullerton, Esq.	• •	••	• •		1831	Ditto.
63	E. P. Blake, Esq.	• •	• •	• •		1860 1859	Ditto.
64 65	W. Dodwell, Esq.	• •	• •	••	• • •	1835	Ditto.
66	W. Linley, Esq. A. Reade, Esq.	• •	• •	• • •		1849	Ditto,
67	lrop'i n		••			1840	Ditto.
68	J. S. Sullivan, Esq.					1837	Ditto.
69	G. Gowan, Esq.					1856	Ditto.
70	W. Chaplin, Esq.					1843	Ditto.
71	P. R. Cazalet, Esq.			• •		1839	Ditto.
72	W. Wayte, Esq.	• •	• •	• •	••	1860 1846	Ditto.
73 74	Sir J. Forbes, Bart.	• •	• •	• •		1855	Ditto.
74 75	T. Hankey, Esq. E. Powney, Esq.	• •	• •	• •	- 11	1855	Ditto.
76	R. Rogers, Esq.	• •	• •	• •		1855	Ditto.
77	H. Mortlock, Esq.	• •	• •	•••		1837	Admitted.
78	G. Parish, Esq.		•••			1839	Not admitted.
79	M. Forbes, Esq					18 39	Ditto.
80	D. Cockburn, Esq.					1836	Ditto.
81	Hon. A. H. Cole					1844	Ditto.
82	W. G. Monk, Esq.	• •	• •			1859	Admitted.
83	J. W. Lewis, Esq.	• •	• •	• •	. 1	18 36 1851	Not admitted. Admitted.
84	J. M. Heath, Esq.	• •	• •	••		1861	Not admitted.
85 86	J. Cotton, Esq J. Vaughan, Esq.	• •	• •	• •	• • •	1833	Ditto.
87	J. McKerrell, Esq.	••	• •	• •		1835	Ditto.
88	W. Taswell, Esq.	••			- 1.1	1857	Ditto.
89	J. Turing, Esq					1846	Ditto.
90	J. H. D. Ogilvie, Esq.		• •			1851	Ditto.
91	Hon. L. G. H. Murray		• •			1837	Ditto.
92	C. Hyde, Esq	• •	••			1862	Ditto.
93	J. O. Tod, Esq	• •	• •	• •		1837 1843	Ditto.
94 95	F. A. Grant, Esq.	••	• •	••	1	1859	Ditto.
96	W. Sheffield, Esq. J. Gwatkin, Esq.	••	••	• •		1855	Ditto.
97	J. Taylor, Esq.	• •	• •			1852	Ditto.
98	T. Newnham, Esq.		• •	• •		1861	Ditto.
99	J. Babington, Esq.			•••		1852	Admitted.
100	R. Bayard, Esq.					1860	Not admitted.
101	T. Jarrett, Esq					1837	Admitted.
102	W. Montgomery, Esq.	••	• •			1852	Not admitted.
103	H. Vibart, Esq	••	••	• •		1839 1853	Admitted. Not admitted.
104	A. H. Hamilton, Esq.	••	• •	• •		1840	Ditto.
105 106	C. Harris, Esq B. Cunliffe, Esq.	• •	• •	• •		1857	Ditto.
107	W. Oliver, Esq.	• •	• •	• • •		1846	Ditto.
108	S. Nicholls, Esq.	• •	••	•••		1857	Admitted.
109	H. Gardiner, Esq.			••		1846	Not admitted.
110	Sir R. A. Abercromby,	Bart.				1855	Ditto.
111	Sir R. B. J. Honyman,		••	• •		1842	Ditto.
112	H. S. Græme, Esq.	• •	• •	• •		1850	Ditto.
113	T. Daniell, Esq	• •	٠.	• •		1842	Ditto.
114	J. C. Whish, Esq.	• •	••	• •	•	1837 18 3 8	Ditto.
115	N. Webb, Esq C. Roberts, Esq.	• •	•	• •	• •	1850	Ditto.
116 117	E. B. Wrav, Esq.	• •	• •	••		1840	Admitted.
118	J. B. G. P. Paske, Esq.		• •			1859	Not admitted.
	J. L. C. L. Lunco, Luq.	•	• •	• •	- '		

No. 23 (continued).

(1)	(2)		(3)	(4)
No.	Names.		Date of Decease.	Whether the Family was Admitted on the Charity Fund, or not.
119	Wm. Hudleston, Esq		1855	Not admitted.
120	T TT-1 T3		1854	Admitted.
121	A TO YY., 31., A TO		1861	Not admitted.
122	1 7 C 11: 13 "		1855	Ditto.
123	A Chamban Pan		1849	Ditto.
124	lmae 'i' in		1858	Ditto.
125	A 70 O1-11 72-2		1857	Ditto.
126	TIZ TO A STORE TO STORE		1863	Admitted.
127	A. E. Angelo, Esq		1853	Not admitted.
128	R. Anderson, Esq		1843	Ditto.
129			1844	Ditto.
130			1844	Ditto.
131	J. D. Gleig, Esq		1852	Admitted.
132			1849	Not admitted.
133			1851	Ditto.
134	J. C. Morris, Esq		1858	Admitted.
135	J. Blackburne, Esq		1850	Not admitted.
136			1862	Admitted.
137			1851	Not admitted.
138	H. Dickinson, Esq		1859	Admitted.
139	T. E. J. Bolieau, Esq.	• • •	1853	Ditto.
140			1854	Not admitted.
141	J. Walker, Esq		1862	Admitted.

INDEX TO APPENDIX II.

Retired Members.—Payments required for New Benefits under the Provident Scheme.

- A. Circular to the retired members of the Madras Civil Service.
- B1. List of retired members of the Madras Civil Service who have elected to join the new scheme, with information as to their families.
- B2. Ditto ditto who abide by the old Rules, with information as to their families.
- C. Summary of List No. 22, Civil Servants who died in the Service from 1825-6 to 1863-4, showing in each year the number whose families were admitted or not admitted on the Fund.
- D. Summary of List No. 23, of annuitants who died from 1803 to 1863, showing in each year the number whose families were admitted or not admitted on the Fund.
- E¹. Estimated amount required to be paid by retired members who have conditionally accepted the new scheme, to entitle their families to benefits under the new Rules.
- E2. Alphabetical list of retired members who have conditionally accepted the new scheme.
- F. Ditto ditto who had paid back-payments to secure their families the benefits of the new Rules.
- G. Ditto ditto who abide by the old Rules.

A.

CIRCULAR.

To

Esq.

RETIRED MEMBER

OF THE MADRAS CIVIL SERVICE.

SIR.

I am directed by the Trustees of the Civil Fund to inform you that a modification of the Fund Rules has been adopted by the Service, the effect of which is to place the Fund on a similar footing with those of Bengal and Bombay, and in the case of the families of those who join the new scheme, to abolish the restriction on the possession of private property by claimants to Annuities. There are some further slight modifications in the rates of Annuity which are shown in the annexed Comparative Statement.

The additional payments from and after 1st May, 1863, to which the Members of the Service have agreed in order to establish the Fund on its new footing are as follows:—

Subscription at the rate of $2\frac{1}{4}$ per cent. on allowances during the whole period of service in the cases of married men and of widowers with families.

Subscription at the same rate up to 16 years, and at 1 per cent. for the whole further period of service, in the cases of unmarried men and of widowers without families.

Back payment at the above rates, from the 27th July, 1860, on which the original proposal was adopted, to 80th April, 1863, in the cases of all who had ceased to subscribe at that date—and for the lesser intervening period in the cases of all who may have intermediately ceased to subscribe.

Donations on future marriages and births from 1st May, 1863, at the following rates:-

On marriage .	•			Rs. 1,500	0	0	
On birth of a daughte	er .		•	500	0	0	
9.800	_	_	_	250	0	0	

It is resolved to offer to all Retired Subscribers the option of joining the new scheme on the condition of their consenting to the payment of the above donations on all future events—and to the payment on account of their existing families of such sum as an Actuary may determine to represent fairly the value in each case of the difference between the contingent liabilities to which the Fund is at present exposed under the old Rules and will hereafter be exposed under the new, calculated at 6 per cent. interest—the final decision being left open to the subscriber till 3 months after the Actuary's calculation in his case shall have been communicated to him.

Should you desire to avail yourself of this option, it is necessary that you fill up and sign the enclosed form of letter A. and Statement and forward it to Messrs. Coutts & Co. within 4 months from the date of this letter.

An alternative form of letter B. with similar appended form of Statement is also enclosed which I request you will be good enough to fill up and forward to Messrs. Coutts & Co. in the event of your electing to abide by the *old* Rules, as the same information is necessary for the adjustment of the appropriated capital which is to be set aside for the security of all vested interests.

I have the honour to be, Sir,
Your obedient Servant,

MADRAS CIVIL FUND OFFICE, 25th October, 1863.

Secretary.



A (continued).

COMPARATIVE STATEMENT OF ANNUITIES, &c.

UNDER NEW RULES, WITHOUT RESTRICTION ON THE POSSESSION OF PRIVATE PROPERTY.	On admission on the Fund To be reduced on remarriage to £150 and to be continued during remarriage and till death at the reduced rate. Should the 2nd husband be a Subscriber to the Provident Fund, then on 2nd widowhood, the Annuity will again be raised to £300. SONS AND DAUGHTERS. £ 50 from birth to 6 years of age £ 40 £ 70 from 6 to 10	### DAUGHTERS. ###################################	Incapacity for earning his livelihood, then instead of the donation, the annual allowance to be granted or continued, after the age of 21 till recovery, as the case may be.
UNDER OLD RULES, WITH RESTRICTION ON THE POSSESSION OF PRIVATE PROPERTY.	Heducible by the amount of private income in arcess of £45 per annum (See note). WIDOWS. WIDOWS. Per annum. On admission on the Fund The Annuity is discontinued on remarringe, but revives on second Widowhood, under the same limitations as to private income. SONS AND DAUGHTERS. per annum. If both parents £ 80 from birth to 6 years of uge £ 50 from birth to 6 years of uge £ 100 from birth to 19 L £ 100 from in to 19 E 80 from 6 to 10 E 100 from 10 to 19 ON ATTAINING THE AGE OF 19 YEARS.	A Donation of £300 in full of all claims. Or if labouring under mental or bodily incapacity for curning his livelihood, then instead of the Donation, an Annuity of £50 till recovery or death, reducible by any private income beyond £50, under resolution dated 9th January, 1845. If the Subsidiary lenefits have Not been secured. A Donation of £300 in full of all further claims. Or in lieu of the Donation an Annuity of £50 till marriage or death, the Annuity being reducible by any income beyond £45 (See note). If the Subsidiary benefits Have Leen secured. A Donation of £300, Or in lieu of the Donation an Annuity of £100 till marriage or death, reducible by any private income in excess of £45 (See note).	N.B. The allowance of £4b private income to annuitants corresponds with the capital of £1,500 which under the Resolution of 16th July, 183b, the Trastees were authorized to exclude from their calculations in estimating the private income derivable from the paternal eather by the family of a decreaced subscriber—in order to determine the amount of Annuity to which thry may be entitled. The allowance of £4b is therefore due to the whole of the family—and not to each individual member or Annuitant. The plan of adjusting the account is that from the gross moone derivable from the estate of the decreaced Subscriber £45 to at acide. Then the removance is divided into equal alastes corresponding with the whole number of surviving members of deceased's family (widow and children), whether liable to come on the Fund or superannusted or other whe insightle. The individual pensions are then reduced by the amount of these individual shares of the private theomet and the behave is paid either to the mother on account of all the family or to the guardians, or separately to those of the daughters who may have stained their majority, if desired. If the family consists of but one individual and that individual should come on the Fund, he or all subsect the medical plan of the full allowance of £45—but only £40 private income altogether is allowed to one family without reduction of pensions, except in the case of sons mentally or physically incapacitated, whose cases are disposed of under the special rule above.

A (continued).

N.B.—The form not used should be cancelled by drawing a line across it.

(Form B.)	To	Messers. Coulty And Co.,	Agents to the Madras Civil Fund.	Gentlemen, With reference to the Circular letter from the Secretary Civil Fund Madras, to the Retired Members of the Madras Civil Service, dated 25th October, 1863, I hereby intimate to you my intention to abide by the old Rules of the Civil Fund regarding annuities to widows and orphans. I annex the information regarding my family required for the adjustment of the appropriated capital. I have the honour to be, Gentlemen, Your obedient Servant,	Dated Member of the 186 Retired Member of the
(Form A.)	To	Messes. Coutts and co.,	Agents to the Madras Civil Fund.	Gentlemen, With reference to the Circular letter from the Secretary Civil Fund Madras, to the Retired Members of the Madras Civil Service, dated 25th October, 1863, I hereby intimate to you my conditional assent to join the new Provident Scheme, and undertake to give my final decision within 3 months from the communication to me of the amount which the Actuary may determine to be payable by me on account of my existing family, in addition to my past payments. I annex the requisite information regarding my family. Gentlemen, Your obedient Servant,	Dated Rehred Member of the 186 Madran Civil Service.

A (continued).
FORM.

No. of Their dates and daughters of Birth. Whether the subdiary payments to the Civil Fund were made on account of the daughters or not.	
Their dates of Birth.	
No. of sons living under the age of 21.	
Whether Birth of Its Single. Hving.	
Date of Birth.	
NAME OF SUBSCRIBER.	

	Remarks.	Died after arrival of Cir-	7000 tonor man	cular, 28th Nov., 1863.		l mind.			Died after arrival of Circular.	Died office the coming of				Mr. R. died after arrival	rcular.			
		Died after		cular, 20		Of unsound mind.			Died after		the Circular.			Mr. R. die	of the Circular.			
	If on the Subsidiary Fund,	Š ~~		Š Z	ğ Z	: ~	~	å ~~	:	Yes	X es	% ~~	Yes	έź	°Ž	_		Two eldest daugh-
	Their Dator, of Birth.	18th May, 1818	98-3 We- 1811	13th Sept., 1813	24th July, 1818 23rd June, 1826	19th Dec., 1828	25th Nov., 1824 7th Sent, 1831	25th Feb., 1833 30th April, 1834	. :	13th Oct., 1845	1830.	27th June, 1818 28th Nov., 1825 8th Jan 1832	20th July, 1829 10th April, 1841	10th Aug., 1850 12th Jan., 1820	let Dec., 1843	Zud Juiy, 1659		12th June, 1838 19th June, 1840 9th July, 1847 29th Oct., 1848
	Ag.	44	<u> </u>	4 6	483	* :	88 5	88	:	17	8	:	52	43	13	, ,		1222
	No. of Daugh- ters Living and Un- married.	81	c	•	es	:	*		:	- 60)	:	63	:-	67			4
	Their Dates of Birth.	:		:	:	:	:		:	: .	:	:	15th Aug., 1845	2nd June, 1853	26th Jan., 1861	16th May, 1843		10th Jan., 1851
	Age.	:		:	:	:	:		:	:	:	:	17	6 :	64	19		12
	No. of Sons Living under the Age of 21.	:		:	:	:	:		;	;	:	:	2	:	-	1		-
	Date of Birth of Wife If Living.	29th April, 1789	23rd Jan., 1818	:	22nd July, 1784	28th Oct., 1796	10th May, 1797		28th Jan., 1812	26th Sept, 1797 9th July, 1801 1792		:	1st July, 1815	27th Aug., 1795	20th Oct., 1820	20th Oct, 1802 5th April, 1795	22nd Mar., 1792 20th Nov., 1794	:
	Age of Wife.	74	45	:	82	99	99		51	65 61 70		:	47	29	43	88	71	:
	Married. or Single.	Married	Married		Married	'89 Married	Married		Married	Married Married		м ідожег	Married	Married	Married	Married Married	Married Married	Widower
	Date of Birth.	30th April, 1782	17th May, 1775		14th Aug., 1784	26th Sept., 1789	11th Dec., 1788		5th Dec., 1791	27th Jan., 1791 7th Nov., 1790	1000	9th Feb., 1793	24th Mar., 1807	10th Sept., 1786	6th Jan., 1793	19th Dec., 1789 28th Mar., 1793	14th Jan., 1792 10th May, 1792	4th Dec., 1793
	Age let May, 1863.	8	84	70	78	73	74		12	222		:	99	92	02		22	
	Intials of Member.	W. C.	T.R.L	¥	ರ ಜೆ	S. H. G. J. H.	E.H.W.		н. г.		5 6	W. I. B.	W.U.A.	G. E. R.	н. в.	Æ.R.M [·] D J. A. D.	J. M. M. H. M.	G. M. O.
-	χο.	1	C1 0	•	4	9	6		10	13	:		011	18	19	20	25	26

÷
~
as
Š
.=
-13
0
U
_
~
_

Remarks.																			A Denoubter Loss since the	arrival of the Circular	(viz., 15th Jan., 1864).		-			
If on the Subsidiary Fund.		~		ž		~	- B	_		e i		Yes		Xes }		Xes		¥98		Yes {		# .	ž			
Their Dates of Birth.		8th Nov., 1835	14th Sept., 1850	12th Dec., 1817		lst Mar., 1840	18th May, 1845	23rd May, 1838	13th Aug., 1841	11th Aug., 1847	25th April, 1851	7th April, 1841		3rd April, 1823 21st Now 1833	20th Jan., 1843	19th Feb., 1849	7th July, 1856	24th Dec. 1853	, , , , , , , , , , , , , , , , , , , ,	2/tn Mar., 1844 3rd Mar., 1851	29th July, 1855	7th Oct., 1844	22nd July, 1860	•		
₽ 68		27	2 2	45		23	17	25		15		23	:	0 0 0 0 0 0 0	8	<u></u>	9	6	-	12	7	2 7	- 2			
No. of Daugh- ters Idving and Un- married				-		63	:	9				_	(.79	4	:	:	-	c	• :	:•	¬ 6	: :			
Their Dates of Birth.	18th Aug., 1847	6th Jan., 1844	23rd Mar., 1847	:		25th June, 1846	101 (max mor	4th July, 1849				8th July, 1848	20th May, 1855	:	16th Sept., 1844	21st Aug., 1846	1 th Feb., 1001	12th Sept., 1844	14th Nov., 1846	25th Oct., 1847 2nd Sept., 1853	10th Aug., 1857	7th Jan 1853	3rd Ang., 1854	12th Oct., 1855	16th Sept., 1862	
Age.	15	19	16			16	2	<u> </u>				14	7	:	18	91	3	18	91	9	40	: 2		~ 4	0	
No. of Sons Living under the Age of 21.	61	•		:		63		-				61		:	ಣ			c		n		: 40	,			
Date of Birth of Wife if Living.	24th Nov., 1807	30th Sept., 1812		27th July, 1798 28th Feb., 1811	14th Oct., 1809	:		:				20th Jan., 1812		:	29th Oct., 1822			17th Sept., 1807		18th Nov., 1818		18th Oct 1831	1001 (100)			
Age of Wife.	55	20		64 52	5.3	3:		:				51		:	40			55	_	*		: 67	 5			
Married or Single.	Married	Married		Married	Married	Widower		Widower				Married		Widower	Married			Married Married		Married		Widower		-		
Date of Birth.	22nd Nov., 1796	20th Aug., 1799		6th Aug., 1798 2nd Mar., 1798	12th May, 1800	30th Aug., 1798		24th July, 1791				7th April, 1795		2nd Dec., 1798	27th May, 1804			11th Feb., 1799 23rd July, 1793		Zist July, 1802		1/th July, 1802	2001 (2001 1011			
Age lst May. 1863.	99	63			25			2				89	;	- - - -	28			7 69		3	_	27				
Initials of Member.	C. R. C.	T. R.W.		84 84 C) G)	자 교 교	F. M. L.		G.J.W.				H. C.	,	M. L.	w.c.o.			A. M. G. D. D.	,	d 5	F	. ×	 !			
Š.	78	8		8 8	36	8		೫				40	:	4	43			46	,	}	9	çç	:			_
			_																							

	l son born 1844, but Mr.	appear in the calculation.						
Yes Yes	X X X	Yes Yes	Kes	;	Xes Xes	Kes X	Xes Xes	Yes
13th Sept., 1842 28th Aug., 1843 28th Sept., 1854	13th April, 1835 28th May, 1838 4th July, 1844 6th Mar., 1848 20th Feb., 1830	Zzna Aug., 1846 22nd Jan., 1846 7th Oct., 1851 18th Aug., 1834 28th May, 1845	3rd Mar., 1850 21st Aug., 1841 5th July, 1844 25th Oct., 1847	28th May, 1828	24th May, 1838 29th Oct., 1843 24th June, 1855 3rd July, 1858	21st June, 1841	9th April, 165/ 14th Feb., 1840 29th May, 1847 29th May, 1852 18th May, 1856	8th Jan., 1844
20 19 8	82 18 18 88 83 12 88	181 18	<u> </u>	200	4 6 6 7 4	13 23	65550	19
⊣ α :	4 00	~ s	n ; ;	63	က		N 60 ; ;	-
11th Dec., 1843 17th July, 1850 18th Aug., 1858	: :	5th Dec., 1845 9th Nov., 1843	16th Jan., 1846 25th Aug., 1849 29th May, 1851 10th Oct., 1954	oun May, 1850 6th Dec., 1857 28th Mar., 1861	4th Sept., 1851	25th Aug., 1843 27th July, 1847 8th Oct., 1849	31st Oct., 1845 14th May, 1848 23rd Jan, 1850 23rd Feb., 4851	8th April, 1854
61 : 23 4	: :	17	13 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	. 10 cm	=	84 E :	: 74	o :
- :«	: :		2	:	-	.	. م	:
18th Dec., 1807 2nd Dec., 1815 1st April, 1806 6th Feb., 1815	lith Oct, 1808 8th Jan., 1821 17th Mar., 1805	14th April, 1819	20th Jan., 1819	:	23rd Jan., 1813	20th June, 1810 15th Oct., 1816	10th Nov., 1824	15th July, 1800 1st Oct., 1808 Widower
55 57 48	54 58 58	4 :	44	:	20	52 46	3 :	54
Married Married Married Married Single		Married Widower	Married	Widower	Married	Married Married		Married Married Single
13th Sept., 1804 25th May, 1796 4th June, 1804 29th June, 1806 6th Nov., 1806	lst Aug., 1807 24th Dec., 1806 28th Nov., 1799	22nd Feb., 1799 Married 24th May, 1804 Widowe	31st May, 1805	12th Nov., 1797	908	26th June, 1808 16th May, 1809 26th T. 1700	4th Feb., 1807	3rd Mar., 1798 10th Mar., 1803 28th Feb., 1807
56 56 56 56	55 63	58	22	65	26	55 54 57	99	65 60 56
H. M. W. D. D. S. C. W. D.	J.G.S.B. W. A. F. A. R.	J. A. H. A. P. O.	R. T. P.	J. F. T.	H. S.	W.A.D.I.	; ₹	D. R. T. P. M.
55 55 57	59 60	62	8	2	65	99 29	2 2	73

•
8
8
탸
୍ଧ
$\overline{}$
<u>@</u>

Remarka															N. R. has paid up back	payment.		N. R. has naid un.	N. R. has paid up.
If on the Subeidiary Fund.		Yes	Yes		Yes			Yes		Yes	_		Yes		Yes	\ \ \	51	8 X	:
Their Dates of Birth.		14th April, 1835 4th April, 1846	loth May, 1847		16th April, 1859	70m rem, 1001	9001 070	7th June, 1846		10th July, 1841	root funder me	8th Aug., 1844	25th Mar., 1848	14th Oct., 1851	12th Nov., 1847 29th Nov., 1853	13th Mar., 1858	14th Jan., 1861	3rd June, 1846 29th May, 1848	:
Aga		28	22		₩ 0	4	2	16		21	9	18	22.5	12	15	40 0	. C4	18	:
No. of Daugh- ters Living and Un- married		69	-			:	_			6,1	:	9	: :			83	: :	64	: :
Their Dates of Birth.	3rd Oct., 1846 3rd Nov., 1851 19th Dec., 1857	7th May, 1851	:	13th July, 1845	23rd Feb., 1850	10th Dec., 1855 8th Sent., 1857	10th Jan., 1863	15th May, 1843	16th Mar., 1845	6th Sept., 1845	30th Nov., 1852	3rd May, 1854	6th Nov., 1857		11th Feb., 1850	11th Mar., 1848	7th Nov., 1851	4th Mar., 1844 20th Jan., 1850	:
Age.	16 11	202	:	17	225	2 ~ ~	0 9	16	8	17	200	4 80	- 10		::	15		9 5	::
No. of Sons Living under the Age of 21.	60	-	:	61	40		-	- 63		4		*>			:-	83		C4	:
Date of Birth of Wife if Living.	12th July, 1821	22nd Feb., 1809	20th Aug., 1825	22nd Mar., 1817	21st June, 1828		9]-4 A 1016	12th July, 1802	Aug., 1802	25th Jan., 1816		:			12th Dec., 1823 24th Mar., 1814	4th Jan., 1819		13th Dec., 1811	:
Age of Wife.	14	54	37	46	34		9	2 9		47		:			::	*		2	:
Married or Single	Married	Married	Married	Married	Married			Married	Married	Married		Widower			Married Married	Married	_	2 Married	Single
Date of Birth.	3rd Feb., 1810	5th Dec., 1809	22nd Sept., 1810	3rd July, 1809	28th May, 1812 Married		0,1 5 1 1010	26th Sept., 1797	22nd Oct. 1800	16th Jan., 1803 Married		11th Aug., 1811 Widower			4th April, 1811 28th Oct., 1801	6th Feb., 1811		30th Aug., 1812	8th Feb., 1810
Age 1st May, 1663.	53	55	55.52		2			2 69	-	8		15			61 2	. 52 - 6		<u>~</u>	82
Initials of Member.	T. A. A.	C. R. B.	R. D. P.	T. B. R.	C. J. B.		20	G. S. H.	J. G.	W. E.		F. B. E.			J. B. E. B. G.	J. D. B.		T. W. G.	M. M.
No.	92	11	78		81			3 8		8		87			8 8	96			25

W. D. 55 22nd Oct. 1807 Single 40 29ch Juni, 1822 5 15 20ch Juny, 1824 1 1 1 1 1 1 1 1 1												
W. D. 55 22nd Oct, 1807 Single 11 19th Sept., 1813 Yes F. N. D. 50 14th Aug., 1812 Married 49 12th April, 1814 1 14th Sept., 1813 Yes C. W. 49 24th Aug., 1812 Married 49 12th April, 1814 1 12th Sept., 1813 Yes F. H. C. 50 4th Sept., 1813 Married 45 23rd Jun., 1817 2 11 18th Nov., 1813 Yes J. F. C. 49 2th Aug., 1813 Married 46 23rd Jun., 1847 8 16th Jun., 1827 Yes J. F. C. 40 3th Aug., 1813 Married 46 3th Aug., 1847 8 16th Jun., 1828 Yes W. M. M. 49 2th Dec., 1813 Married 46 3th Aug., 1847 8 1th Aug., 1847 Yes W. M. M. 49 2th Dec., 1813 Married 48 3th Aug., 1848 Yes 1th Aug., 1848 Yes W. H. B. 49 14th Sept., 1844		Has paid Has paid Has paid	•									
W. D. 55 22nd Oct., 1807 Single 40 29th June, 1822 8 14 10th July, 1848 1 12 7th Feb., 1831 F. N. G. 60 14th Aug., 1812 Married 40 29th June, 1823 1 10th July, 1849 1 12 15th Apr., 1831 F. H. C. 50 14th Aug., 1812 Married 40 23th Jun., 1849 1 25th July, 1841 1 27th Apr., 1831 F. H. C. 40 30th Aug., 1813 Married 40 13th Dec., 1843 1 10th May, 1849 1 1 27th Apr., 1833 F. C. 40 10th Nov., 1812 Married 40 10th July, 1847 8 10th Apr., 1843 1 1 1 1 1 1 1 1 1 1 1 1 1 1	zz —	22 2	zi zi	z.	z. R	z z z z	z z	z z m m	z. Z.	z z	z.	z. R
W. D. 56 22nd Oct., 1807 Single 40 29th June, 1822 3 14 10th July, 1848 1 12 F. N. M. 50 14th Aug., 1812 Married 40 12th April 1814 11 12 11 12 C. W. 50 5th Sept., 1812 Married 40 18th Dec., 1813 Married 40 18th Dec., 1813 Married 40 18th Dec., 1813 Married 30 18th Dec., 1823 8 20 30th Dec., 1842 4 11 F. C. 50 10th Nov., 1812 Married 36 16th July, 1826 1 4 26th Sept., 1845 11 F. C. 50 10th Nov., 1812 Married 36 16th July, 1826 1 4 26th Sept., 1845 1 W. H. B. 49 16th Nov., 1813 Married 36 16th July, 1826 1 4 26th Sept., 1845 1 W. H. B. 49 16th Mar., 1798 Married 36 27th July, 1824 4	. X	: 8	\$ ~~~~			. Xes	X X S	: 8 X	:	Yes	X A	:
W. D. 55 22nd Oct, 1807 Single 40 29th June, 1822 8 14 10th July, 1848 1 F. N. M. 50 14th Aug., 1812 Married 40 12th April, 1814 9 14th Sept, 1813 1 C. W. 49 23rd Sept, 1813 Married 46 23rd Jan, 1817 2 12 20th May, 1850 4 F. H. C. 50 10th Aug., 1813 Married 46 23rd Jan, 1827 2 12 20th May, 1850 4 F. C. 50 10th Nov., 1812 Married 36 16th July, 1826 1 4 26th Sept, 1858 2 F. C. 50 10th Nov., 1812 Married 36 16th July, 1826	7th Feb., 1851	Apr. July, Aug.,	29th Mar., 1853 25th July, 1854 17th Oct., 1849 16th Jan., 1852 1st Feb., 1855	9th Feb., 1857 17th July, 1848 1st Nov., 1850	16th Aug., 1836 15th Mar., 1854	4th Feb., 1837 2nd Jan., 1838	31st Mar., 1839 7th Dec., 1846 31st May, 1848 23rd Aug., 1853 16th Sept., 1854	25th Oct., 1858 23rd Dec., 1859 16th Oct., 1854 25th Mar., 1857	:	:	:	:
W. D. 56 22nd Oct, 1807 Single 40 29th June, 1822 5 14 th Sept., 1813 F. N. M. 50 11th Nov., 1812 Married 49 12th April, 1814 18 56th June, 1813 C. W. 49 23rd Sept., 1812 Married 46 12th April, 1817 11 19th Nov., 1813 F. H. C. 50 5th Sept., 1813 Married 46 23rd Jan., 1817 2 12 20th May, 1845 F. C. 50 10th Nov., 1812 Married 36 16th July, 1826 1 4 26th Sept., 1843 W. M. M. 49 25th Dec., 1813 Married 36 16th July, 1826 1 4 26th Sept., 1843 W. H. B. 49 14th Sept., 1813 Married 37 30th May, 1824 1 16th Sept., 1836 W. H. B. 49 14th Sept., 1813 Married 37 27th July, 1824 4 18 20th May, 1844 A. H. 49 27th Dec., 1813 Married <	:82	:22:27	58 27 8 9	• 4 5	:	58 52	4 2108	4 eo ∶eo e	:	8 6	2222	. e
W. D. 56 22nd Oct, 1807 Single 40 29th June, 1822 8 14 10th July, 1814 F. N. M. 50 11th Nov., 1812 Married 49 12th April, 1814 9 14th Aug., 1812 Married 49 17th Oct., 1827 9 14th Aug., 1813 Married 49 17th Oct., 1827 11 19th Nov., 1812 Married 49 18th Aug., 1813 Married 49 18th Aug., 1813 Married 36 18th Dec., 1828 11 19th Nov., 1812 11 18th July, 1824 4 26th Sept., 1917 11 18th July, 1824 4 18th Sept., 1917 11 14th July, 1824 4 18th Sept., 1917 11 18th July, 1824 4 18th July, 1824 11 26th July, 1824 18th July, 1824 4 18th July, 1824 4 18th July, 1824 4 18th July	:-	:⊶ → :	₩ 1 1	61	63] 60	v :::	∶∾	:	60	၈	:
W. D. 55 22nd Oct., 1807 Single ii 29th June, 1822 ii iii F. N. M. 50 14th Aug., 1812 Married 40 12th April, 1814 9 F. H. C. 50 14th Aug., 1812 Married 46 23rd Jan, 1817 2 12 F. H. C. 50 16th Sept., 1813 Married 46 23rd Jan, 1817 2 12 F. C. 50 10th Nov., 1812 Married 36 16th July, 1828 1 4 F. C. 50 10th Nov., 1812 Married 37 30th May, 1828 W. H. B. 49 27th Dec., 1813 Married 47 1816 </td <td>10th July, 1848 26th June, 1849 14th Sept., 1853</td> <td>20th May, 1850 19th Nov., 1851</td> <td>30th Dec., 1842 13th Sept., 1845 17th July, 1847</td> <td>26th Sept., 1858</td> <td>:</td> <td>::</td> <td></td> <td>17th Sept., 1858</td> <td>23rd Nov., 1843 10th Aug., 1845 26th June, 1847 18th Oct., 1845</td> <td>:</td> <td>:</td> <td>:</td>	10th July, 1848 26th June, 1849 14th Sept., 1853	20th May, 1850 19th Nov., 1851	30th Dec., 1842 13th Sept., 1845 17th July, 1847	26th Sept., 1858	:	::		17th Sept., 1858	23rd Nov., 1843 10th Aug., 1845 26th June, 1847 18th Oct., 1845	:	:	:
W. D. 55 22nd Oct, 1807 Single ii 29th June, 1822 F. N. M. 50 14th Aug., 1812 Married 49 12th April, 1814 C. W. 49 23rd Sept., 1813 Married 46 23rd Jan., 1817 F. H. C. 50 5th Sept., 1813 Married 36 18th July, 1826 F. C. 50 10th Nov., 1812 Married 36 16th July, 1826 F. C. 50 10th Nov., 1812 Married 37 10th July, 1826 W. M. M. 49 25th Dec., 1813 Married 37 1816 W. H. B. A. 49 14th Sept., 1813 Married 37 1816 W. H. B. A. 49 27th Dec., 1813 Married 38 27th July, 1824 A. H. 49 27th Dec., 1813 Married 38 27th July, 1824 J. G. T. 72 16th Aug., 1790 Married 45 3th Dec., 1817 W. B. A. 65 10th Mar., 1798 Married 45 3th April, 1819 W. B. A. 65 21st April, 1813 Married			25 15	7	:	::	13		19 17 15	17	:	:
W. D. 55 22nd Oct., 1807 Single F. N. M. 50 11th Nov., 1812 Married 49 C. W. 49 23rd Sept., 1812 Married 46 C. W. 50 5th Sept., 1813 Married 46 F. H. C. 50 10th Nov., 1812 Single W. M. M. 49 25th Dec., 1813 Married 37 F. C. 50 10th Nov., 1812 Single W. H. B. 49 27th Dec., 1813 Married 47 A. H. 49 27th Dec., 1813 Married 45 J. G. T. 72 16th Aug., 1790 Married 45 J. G. T. 72 16th Aug., 1790 Married 45 J. G. T. 72 16th Aug., 1790 Married 45 W. A. M. 53 5th April, 1813 Married 45 W. A. M. 57 Married 57 Warried 57 Married 57	; ec	: :61	83	. ~	:	::	4	:-	e -	-	:	:
W. D. 55 22nd Oct., 1807 Single F. N. M. 50 11th Nov., 1812 Married C. W. 49 23rd Sept., 1812 Married F. H. C. 50 5th Sept., 1813 Married F. C. 50 10th Nov., 1812 Single W.M.M. 49 25th Dec., 1813 Married F. C. 50 16th Nov., 1812 Single W.H. B. 49 27th Dec., 1813 Married F. F. C. 50 16th Mar., 1798 Married F. F. C. 50 16th Aug., 1790 Married F. F. C. 51th Aug., 1790 Married J. G. T. 72 16th Aug., 1790 Married W. B. A. 65 21st May, 1797 Married W. A. M. 67 Married Warried Married W. A. M. 67 <td< td=""><td>29th June, 1822</td><td>12th April, 1814 17th Oct., 1827 23rd Jan., 1817</td><td>18th Dec., 1823</td><td>16th July, 1826</td><td>30th May, 1828</td><td>1816</td><td>27th July, 1824</td><td>21st Sept., 1831</td><td>25th Oct., 1797 9th Dec., 1817 22nd Mar., 1815</td><td></td><td>:</td><td>:</td></td<>	29th June, 1822	12th April, 1814 17th Oct., 1827 23rd Jan., 1817	18th Dec., 1823	16th July, 1826	30th May, 1828	1816	27th July, 1824	21st Sept., 1831	25th Oct., 1797 9th Dec., 1817 22nd Mar., 1815		:	:
W. D. 55 22nd Oct., 1807 F. N. M. 60 11th Nov., 1812 C. W. 49 23rd Sept., 1812 F. H. C. 50 5th Sept., 1813 F. C. 60 10th Nov., 1812 W. M. M. 49 25th Dec., 1813 F. C. 50 10th Nov., 1812 W. H. B. 49 27th Dec., 1813 F. F. C. 50 16th Nov., 1812 W. H. G. 51th Aug., 1798 J. G. T. 72 16th Aug., 1798 J. G. T. 72 16th Aug., 1799 Jied 16 th July, 1863. G. F. B. 50 W. A. M. 57	:04	49 35 46	89	36	34	<u>;</u>	88	: 5			22	99
W. D. 55 22nd Oct, 11 F. N. M. 50 11th Nov., 1 H. F. 50 14th Aug., 1 C. W. 49 23rd Sept., 18 F. H. C. 50 5th Sept., 18 F. C. 50 10th Nov., 1 W. M. M. 49 25th Dec., 1 W. H. B. 49 14th Sept., 1 W. K. 49 23rd Sept., 1 G. T. 72 16th Nov., 1 G. T. 72 16th Aug., 1 G. T.			Married		Married	Single Married	Married	Single Married		28 Feb. 28 Married	Married	Married
W. D. 55 F. N. M. 50 C. W. 49 F. H. C. 50 J. F. C. 60 T.B.A.C. 50 W. H. B. 49 A. H. 49 F. F. C. 65 J. G. T. 72 R. H. W. 53 W. B. A. 67 W. A. M. 57 W. A. M. 57	22nd Oct., 1807 11th Nov., 1812	14th Aug., 1812 23rd Sept., 1813 5th Sept., 1812		25th Dec., 1813	_			21st Aug., 1814 23rd Sept., 1813	10th Mar., 1 16th Aug., 1 5th April, 18	1863.	:	:
			64	69	90	8 8	6		55 72	b July, 50	22	59
00 00 00 00 00 00 00 00 00 00 00 00 00	W. D. F. N. M.	H. F. C. W. F. H. C.	J. F. C.	W.M.M.	F. C.	T.B.A.C. W.H. B.	А. Н.	P. I. W. K.	F. F. C. J. G. T. R. H. W.	Died 16t	W.A.M.	ď
	95	100	102	103	104	105 106	201	108	88 89 E	:		

B1 (continued).

Remarka													N. R. has paid up back	tw) menue.		N. R. has paid up.	N. K. nas paid up.
If on the Subsidiary Fund.		Yes	Yes		Yes		Yes	3	X X			Yes	Yes Yes	~ ~	, Tes	Yes	:
Their Dates of Birth.		14th April, 1835 4th April, 1846	1st June, 1845		16th April, 1859 20th Feb., 1861		29th Oct., 1848	oroz (ama c ma c	10th July, 1841 9th April, 1851		8th Aug., 1844 18th Jan., 1847 95th Mer., 1848	21st May, 1850 14th Oct., 1851	let April, 1859 12th Nov., 1847 29th Nov., 1853	13th Mar., 1858	14th Jan., 1861 3rd June, 1846	29th May, 1848	:
γĝφ.		28	17		40		14	2	12		81 5	222	4.5	10 m		14	:
No. of Daugh- ters Living and Un- married		es			81 :		-	•	61 :		9 :	:		ಣ	: :61	:	:
Their Dates of Birth.	3rd Oct., 1846 3rd Nov., 1851	7th May, 1851	:	13th July, 1845	23rd Feb., 1850 15th Jan., 1853	10th Dec., 1855 8th Sept., 1857	19th Feb., 1851	16th Mar., 1845	6th Sept., 1845 19th July, 1847	30th Nov., 1852 22nd Oct., 1854	3rd May, 1854 23rd Mar., 1856 6th Now 1857	100 t. 100 mg	11th Feb., 1850	11th Mar., 1848	7th Nov., 1851 4th Mar., 1844	20th Jan., 1850	:
Age.	119	20 20 20 20 20 20 20 20 20 20 20 20 20 2	:	17	222	~ 40 0	222	18	17	28	20 to 10	,	::	51 8			:
No. of Sons Living under the Age of 21.	69	-	:	63	40		- 0		4	,	*		:-	•	81		:
Date of Birth of Wife if Living.	12th July, 1821	22nd Feb., 1809	20th Aug., 1825	22nd Mar., 1817	21st June, 1828		31st Aug., 1816	12m 5m3, 1002	Aug., 1802 25th Jan., 1816		:		12th Dec., 1823 24th Mar., 1814	4th Jan., 1819	13th Dec., 1811	`	:
Age of Wife.	4	52	37	46	34		46	3	47		:		::	44	61		:
Married or Single	Married	Married	Married		812 Married		Married		Married Married		811 Widower		Married Married	Married	Married		and and
Date of Birth.	3rd Feb., 1810	5th Dec., 1809	22nd Sept. 1810	3rd July, 1809	28th May, 1812		8th Feb., 1812	zom oepe, 1131	22nd Oct., 1800 16th Jan., 1803		lith Aug., 1811		4th April, 1811 28th Oct., 1801	6th Feb., 1911	30th Aug., 1812		ota Feb., 1610
Age let May, lb63.	53	53	22		20		51		60		51		61	25	22		 8
Initials of Member.	T. A. A.	C. R. B.	R. D. P.	T. B. R.	C. J. B.		A. S. M.	i i	J. G. W. E.	- 1	ર. સ્		J. B. E. B. G.	J. D. B.	T. W. G.	 >	. W. W.
Š.	76	11	78	8	81		88	3	85	,	28		88 88	06	16		

Has Has	Has paid up. Has paid up.	Has paid up.		Has paid up.	Has paid up.			Has paid up.		Has paid up.		Has paid up. Has paid up.		Has paid up.		Has paid up.	Has paid up.	Has paid up.
Z.Z. R.R.	z z z z	Z. R.	;	보 보	Z. F.	z. R	N. R.	z Z		X. R.		z z g g		z. R		Z. R.	X.R	Z. R.
. %	Yes	Yes		Kg ~~	Xes X	Yes	:	Yes		Yes	_	Yes	•	:		Y 488	Yes	: :
7th Feb., 1851	13th Apr., 1851	29th July, 1947 27th Aug., 1848	25th July, 1854 17th Oct., 1849 16th Jan, 1852	lst Feb., 1855 9th Feb., 1857	17th July, 1848 1st Nov., 1850	16th Aug., 1836 15th Mar., 1854	4th Feb., 1837	2nd Jan., 1838 31st Mar., 1839	7th Dec., 1846 31st May, 1848	23rd Aug., 1853 16th Sept., 1854	23rd Dec., 1859	16th Oct., 1854 25th Mar 1857		:		:	:	:
:23	12	24.5	8 2 7	0 0	12	:	56	£ 53	16 14	o & -	+ 63	: ထ "	,	:	2	16	2222	7e :
:-	:	- :	4	: :	63	61	_ co		9 :	::	_	:∾		:	•	0	က	:
10th July, 1848 26th June, 1849 14th Sept, 1853	: :	20th May, 1850 19th Nov., 1851	30th Dec., 1842	17th July, 1847	26th Sept., 1858	:	: :		20th May, 1844 25th July, 1845	26th June, 1849 18th Nov., 1850		17th Sept., 1858	23rd Nov., 1843	10th Aug., 1845 26th June, 1847 18th Oct., 1845		:	:	:
:48	: :	2 =	20	:2:	*	:	: :		18	12		: 4	19	15 17	-	*	:	:
; •••	::	64	65		-	:	: :		4			: -	63	-	,	٦	:	:
29th June, 1822	12th April, 1814 17th Oct., 1827	23rd Jan., 1817	13th Dec., 1823		16th July, 1826	30th May, 1828	1816		27th July, 1824			21st Sept., 1831	25th Oct., 1797 9th Dec., 1817	22nd Mar., 1815	29th April, 1797	:	:	:
:4	8 8	9	89		36	34	:4	1	88			: 55	65 45	4 8		83	57	99
Single Married		Married	813 Married		Married	Married	Single Married		1813 Married			Single Married	Married Married	Married	Married 28 Feb. 28	Married	Married	Married
22nd Oct., 1807 11th Nov., 1812	14th Aug., 1812 23rd Sept., 1813	5th Sept., 1812	30th Aug., 1813		25th Dec., 1813	10th Nov., 1812	16th Nov., 1812 14th Sept., 1813	•	27th Dec., 1813			21st Aug., 1814 23rd Sept., 1813	10th Mar., 1798 16th Aug., 1790	5th April, 1810	21st May, 1 1863.	:	:	:
22.23	5 6		49		49	20	3 4		49			8 4 8	72	53	65 th July,	3	22	59
W. D. F. N. M.	щ. Э. Э.	F. H. C.	J. F. C.		W.M.M.	F. C.	T.B.A.C. W. H. B.		А. Н.			P. I. W. K.	F. F. C. J. G. T.	R.H.W.	W. B. A. 65 Died 16th July,	 	W.A.M.	Б. В. Т.
48	100	<u> </u>	102		103	104	105		107			108 109	35	86	Ξ			

B².—List of Retired Members of the Madras Civil Service who abide by the old Rules, with information as to their Families.

Г										
No.	Initials of Member.	Age lst May, 1863.	Date of Birth.	Married or Single.	Age of Wife.	No. of Dete of Birth of Wise, Sons living under 21.	No. of Sons living under 21.	468	Dates of Birth.	Remarka
&	D. H.	:	:	Married	:	:	:	:	:	No particulare furnished.
12	Т. Н.	18	25th Sept., 1781	Single	:	:	:	:	:	Having no wife or child, is not interested in the change.
17	J. A. C.	92	1787	Married	:	:	:	:	:	No particulars.
27	R. C.	:	:	:	:	:	:	:	:	No particulars. Circular destroyed.
15	E. W. C.	75	5th Sept., 1787	Widower						
33	W. A.	99	9th Nov., 1797	Widower						
51	A. F. B.	63	31st Aug., 1799	Married	7	21st July, 1822	ca .	18	15th Nov., 1844 lst Aug., 1861	l daughter, born 13th April, 1843; on Subsid. Fund.
20	E.N.T.	59 or 58	1803	Widower	:	:	7	•	21st Aug., 1862	
26	C. N. B.	55	10th Nov., 1798	:	:	:	:	:	:	Not interested in the change. Circular destroyed.
7.4	T. B. S.	:	:	:	:	:	:	:	:	Not interested in the change. Circular destroyed.
11	J. F. B.	24	11th Feb., 1809	Single						
22	J. T. A.	89	29th April, 1795	Married	63	1800	None	:	:	l daughter, ege 33; not on Subsid. Fund.

C. Summary of List No. 22.—Civil Servants who Died in the Service, from 1825-26 to 1863-64, showing in each Year the Number whose Families were Admitted or not Admitted on the Fund (Art. 87).

	Admitted.	Not Admitted.	Total.		Admitted.	Not Admitted.	Total.		Admitted.	Not Admitted.	Total.
1825-26 1827 1828 1829 1830 1831 1832 1833 1834 1835	1 2 1 1 2 2 2 4	1 3 2 4 1 2 5 6 6 7 2	1 4 4 5 2 3 7 8 8 11	1840 1841 1842 1843 1844 1845 1846 1847 1848 1849	2 1 4 1 1 1 1 2	2 2 3 2 1 1 2 4 1 1 3	42462225237	1853 1854 1855 1856 1857 1858 1859 1860 1862 1864	2 2 2 2 2 1 2 1 8	 2 1 2 2 1 2 1	2 4 2 3 4 3 3 4 1
18 38 18 3 9	2 4	2 1	4 5	1851 1852	i	2	8		60	77	137

	Admitted.	Not Admitted.	Total.	Admitted per Cent. of Total, assuming 60 per Cent. to be Married.	Average Annual No. Total Deaths.
1825-33 1833-53 1853-61 1861-64	10 84 12 4	24 42 10 1	34 76 22 5	49·0 74·6 90·7 Say 100· } 98·8	4·5 3·8 (2·8 (1 7
	60	77	137	73.0	3⁺5

D. Summary of List No. 23.—Annuitants who Died from 1803 to 1863, showing in each Year the Number whose Families were Admitted or not Admitted on the Fund (Art. 87).

	Admitted.	Not Admitted.	Total.		Admitted.	Not Admitted.	Total.		Admitted	Not Admitted.	Total.
1803	1	1	1	1834	1	3	3	1851	2	4	
1804	1		1	1835		3	3	1852	2	4	, 6
1805	1	1	1	1836	2	3	5	1853	1	3	4
1807	1	1 1	1	1837	2	5	7	1854	2	1 1	3
1810	1	1 1	1	1838	۱	1 1	' 1	1855		7	7
1812	1	1 1	1	1839	1	7	8	1856		3	3
1813	1	2	2 2	1840	1	3	4	1857	1	6	7
1815	1	2	2	1841	١	1	1	1858	1	1	2
1818		1 1	1	1842	2	2	4	1859	2	8	5
1822	1	8	8	1843		5	5	1860		3	3
1825		1	1	1844		3	3	1861	1	4	4
1826	1	2	3	1845	 	2	2	1862	2	1	3
1828		1 1	1	1846	1	5	5	1863	1		1
1830	1	1	2 3	1847	ļ	1 1	1				
1831		3	3	1849		4	4				
1833	1	3	8	1850	1	4	4		25	116	141

	Admitted.	Not Admitted.	Total	Admitted per Cent. of Total, assuming 80 per Cent. to be Married.
1803- 53 1833-53 1853-61 1861-63	3 13 6 3	24 63 28 1	27 76 34 4	13.9 21.4 22.1 93.7 } 29.6
	25	116	141	22-2

E¹. Retired Members.—Estimated Amount required to be paid by those who have conditionally accepted the New Scheme to entitle their Families to Benefits under the New Rules. (Art. 97.)

.				Wives	.		8	Sons.			Da	UGHTERS		
n Circuler.	Name.	Age.	Vali	e or Be	MEPITS		VALU	or Be	NEPITA.		VALU	e or Bri	epits.	on Subsidiary Fund, S.
No.			Old Rul es .	New Rules.	Difference to pay.	No.	Old Rules.	New Rules.	Differ- ence to pay.	No.	Old Rules.	New Rules.	Differ- ence to pay.	If on
70	Anderson	56	188-2	955-2		5	62·1	504.4	442.3	3	155.6	879.8	724-2	s.
111	Anderson	65	215.3	1077:0						l				l .
76	Anstruther	53	180.8	923.7	742.9	3	52.0	392.5			1 1			
110	Arbuthnot	56	188.2	955.2	767.0	2	25.7	205.6			84.1	680·3	596.2	S.(1)
19	Baskerville	70	219.3	1096.2	877.2	1	30.4	207.7	177.3		23.0	625.8	602.8	
77 81	Baynes Bird	53	180.8	923.7	742-9	1	17.6	134.3		3	194.3	1112.3	918 0	
47	Bird	50 60	178.6	916.8		5	116.1	831.6			105.4	593.5	488-1	
88	Bird	52	201·8 179·3	1016·4 917·7	814·6 738·4	3	59.7	440.8	381.1	3	161.5	916.2	754.7	8.
37	Blair	64	213.4	1068-3		• •	• • •	• •	••]	47.3	271.1	223.8	8.
57	Blane	56	210.5	1000 0	Single		}		1	l				
58	Bruere	55	185.3	942.6			1			4	276-2	1579-2	1303.0	s
40	Chamier	68	218.8	1094-1	875.3	2	36.6	274.9	238.3		69.3	396.2	326-9	
4	Clarke	78	203.5	1017-6				2.40	2000	â		2465.8		
35	Clementson	65	215.3	1077.0				• • •	ا ا	ľ	''	21000	21000	
30	Clerk	64	213.4	1068-3	854.9		١ ا		l	1	l l	947.7	947.7	
1	Cooke	81	190.5	952.5						2		1757.8	1757.8	
28	Cotton	66	216.8	1084.5		2	19-1	165.9	146.8	i	i I			
54	Crawford	58	194.8	984.9		١			ا ا	1	60.2	345.1	284 ·9	S.
21	Dalzell	70	219.3	1096.5					i l	l				
53 55	Davis	66	216-2	1084.2										
56	Douglas Drury	56 69	188-2	955-2		2	45.2		281.3	_	110-9	629.9	519.0	
36	Eden	62	219·3 208·3	1096·2 1045·5		2	5.5	77.0	71.5	1	54.1	304.0	249-9	S.
72	Eliot	65	215.3	1045.5			1		1 1	1	56.0	3 21·8	265.8	
85	Elliott	60	201.8	1016.4		4	55.3	437.3	382-0	2	114.8	654.1	539·3	
87	Elton	51	2010	1010 4	Widower	3	82.1	580.2		6	303.0	1725.7	1422.7	S.
59	Forsyth	56	188.2	955-2		ľ	02.1	000 2	450 1	ľ	505 0	1,20,	1422 1	S.
48	Freeze	60			Widower				l I	1	52.1	300.2	248.1	s.
84	Goldingham	62	208.3	1045.5	837.2		'			-				-
31	Grant	65	215.3	1077-0					i 1	l				
6	Hadow	73	217.1	1085.4			!							
83	Hooper	65	215.3	1077.0		2	.8	39.7	38.9	1	47.7	274.4	226.7	S.
61	Huddleston	64	213.4	1068-3		1	2.7	37.9	35.2	_	51.5	291.1	239.6	
66	Inglis Keene	54 81	182.8	932-1	749.3	3	19-1	180-2	161.1	1	64.6	370.0	305.4	
10	Lacon	71	190.5	952.5		٠.		••		2	256.3	1465.8	1209.5	S.
38	Lacon Lewin	64	218-9	1094.7	875·8 Widower	2	11.7	118-1	106.4	3	179-3	1028.7	849-4	ا ۾ ا
41	Lewin	64	٠٠ ا	• •	Widower	_		110.1	100.4	2	255.9	1469.3		
2	Lushington	87	156.4	782-1	625·7	• •		• •		 	200 8	1402.0	1410.4	3.
20	McDonell	73	217.1	1085.4		1	١ ا	14.3	14.3					
45	Maclean	64	213.4	1068-3		١.	۱ ۱	. 7 0	"					
24	Macleod	71	218-9	1094.7	875.8									1
82	Matheson	51	178.6	915.6		1	14.8	316.8	102.0	1	47.7	272.4	224.7	S.
49	Meller	57	191.4	969.9		5	128-2	907.6			60.8	593.5	532.7] [
25	Montgomerie	70	219.3	1096.5										
73	Montgomery	60	201.8	1016.4						i				
52	Morris	58	194.8	934.9	790-1	1		14.3	14.3		اللما			
26	Ogilvie	69	1000		Widower	1	14.8	116.8	102.0		164.7	1390.1		
43	Ogilvie	58	194.8	984.9	790-1	3	20.4	193.8	173.4	4	217.4	1232.2	1014.8	S.

E1 (continued).

				WIVE	l.		s	ons.			Dat	UGH TERS	•	
No in Circular.	Name.	Age.)	VAL	UE OF BE	NEPITS.		VALUI	e of Br	NEFTTS.		VAL	UE OF BE	MEFITS.	n Subsidiary Fund, S.
No.			Old Rules.	New Rules.	Difference to pay.	No.	Old Rules.	New Rules.	Difference to pay.	No.	Old Rules.	New Rules.	Difference to pay.	If on F
62	Onslow	58			Widower	1		14:3	14:3	3	195-8	1118-5	922.7	S.
78	Parker	52	179-3	917.7		١	1		1	1	49-2	283.7	234.5	S.
63	Porter	57	191.4			7	146.4	1067-9	921.5	3	164.0			
75	Prendergast	56			Widower	l				_			,,,,	
60	Robertson	63	211.0	1057-8	846.8	1	1		١	3	241.9	1384.3	1142.4	S.
80	Roupell	53	180.8	923.7	742.9	2	14.8	137.3	122.5					-
18	Russell	76	210.2	1050-9	840.7	Ī.,				ı	l	928.8	928.8	
79	Scott	52			Single	· ·	1 ''			-			1111	١.
13	Smalley	72	218.2	1091-1	872.9	١	۱	۱		1	49.2	283.7	234.5	S.
67	Smith	53	180.8			1	1	l ::		Ī	12.1	277.3		· ·
65	Stokes	56	188-2			lπ	17.6		116.7	3	165.6		771.3	S.
11	Stokes	72	218.2			-	l ••				1			~
69	Stonhouse	64	213.4			۱	l	۱	ا ا	2	162.5	927-1	764-6	S.
64	Thomas	65			Widower		1			2	207.5		977.5	
23	Turnbull	72	218.2	1091-1		3	9.6	118.7	109.1	-				
39	Waters	71			Widower	ĭ	12.1	99.4	87.3	6	368-0	2096.8	1728.8	S.
29	Wheatley	63	211.0	1057.8		2	5.5			3	26.9			~
82	Wilson	82		l "	Widower	١				2		1960.8	1960-8	
9	Woodcook	74	215.3	1076.7	861.4					4		2684.4	2684.4	
	Total	69	11 5 25· 3	58004.7	46479· 4		1025-9	7981-4	6955-5		4856·4	40994-9	36138·5	

E².—Alphabetical List of Retired Members who have conditionally accepted the new Scheme.

No. in lessrs.Coutis' List.	Name.	Age.	No. in Mesars. Coutts' List.	Name.	Age.
70	Anderson, Findlay Esq.	56	14	Keene, Henry G Esq.	81
111	Anderson, W. Bentley "	65	10	Lacon, Henry ,,	71
76	Anstruther, Thos. Andrew ,	53	38	Lewin, Fred. M. (Widr.) "	64
110	Arbuthnot, W. U "	56	41	Lewin, Malcolm (Widr.) ,,	64
19	Baskerville, Henry ,	70	2	Lushington, S. R. (Rt. Hon.)	87
77	Baynes, C. R ,	5 3	20	McDonell, Æneas R Esq.	73
81	Bird, Chas. Jas "	50	45	Maclean, Alexr. ,,	64
47	Bird, Geo "	60	24	Macleod, John M "	71
88	Bird, John "	52	82	Matheson, A. S ,,	51
37	Blair, H. M "	64	49	Mellor, Abel ,,	57
57	Blane, T. L. (Single) ,	56	25	Montgomerie, Hugh ,	70
58	Bruere, Jas. G. S "	55	73	Montgomery, Sir H. C. (Bt.)	60
40	Chamier, Henry "	68	52	Morris, Henry Esq.	58
4	Clarke, Richd "	78	26	Ogilvie, Geo. M. (Widr.)	69
35	Clementson, F. F ,	65	43	Ogilvie, Wm. Cecil "	58
30	Clerk, Robt "	64	62	Onslow, Arthur P	58
1	Cooke, Wm.	81	78	Pasker, Robt. D ,,	52
28	Cotton, Chas. Robt "	66	63	Porter, Robt. T ,	57
54	Crawford, Stewart ,,	58	75	Prendergast, Thos. (Widr.)	56
21	Dalzell, Jas. A "	70	60	Robertson, Andrew ,,	63
53	Davis, W. B "	66	80	Dannell Thee D	53
55	Douglas, Wm "	56	18	D	76
56	Drury, Geo. D.	69	79	Canta Cantimus "	52
36	Eden, Robt	62	13	Q1i1D	72
72	Eliot, Danl.	65	67	C-ish Es-s	53
85	Elliott, Walter	60	65	Chalear Hudlandan "	56
87	Elton, Fred. Bayard (Widr.) "	51	ii	Stoken John	72
59	Forsyth, W. A "	56	69	Stonhouse, Sir T. V	64
48	Freeze, Arthur (Widr.) ,,	60	64	Thomas, John F. (Widr.), Esq.	65
84	Goldingham, J ,	62	23	Tumbuli Ichn (C) "	72
31	Grant, Robt.	65	39	117-4 () 1 /117:3-\ "	71
6	Hadow, Geo. J.	73	29	Wheetler Thee D	63
83	II C C	65	82	31721 Al /31723-\ "	82
61	TT31	64	9 1	11731 12 Tr	74
66	Inglis, W. A. D.	54	l "	Woodcock, E. H "	

F.—Alphabetical List of Retired Members who had paid back-payments to secure their Families the Benefits of the new Rules.

No. in Messra.Coutts' List.	Name.	Age.	No. in Messrs.Coutts' List.	Name.	Age.
106 100 90 105 104 102 101 94 99 89	Bayley, W. H. Beauchamp, G. T. Bourdillon, Jas. Dewar Conway, T. B. A. Copleston, F. Cotton, Jos. John Crozier, F. H. Dowdeswell, W. (Single) Forbes, H. Glass, E. B. Goodwyn, Thos. Wildman	Eaq. 49 50 52 50 50 50 50 50 50 50 50 60 50 61 50	107 108 109 95 103 101? 92	Hall, Arthur Es Irvine, P. (Single)	48 49 50 49 57 57 53 59 49

G .- Alphabetical List of Retired Members who abide by the old Rules.

No. in Messrs.Coutts List.	Name.		Age.	No. in Messrs.Coutts' List.	Nume.	Age.
22 33 71 56 51 17	Anstey, John T. Ashton, W. (Widr.) Bishop, J. F. (Single) Brown, E. P. (Single) Bruce, A. F. Casamaijor, J. A.	Esq.	68 65 54 64 63 75	27 15 12 8 74 50	Clive, Robt Esq. Cunliffer, E. W. (Widr.) Hamilton, T. (Single) Hill, David	75 81 76 56 59

INDEX TO APPENDIX III.

Valuation of the Madras Civil Fund, 1st May, 1863, at 8, 6, 5, and 4 per Cent.

- a. Old Rules.—Incumbent Pensions.—Widows, £300 per annum, payable half-yearly in advance till marriage or death.
 - Valued as under new Rules.—Ditto ditto, £300 per annum half-yearly, in advance, reducible to one-half on remarriage.
- b. Old Rules.-Incumbent Pensions.-Sons' benefits.
 - Valued as under new Rules, ditto ditto.
- c. Old Rules.—Incumbent Pensions.—Daughters' benefits.
 - Valued as under new Rules, ditto ditto.
- b. & c. Old Rules.—Incumbent pensions classed under mother's age, if living as a widow lst May, 1863.
- e. Value of reversionary benefits to the families of retired members who abide by the old Rules.
 Ditto ditto of members in the Service who abide by the old Rules.
- £. Retired members who have conditionally accepted the new scheme.
 - Values of reversionary benefits to wives, sons, and daughters under old Rules.
 - Ditto ditto under new Rules.
- g. Members in the Service who have conditionally accepted the new scheme.
 - Values of reversionary benefits to wives, sons, and daughters under old Rules. Ditto ditto, under new Rules.
- p. Values of members' subscriptions:—
 - Old Rules. —Unmarried Members.—Total and average values of annuities to the end of 16 years' service.
 - Married Members.—Total and average values of annuities to the end of 16 years' service.
 - New Rules.—Unmarried Members.—Total and average values of annuities to the end of 25 years' service.
 - Married Members.—Total and average values of annuities to the end of 25 years' service.
- E. Art. 192.—Members in the Service, 1st May, 1863.—Total salaries and emoluments receivable at each age, and the average at each age, and at every fifth year of age (from List No. 18).

VALUATION, 1ST MAY, 1863.

a. Old Rules.—Incumbent—Widows' Pensions, £300 per Annum, payable Half-yearly in advance till Marriage or Death.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			Decides	P-11	8 PER	CENT.	6 PER	CERT.	5 PER	Caper.	4 782	CENT.
Age last Birthday.	No. in List 1.	When Admisted.	Pension now payable.	Full Pen- sion.	Value of Pensions now payable.	Full Pension.	Value of Pensions now payable.	Full Pension.	Value of Pensions now payable.	Full Pension.	Value of Pensions now psyable.	Full Pension.
23	2.0	14 37 1061	£	£	£	£	£	£	£	£	£	£
28	56 44	14 Nov., 1861 1 Apr., 1857	300· 197·400	300 300	2583·3 1804·8	2583·3 2742·9	3084·9 2165·1	3084·9 3290·4	8423·0 2406·5	3423·0 3657·3	3846·3 2706·2	8846.3
30	43	29 Jan., 1855	162-	300	1509.8	2796.0	1812.8	3357.0	2015.0	3731.4	2265.9	4114-2 4196-1
34	46	6 Feb., 1858	300.	800	2914.2	2914.2	3496.8	3496.8	3882.3	3882·3		4356.6
35	42	19 May, 1854	300.	300	2937.9	2937.9		3522.9	3909.0	3 909·0	4382.7	4382.7
	*52 53	7 Dec., 1859 22 Feb., 1860	275· 300·	300 300	2693·1 2937·9	2937.9	3229.3	3522.9	3583.0	3909.0	4017:4	4382.7
37	31	19 Dec., 1848	222.500	300	2204.3	2937·9 2972·1	3522·9 2637·7	3522·9 3556·5	3909·0 2922·2	3909·0 39 30 ·9	4382·7 3269·4	4382.7
٠. ا	55	5 July, 1861	300.	300	2972-1	2972-1	3556.5	3556.5	3939·9	3939.9	4408-2	4408·2 4408·2
39	48	22 Nov., 1858	216.533	300	2153.9	2984.1	2570.0	3560.7	2841.7	3937-2	3171.5	4394.1
40	34	25 Aug., 1850	300	300	2979.9	2979.9	3549.9	3549.9	3921-0	3921.0	4370.4	4370.4
40	50	13 Apr., 1859	900	300	00.54.77	2979.9	9.07.0	3549.9		3921.0		4370.4
42	29 33	2 Dec., 1842 30 Jan., 1850	300·	300 300	2954·7 2 32 4·4	2954·7 2954·7	3507·9 2759·6	3507.9	3865-2	3865.2	4296.0	42960
	*45	9 Apr., 1858	150	300	1477.4	2954·7 2954·7	1754.0	3507·9 3507·9	3040·6 1932·6	3865·2 3865·2	3379·5 2148·0	4296.0
43	28	27 Aug., 1842	290-367	300	2841.5	2935.8	3367.1	3478.8	3705·3	3828·3	4112.5	4296·0 4248·9
44	40	24 Oct., 1853	26.096	300	253.4	2913.3		3445.5	329.4	3786-9	365.0	4196.4
	54	7 May, 1861	300.	300	2913.3	2913.3		3445.5	3786.9	3786.9	4196.4	4196.4
ا مد	57	28 Apr., 1862	205.483	300	1995.5	2913.3		3445.5	2593.7	3786.9	2874.2	4196.4
46	39 25	8 Feb., 1853 22 Apr., 1840	300. 300.	300	2860.5	2860.5		3369.6	3694.2	3694.2	4080.9	4080.9
47 48	51	29 Nov., 1859	274.150	300 300	2832·6 2563·2	2832·6 2805·3		3330·3 3291·6	3646·5 3289·0	3646.5	4021.8	4021.8
49	22	20 Aug., 1837	300.	800	2781.3	2781.3		3256.5	3555.9	3599·1 3555·9	3622·0 3909·9	3963·6 3909·9
50	36	30 Dec., 1851	265-367	300	2442.2	2761.5		3226.5	3112.2	3518.4	3416.6	3862.5
52	24	6 Nov., 1839	150	300	1363.7	2727.3	1586.1	3172-2	1724.6	3449.1	1887-0	3774.0
- 1	27	l Mar., 1842	300.	300	2727.3	2727.3	3172.2	3172-2	3449-1	3449-1	3774.0	3774.0
	47	2 Aug., 1858	300.	300	2727.3	2727.3	3172-2	3172.2	3449.1	3449.1	3774.0	3774.0
54	58 30	24 July, 1862 11 May, 1848	300·	300 300	2727·3 2687·4	2727.3	3172-2	3172-2	3449.1	3449·1	3774.0	3774.0
56	15	1 Sept., 1832	300	300	2644.8	2687·4 2644·8	3110·4 3044·1	3110·4 3044·1	3371·7 3288·9	3371·7 3288·9	3675.9	3675.9
"	•37	20 Feb., 1852	300.	300	2644.8	2644.8	3044.1	3044-1	3288·9	3288·9	3571·8 3571·8	3571·8 3571·8
57	12	23 Feb., 1828	177-636	300	1550.0	2617.8	1778-9	3004-2	1918-3	3239.7	2079-2	3511.5
58	14	2 June, 1831	300-	300	2583·3	2583·3	2955.6	2955.6	3181.5	3181.5	3441.0	3441.0
59	21	20 June, 1837	270-25	300	2289.8	2541.9	2611.7	2899-2	2805.5	8114-3	3028.0	3361-2
61	10 5	6 Apr., 1825	300·	300	2443.8	2443.8	2768.4	2768.4	2963-1	2963.1	3184.2	3184.2
62 63	32	13 Aug., 1822 28 June, 1849	300	300 300	2388·9 2331·6	2388·9 2331·6	2697∙0 2623∙5	2697·0 2623·5	2880.9	2880.9	3089.1	3089.1
64	23	17 May, 1838	300.	300	2278.4	2273.4	2549.4	2549.4	2796·9 2712·3	2796·9 2712·3	2992·5 2895·9	2992·5 2895·9
65	4	7 May, 1821	300·	300	2214.3	2214.3		2474.4	2627.7	2627.7	2799.6	2799·6
	7	• • •	232-125	300	1713.2	2214.3	1914.6	2474.4	2033-2	2627.7	2166-2	2799.6
66	6	2 June, 1823	300.	300	2154.3	2154.3		2399-1	2542.5	2542.5	2703.3	2703·3
ا جء	35 11	28 Jan., 1851	300· 299·283	300	2154.3	2154.3		2399-1	2542.5	2542.5	2703.3	2703.3
67 68	9	24 May, 1827 18 Sept., 1824	300	300 300	2088·4 2031·9	2093·4 2031·9	2318·0 2247·3	2323·5 2247·8	2451.7	2457.6	2601.1	2607:3
69	41	31 May, 1854	300-	300	1969.5	1969.5		2170.8	2372·4 2287·5	2372·4 2287·5	2511.6 2416.5	2511·6 2416·5
70	19	12 Mar., 1836	235.775	300	1498-5	1906.8		2094.6	1731.3	2202.9	1825.4	2322.6
72	18	2 Mar., 1836	300∙	300	1780.8	1780.8	1943-1	1943-1	2035.8	2035.8	2137.8	2137.8
ļ	20	13 Feb., 1837	300-	300	*****	1780.8		1943-1	2035.8	2035.8	2137.8	2137.8
-, l	*26	26 Nov., 1840	196.533	300					1333.7	2035.8		
73 74	8 16	17 May, 1824 4 Sept., 1833	296·25 300·	300 300	1696·3 1655·1	1717·8 1655·1	1844·8 1794·0		1929.5			2047.5
′*	38	22 Apr., 1852	68.742		379.3			1794·0 1794·0				1959-0
76	17	13 Dec., 1834	300	300		1531.2			1715.7		1787.7	1959·0 1787·7
	49	3 Mar., 1859	+	300		1531-2		1648.8		1715.7		1787-7
79	2	24 Aug., 1809	300-	300	1353-3	1353.3	1443.6	1443 6		1494.9	1548.6	1548.6
80	1	22 Feb., 1805	300.	300	1296.6	1296.6		1379.7	1425.9	1425.9		1474.8
84 88	13 3	7 Sept., 1830	237·433 300·	30 0	859.2	1085.7		1142.7	929-1	1173.9		1207.2
00		24 July, 1812		300		901.8						982-2
	58		14884·923				137841.6		149335·9			191599-2

^{*} Four thus marked have returned to this List.

⁺ Excluded by Property Clause.



VALUATION, 1st May, 1863.

a. Valued as under New Rules.—Incumbent—Widows' Pensions, £800 per Annum, Half-yearly in advance, reducible to one-half on Remarriage.

Age last Birthday.	No. in List 1.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
23	56	3016:8	3678.5	4131.3	4706-1
28	44	3069-9	3734.4	4183.5	4747-5
30	43	3084.9	3746.9	4192-2	4749-0
34	46	3118-2	3771 ⋅2	4205.7	4743.3
35	42	3123·0	3771.8	4202·1	4733-4
	*52	3123-0	3771.8	4202.1	4733.4
	53	3123.0	3771.8	4202.1	4733.4
37	81	3124.2	8762·2	41817	4697:1
	55	3124-2	3762.2	4181.7	4697.1
39	48	3114.0	8784·3	4141.2	4637·7 4598·1
40	34	3 102 ·3 3 10 2· 3	3711 · 9 3711·9	4112·1 4112·1	4598·1
42	50 29	3066:3	3657.0	4039-2	4501.8
42	33	3066.3	3657·0	4039-2	4501-8
	*45	3066·3	3657·0	4039-2	4501.8
43	28	3044·7	3623·7	3996.9	4447.5
44	40	3021.0	3587:4	3953.1	4389.0
	54	3021.0	3587.4	3953:1	4389-0
	57	3021.0	3587.4	3953·1	4389·0
46	39	2967-0	3507:3	3852.0	4263.9
47	25	2938 ·2	3465.0	3799.8	4198.8
48	51	2908.8	3422·1	8747.0	4133.1
49	22	2880.0	3380.1	3695·1	4068·9 4006·5
50	36	2852.7	3339.6	3645-0	3881·4
52	24	2797·5	3258.3	3544·8 3544·8	3881.4
	27	2797·5 2797·5	3258·3 3258·3	3544·8	3881.4
	47 58	2797·5	3258·3	3544·8	3881.4
54	30	2736·0	3169·2	3436.2	3747.9
56	15	2670.3	3074.4	3321.6	3608.1
•	*37	2670.3	3074.4	3321.6	3608-1
57	12	2633.1	3022.5	3257.4	3533.4
58	14	2592.0	2965.5	· 3190·2	3452.7
59	21	2546.1	2903-9	3119· 4	3367-2
61	10	2444.]	2769.0	2963·1	3184.5
62	5	2388-9	2697.0	2880.6	3089-1
63	32	2330·1	2623.5	2796.6	2992.8
64	23	2273.4	2549.4	2712.3	2896-2 2799-6
65	4	2214.0	2474.5	2627.4	2799·6
60	7	2214·0 2154·3	2474·5 2399·1	2627·4 2542·2	2703·3
66	6 35	2154·3	2399·1 2399·1	2542·2 2542·2	2703.3
67	111	2093.4	2323.5	2457.3	2607:3
68	11	2031.9	2247:3	2372.4	2511.6
69	41	1969-2	2170.8	2287.5	2416.8
70	19	1906.8	2094.6	2202.9	2322.6
72	18	1780-8	1943-1	2035.8	2137.8
	20	1780.8	1943-1	2035.8	2137.8
	*26	1780.8	1943-1	2035.8	2137.8
73	8	1717.8	1868-1	1953.6	2047:8
74	16	1655.4	1794-0	1872.6	1959•0 1959•0
70	38	1655.4	1794.0	1872·6 1715·1	1787.7
76	17	1531·2 1531·2	1648 [.] 8 1648 [.] 8	1715·1 1715·1	1787-7
70	49	1353.3	1443.6	1494.3	1548.9
79 80		1296.6	1379.7	1425.6	1475-1
84	13	1085-4	1142.7	1173.6	1207-2
88	3	905.8	939-9	960-3	982-2
	58	144365.8	167354-2	181888-2	199203-0

^{*} Four thus marked have returned to this List.

Valuation, 1st May, 1863.
b. Old Rules.—Incumbent Pensions—Sons' Benefits.

A ma land	No. in	Amount of	Full		VALUE OF FO	ILL BREEFITS.		
Age last Birthday.	List 3.	Pension paid.	Pension.	8 per Cent., by Neison XVII.	6 per Cent.	5 per Cent.	4 per Cent., by Neison, XVII (a)	
		£	£	£	£	£	£	
6	15	75.891	80	735-7	931-2	992-2	958.4	
7 8	13	50.	50	749.5	844-1	897-6	955.3	
8	7	50-	50	763.5	849.7	898-2	950.8	
	12	46.550	80*	763-5	892-6	941.3	950.8	
	17	5.575	50	763-5	849.7	898.2	950.8	
9	9	50.	50	778-4	855.6	898.8	945.5	
	18	50.	50	778-4	855.6	898.8	945.5	
10	8	100·	100	767-6	830 ·5	873-1	913.7	
11	14	95.891	100*	728.6	787 -2	819.4	828-9	
12	11	100·	100*	685-8	735.2	762.1	765.7	
13	10	100.	100*	639.0	679·3	701.2	724-2	
	16	100·	100	639-0	679·3	701.2	724-2	
14	3	100-	100	588-1	619.6	636.6	654.4	
	4	100∙	100	588-1	619-6	636.6	654.4	
16	2	100.	100	472.5	488:3	496.7	505.3	
18	6	100-	100	336-8	339.6	341-1	342.6	
	16	1223-907	1310	10778-0	11857-1	12393-1	12770-5	Value of full Pensions
				10069-8	11077-7	11578-7	11931-4	Value of dimin- ished Pensions

Value of Special Annuities to Sons.

Age	No. in	Amount	Full	8 per Cent. 1852, To	, by Neison, able IX.	6 per	Cent.	5 per	Cent.	4 per Cent. Table	by Neison, IX (a)
Birth- day.	List 3.	of Pension paid.	Pen- sions.	Value of Pension paid.	Value of full Pension.	Value of Pension paid.	Value of full Pension.	Value of Pension paid.	Value of full Pension.	Value of Pension paid.	Value of full Pension.
33 36	5 1	£ 43.600 50.	£ 50* 50	£ 444·1 500·3	£ 509·3 500·3	£ 531·8 598·1	£ 609·9 598·1	£ 589·5 660·8	£ 676·1 660·8	£ 662·5 7 37· 2	£ 759·7 737·2
	2	93.600	100	944:4	1009-6	1129-9	1208.0	1250:3	1336-9	1399.7	1496:9

^{*} Both Parents dead.

Valuation, 1st Mat, 1863.
b. Valued as under New Rules.—Incumbent Pensions—Sons' Benefits.

		8 PER	CENT.	6 PER	Свят.	5 PER	CENT.	4 753	CENT.
Age last Birthday.	No. in List 3.	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.
		£	£	£	£	£	£	£	£
6	15		981.7		1124.3		1207.4		1299.8
7	13	974.9		1108-2		1185-2		1270.5	
8	7	997-9		1121.7		1192-6		1270-6	
	12		1001.8	l	1135.7	1	1206.7	1	1284.8
_	17	997-9	• •	11217		1192.6	• • •	1270-6	i
9	9	1022.7	• • •	1135.8	· ·	1200-1		1270-5	1
10	18	1022.7	• •	1135.8		1200-1		1270-5	
10	8 14	1014.7	071.5	1116.5	1061-2	1173.8	1111.5	1236-2	1100.0
11	114		971.7					••	1165·9 1091·5
12 13	10		923·6 869·9		1001·4 937·1		1044·8 973·9		1013-2
10	16	869-9		937-1		973-9	9759	1013-2	1013-2
14	3	812-2	• • •	868-3		898.7		931.0	ì
14	4	812-2	• • •	868.3		898.7	٠٠.	931.0	1
16	2	682.1	• • •	717.1		735-9	٠٠.	755.4	1
18	6	529.2		546.0	::	555-0	.:	560-1	
	16	9736-4	4748:7	10676.5	5259.7	11206.6	5544.3	11779-6	5855-2
		144	85·1	1593	36-2	1678	50-9	176	34.8
Annuity£50 } paid in full \$	2	10	09-6	120	0.80	133	36·9	14	196- 9
		154	.94·7	1714	14-2	1808	37·8	191	31-7

VALUATION, 1st May, 1863.

c. Old Rules.—Incumbent Pensions—Daughters' Benefits under age 19.

Age					VALUE OF F	ULL BENEFITS.		
last Birth- day.	No. in List 2.	Amount of Pension paid.	Full Pension.	8 per Cent. by Neison, XX.	6 per Cent.	5 per Cent.	4 per Cent by Neison, XX.(a)	
ļ	 	£	£	£	£	£	£	
2	34	30.	30	601.4	730-2	800.0	860.7	
6	31	5.575	50	725· 5	838-2	896.2	942-9	
7	20	50-	50	738-3	844.1	897.6	939.0	
	27	75-892	80*	738-3	913.1	964.9	939.0	
	33	50·	50	738.3	844.1	897.6	939-0	
8	25	50.	50	751.3	849.7	898-2	933.7	
ì	26	75.891	80*	751.3	892.6	941.3	933.7	
9	32	50∙	50	765-1	855.6	898-8	927.6	
10	19	100-	100	753.1	830.5	873-1	895.0	
1	22	100.	100*	753.1	830.5	873-1	895.0	
ļ	24	96.55	100*	753-1	830.5	873-1	895.0	
13	17	10 0 ·	100*	620.5	679.3	701.2	702.6	
l	18	100-	100	620.5	679-3	701-2	702.6	•
1	36	100.	100	620.5	679.3	701-2	702.6	
14	16	17.783	100*	569.6	619-6	636.6	633.8	
1	23	96.55	100*	569.6	619.6	636-6	633.8	
	28	78.938	100	569.6	619 ·6	636-6	633.8	
	30	52.788	100	569.6	619.6	63 6·6	633.8	
15	29	52.788	100	517.2	555.9	568.5	564.7	
	35	100.	100	517.2	555 ·9	568.5	564.7	
16	11	100∙	100	462.3	488.3	496.7	494.4	
	15	17.783	100*	462.3	488.3	496.7	494.4	
17	10	100.	100*	403.0	416.3	421.0	421.1	
	21	100-	100*	403.0	416.3	421.0	421-1	
18	14	17:783	100*	336.0	339.6	341.1	341.7	
	25	1718:321	2,140	15309.7	17036-0	17777-4	18045:7	Value of full Pensions.
				3016-6	3356.8	3503.0	3556.0	(remaining
				12293·1	13679-2	14274-4	14489-7	Value of dimin- ished Pensions.

c. After age 19-Receiving Pensions of £50 a Year in lieu of Donation.

	No. in	Amount of	Full		VALUE OF	BENEFITS.		
Age.	List 2.	Pension paid.	Pension.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	1
	¦	£	£	£	£	£	£	-
25	13	50.	50*	443.8	531.2	590-1	663.5	l
32	4	50.	50*	476.1	571.8	635.3	713.9	
37	8	50·	50	495.4	592.8	656.7	734.7	1
38	7	50∙	50	496.9	593.9	657.2	734.5	1
3 9	12	50.	50	497-4	593.5	656.2	732.4	
41	3	19.813	50	4950	588.7	649.4	722.9	
42	1	50.	50	492.5	584.7	644.2	716.0	
43	2	19.812	50	489:3	579.8	638·l	708-2	
	6	50.	50	489.3	579.8	638.1	708-2	
44	5	50.	50	485.6	574.3	631.2	699.4	1
59	9	50.	50*	423.7	483-2	519.1	560.2	
	11	489.625	550	5285.0	6273.7	6915.6	7693-9	
		Deduct		594.3	705.4	777:4	864.1	
				4690.7	5568:3	6138-2	6829-8	Value of diminished Pensions
Total	36	2207:946	2,690	20594.7	23309.7	24693.0	25739.6	Value of full Pensions.

^{*} Both Parents dead.

VALUATION, 1st May, 1863.

c. Old Rules.—Value of Pensions of Daughters who are Annuitants of £100 a Year till Marriage or Death, under the Subsidiary Rules.

Age			8 PER	CENT.	6 PER	CENT.	5 PMB.	CENT.	4 PER	CENT.
last Birth- day.	No. in List 13.	Amount of Pension paid.	Value of Pension paid.	Full Value.	Value of Pension paid.	Full Value.	Value of Pension paid.	Full Value.	Value of Pension paid,	Full Value.
		£	£	£	£	£	£	£	£	£
19	28	17:782	140.8	792-0	166.9	938.8	184.5	1037.7	206-6	1161-8
	30	100.	792.0	792.0	938.8	938-8	1037.7	1037.7	1161.8	11614
	31	100	792.0	792.0	938.8	938-8	1037.7	1037-7	1161.8	1161
21	27	17.782	147.2	827.5	175.2	985-0	194.0	1091.1	217.7	1224
22	25	100	844.7	844.7	1007-2	1007-2	1116.8	1116-8	1254.2	1254
	26	100-	844.7	844.7	1007-2	1007-2	1116.8	1116.8	1254-2	1254
23	21	100-	861.1	861.1	1028.3	1028.3	1141.0	11410	1282-2	1282
	22	100.	861.1	861.1	1028·3	1028.3	1141.0	1141-0	1282-2	1282
24	20	100.	875.6	875.6	1047-0	1047-0	1162.4	1162.4	1306.7	1306·
25	17	100.	887.6	887-6	1062.4	1062.4	1180-1	1180.1	1327.0	1327
	18	100.	887.6	887.6	1062-4	1062.4	1180-1	1180-1	1327.0	1327
	19	91.	807.7	887.6	966-8	1062.4	1073.9	1180-1	1207.6	1327
26	16	17.782	159.6	897.6	191-2	1075.4	212.5	1194.9	236.4	1344
	23	100.	897-6	897-6	1075.4	1075.4	1194.9	1194.9	1344.0	1344-
	29	100.	897.6	897.6	1075.4	1075.4	1194.9	1194.9	1344.0	1344
27	14	100.	906.3	906.3	1086-7	1086.7	1207.7	1207.7	1358.5	1358
	15	17.783	161.2	906.3	193-2	1086.7	214.8	1207.7	241.6	1358
28	13	100-	914.3	914.3	1096.8	1096.8	1219-1	1219-1	1371.4	1371
	24	100-	914.3	914.3	1096.8	1096-8	1219-1	1219-1	1371.4	1371
29	12	100.	922.7	922.7	1107.3	1107:3	1230-9	1230-9	1384.5	1384
30	9	94.	876-1	932.0	1051-9	1119-0	1169-2	1243.8	1274.8	1398
	10	70-250	654.8	932.0	786-1	1119-0	873.8	1243.8	982.6	1398
34	8	100.	971.4	971.4	1165-6	1165-6	1294·1	1294·1	1452-2	1452
37	6	100.	9907	990.7	1185.5	1185.5	1313-3	1313.3	1469-4	1469
	7	94.	931.3	990.7	1114.4	1185.5	1234.5	1313.3	1381-2	1469
38	5	100.	993-8	993-8	1187.7	1187.7	1314.4	1314.4	1469-0	1469
39	4	100-	994.7	994.7	1186.9	1186-9	1312.4	13124	1464.8	1464
40	3	94.	933.7	993-3	1112.3	1183-3	1228.6	1307-0	1359.4	1456
43	2	100	978.6	978.6	1159.6	1159.6	1276-1	1276-1	1416.3	1416
44	1	91:246	886.1	971-1	1048.0	1148.5	1151.8	1262.3	1276.3	1398
50	11	100-	920.5	920.5	1075-5	1075-5	1172.8	1172-8	1287.5	1287
		2705·625 3100·	24647·4	28079.0	29425-6	33523.2	32600-9	37145.0	86474:3	41628

VALUATION, 1st May, 1863.

c. Valued as under New Rules.—Incumbent—Value of Daughters' Benefits.

last day.	ā%	8 PE	CENT.	6 PER	CENT.	5 PEI	CENT.	4 PEI	R CENT.
Age last Birthday.	No. in List 2.	If Mother living.	If both Parents dead.	If Mother living.	If both Parents dead.	If Mother living.	If both Parents dead.	If Mother living.	If both Parents dead.
М	-	£	£	£	£	£	£	£	£
2	34	825·1		1046.0		1195.9	1	1386.4	
6	31	976.4	l	1195.4	l	1341.1		1524.6	
7	20	995-1		1209.8		1352-2		1531-1	
	27		1159-8		1402.3	••	1562-1		1761.3
	33	995-1		1209.8		1352-2		1531-1	1
8	25	1014-1	l l	1223.8		1362.3		1536.4	Į
l	26	••	1189-3	••	1426.5		1582-1		1776.0
9	32	1034.5	1 1	1238.3		1372.7	1	1541.5	ł
10	19	1035.0	1	1232.5		1362:3	1	1525.5	
	22		1225.4		1448.8		1594.7	• • •	1776.3
	24		1225.4		1448.8		1594.7		1776.3
13	17	• •	1140-9		1341-1		1471.4		1633.7
	18	966.5	l l	1144.2	l l	1260.8	1 1	1407.0	1
	36	966.5		1144.2		1260.8	1 !	1407.0	†
14	16		1110-9		1304.3		1430-2		1587.0
	23		1110.9		1304.3		1430-2		1587.0
	28	943-1	l	1115-1	1 1	1227.9	1	1369.4	1
	30	943.1	1 1	1115.1		1227.9	1 !	1369.4	1
15	29	924.5	1	1092.4	1	1202.5		1341.0	1
	35	924.5	1 1	1092-4	l I	1202.5	1	1341.0	1
16	11	912-4	l ., l	1078.7		1187.6		1324.9	İ
	15	••	1070.0		1256-2		1377-3		1528.9
17	10		1064.4	• •	1251-2	••	1373-2		1525.6
	21		1064.4		1251-2		1373-2		1525.6
18	14	••	1067-5	• •	1263-6	••	1388-6		1544-9
		13455-9	12428:9	16137-7	14698:3	17908-7	16177-7	20136-3	18022-6
	25	2588	R4·R	3088	16.0	340	86.4	381	58-9
	ii l	1240		1482		163		182	
	31	3694		4402		486		544	
Total	67	7522	29.0	8968	3.2	991	46·7	1108	57:6

Valuation, 1st May, 1863.

c. Daughters after age 19 receiving (under Old Rules) Pensions of £50 a Year in lieu of D mation—Value of Benefits under New Rules.

ast lay.	는 ci	8 PER	CENT.	6 рез	CENT.	5 P#E	CENT.	4 PEI	CENT.
Age last Birthday.	List.	If Mother living.	If both Parents dead.	If Mother living.	If both Parents dead.	If Mother living.	lf both Parents dead.	If Mother living.	If both Parents dead
		£	£	£	£	£	£	£	£
25	13		1179-2		1408-2		1560.0		1749-0
32	4		1236.7		1482.6		1644.7		1844.4
37	- 8	1112.7	l i	1344.8	1 . 1	1497-1	1 1	1684.0	t
38	7	1117:4	1 1	1348.9	1 1	1500-2	1 1	16857	l
39	12	1120.3	1 1	1350.3	1 1	1500.5	1 1	168 3·6	ì
41	3	1120.4	1 1	1345.6	1 1	1491.6	1 [1668-7	
42	1	1118.0	1 1	1340.2	l l	1483.6	1 1	1657:1	1
43	2	1114.5	1 1	1333.1	1 1	1473.6	1 1	1643-2	i
	6	1114.5	1 1	1333:1	1 . 1	1473.6	1 1	1643-2	1
44	5	1109.8	1 1	1324.5	1]	1461.9	1 1	1627:3	1
59	9		1060-0	••	1208-9	• •	1298-6	• •	1401-4
		8927.6	3475.9	10720-5	4099:7	11882·1	4503-3	13292.8	4994.8
	11	124	03.6	148	20.2	163	85.4	182	87·6

New Rules.—Valuation of Incumbent Pensions—Daughters who under the Old Rules are on the Subsidiary Fund (valued in all cases as if the Mother is dead or married).

Age.	No. in List 13.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Age.	No. in List 13.	8 per Cent	6 per Cent.	5 per Cent.	4 per Cent.
		£	£	£	£			£	£	£	£
19	28	1089.0	1286.4	1415.9	1577:9	28	13	1203.2	1440.2	1596-9	1791.9
	30	1089.0	1286.4	1415.9	1577.9		24	1203.2	1440.2	1596.9	1791-9
	31	1089.0	1286.4	1415.9	1577.9	29	12	1210.4	1449.7	1607.9	1804-1
21	27	1122.8	1332.4	1475.6	1643.5	30	9	1218.8	1460.3	1620.0	1817:5
22	25	1139-1	1354.4	1496.7	1674.4		10	1218.8	1460.3	1620.0	1817.5
	26	1139-1	1354.4	1496.7	1674.4	34	8	1253.3	1502.2	1665-5	1866-2
23	21	1154.6	1375.2	1521.3	1703.4	37	6	1268.3	1516.7	1678.8	1876.7
	22	1154.6	1375-2	1521.3	1703.4		7	1368.3	1516.7	1678-8	1876.7
24	20	1168-1	1393.4	1542.7	1728.6	38	5	1269.8	1516.9	1677.5	1873-2
25	17	1179.2	1408-2	1560-0	1749.0	39	4	1268.9	1513.9	1672.9	1865.6
	18	1179.2	1408 2	1560 0	17490	40	3	1265.9	1507.8	1664.5	1854.0
	19	1179-2	1408-2	1560.0	1749.0	43	2	1245.8	1476.3	1623.2	1800-2
26	16	1188-1	1420.6	1574.3	1765.8	44	l	1236.3	1461.8	1605.4	1777.8
	23	1188-1	1426.6	1574.3	1765.8	50	11	1170.6	1366.4	1488.7	1632.6
	29	1188-1	1426.6	1574.3	1765.8						
27	14	1195.9	1431.0	1586.5	1779.7						
	15	1195.9	1431.0	1586.5	1779.7		31	36940.6	44027.0	48674.9	54411.1

VALUATION, 1st MAY, 1863.
b and c. Old Rules.—Incumbent Pensions, classed under Mother's Age, if living as a Widow 1st May, 1863.

			c.	DAUGH	TERS.			<u> </u>			b. So	NS.		
Mother's Age	# 15		ĸ	VAI	UE OF FU	LL BENE	TITS.			÷	VAT	UE OF F	ULL BE	EFITS.
last Birthday.	Age last Birthday.	Annuity paid.	Full Annuity.	8 per Ct. Neison, XX.	6 per Ct.	ā per Ct.	4 per Ct. Nelson. XX. (a).	Age last Birthday.	Annuity paid.	Full Annuity.	8 per Ct. Neison, XVII.	6 per Ct.	5 perCt.	4 per Ct. Neison, XVII. (a).
		£	£	£	£	£	£		£	£	£	£	£	£
23	2	30.	30	601.4	730.2	800.0	860.7		1			1		
28	8	50.	50	751.3	849.7	898.2	933.7	7	50.	50	749.5			
30	7	50·	50	738 3	844.1	897.6	939.0		100-	100	767.6			913.7
35	1.0	100	100	753·1	830.5	873 1	895·0	9	50.	50	778·4 763·5			945·5 950·8
35	10 9	50.	100 50	765·1	855·6	898.8	927.6	8	50.	50	100.0	849.7	898.2	950.9
"	7	50.	50	738.3	844·1	897.6								
40	16	100	100	462.3	488.3		494.4		100.	100	588-1	619-6	636.6	654.4
	15	52.787	100	517-2	555.9	568.5	564.7	178	5.575	50	763.5			950.8
"	14	52.788	100	569.6	619.6	636.6	633.8	ľ	1 0019	00	, 500	040.	0002	0.00
"	6	5.575	50	725·5	838.2	896.2	942.9		!				1	
4 6	13	100.	100	620.5	679.3				1 1	'				
50								18	100.	100	336.8	339.6	341-1	342.6
52								13	100.	100	639.0	679.3		724·2
"	15	100.	106	517.2	555.9	568.5	564.7	9	50.	50	778-4	855.6	898.8	945.5
	13	100	100	620.5	679.3	701.2	702.6		1			l		
54									100.	100	472.5			505.3
61	::	-:	• • • •						100	100	588-1	619.6	636.6	654.4
61	43	19.813		489.3	579.8		708 2		1			ł		l
70	41	19.813		495.0	588.7	649.4	722.9		1 1			l		
66	42	50.	50	492.5	584.7	644·2 656·2	716·0 702·4		1			}		
$\ddot{72}$	39 37	50·	50 50	497·4 495·4	593·5 592·8	656.7	734.7					ł		
						1	1041	36	50.	50	500.3	598.1	660-8	737-2
76	44	50	50	485.6	574.3	631.2	699.4	90	30	30	"" 3	330 1	"""	13/2
	43	50	50	489.3	579.8		708·2		1			ľ		l
"	38	50.	50	496.9	593.9		734.5		j		1			l
"	14	78.937	100	569.6	619.6	636.6			1		1		l	ı
												 	<u> </u>	
With)		l												
Mothers }	22	1259.713	1,480	2891.3	14677.8	15641.9	16490.8	12	855.575	900	7725.7	84297	8837.7	9279.7
living)						<u> </u>		<u> </u>	<u> </u>				<u> </u>	<u> </u>

Both Parents dead.

			DA	UGHTER	j.							Sons.			
.E øi	ast Iny.	Annuity	ıty.		FULL V	ALUES.		3.	ay.	Annuity	<u>.</u>	VAL	UE OF FU	LL BENEF	ITS.
No tr	Age last Birthday.	paid.	Full Annuity.	8 per Ct.	6 per Ct.	5 per Ct.	4 per Ct.	No.	Age last Birthday.	paid.	Fall Annuity.	8 per Ct.	6 per Ct.	5 per Ct.	4 per Ct.
		£	£	£	£	£	£			£	£	£	£	£	£
4	32	50.	50		571. 8	635.3									
9	59	50.	50	423.7	483.2		560.2			1					
10	17	100-	100	403.0			421.1			İ					
13	25	50.	50				663·5						'		
14	18	17:783	100				341.7			Ì					
15	16	17.783					494.4								
16	14	17.783							}	l					
17	13	100.	100				702.6								
21	17	100.	100						13	100.	100		679.3		724-2
22	10	100·	100		830.5		895.0		12	100.	100				765.7
23	14	96.550							8	46.550	80	76 3 ·5	892.6	941.3	950.8
24	10	96.550			830.5		895.0			.				1	
26	8	75.892							11	95.891	100				
27	7	75.892	80	738.3	913.1	964.9	939.0		6	75.891	80		931-2		958.4
					·	}		3	33	43.600	50	509.3	609-9	676-1	759-7
	14	948-233	1,210	7703.4	8631-9	9051-1	9248 8		6	461-932	510	4061-9	4635.4	4892-3	4987:7
Total	36	2207 ·946	2,690	20594.7	23309.7	24693.0	25739.6		18	1317-507	1,410	11787:6	13065-1	1 37 30·0	14267-4

e. Valuation, 1st Mar, 1863.—Refired Members who abide by Old Rules.

		ಬೆ															
MIONABY	4 per Ct.	£ 440·1		440.1									328-3		534.3	346.9	1209.5
VALUE OF DAUGHTERS' REVESTIONARY BENEFITS.	5 per Ct.	£ 364.4		364.4									265-2		445.9	290.4	1001.5
DAUGHT BEN	6 per Ct.	£ 300.8		300.8									214.6		370.5	238.4	823.5
VALUE OF	8 per Ct.	£ 206-0		206.0									141.0		256-3	157.4	554.7
	Age	20										1	0		(23)	16	•
	4 per Ct.	£ 185·9 4·8		190-7		171.8						Rules.	185-9	189-2 189-2 97-0 65-9	37.5	:	764.7
Sons' REVEREGONART BENEFITS.	5 per Ct.	£ 165·5 4·8		170.3		151.6						the Old	165.5	169.7 92.5 62.7	36.4	:	696.5
OF SOMS' R. BEMESTA	6 per Ct.	£ 147·3		151.5		133.9						bide by	147-3	125-0 125-0 88-1 60-5	34.9	:	634.8
VALUE O	8 per Ct.	£ 112:5	1	114.7		100-9						e who a	112.5	117.8 75.8 51.9	29.3	:	505-1
	Age.	- «				•						eroi.		7722	(P) (P) (P) (P) (P) (P) (P) (P) (P) (P)	(6E)	9
OMABY	4 per Ct.	£ 1353·6	1349-7 1223-1	3926-4		r 19.)						in the S	1190-7	1334.7	1250-7	1252-2	5028.3
Wips's Reversionary Bribetts.	5 per Ct.	£ 1192.5	1214·1 1132·2	3538-8		(Without Children under 19.)						Members in the Service who abide by the Old Rules	939-6	1098-9	1051.5	1059-0	4149.0
18	6 per Ct.	£ 1055·1	1094·1 1050·9	3200-1		 lout Child dit						M	7.847	920-7	893.1	203-9	8476.4
VALUE	8 per Ct.	£ 798.	852-9 859-8	2510-7		: X							548.4	663.6	643.8	654.3	2510-1
	V	55	24 19		_	54 36 17		7.6 60	==	not given			No. in List 6. 119	36	80	4	4
gi	W.	40	69		Widovers.	:::	Single.	::	:	Age or Description not given	or reply to Calcular.		23	39	55	49	
Age.	H	63	68 76			59 75		27		Age or 1	Oy. Age. 76		28	43	51	53	

VALUATION, 1st MAY, 1868.

1. Old Rules.—Retired Members who have conditionally accepted the new Schome.—Values of Reversionary Benefits to Wives, Sons, and Daughters, at 8, 6, 5, and 4 per Cent, under the Old Rules.

÷
_
(continued
$\overline{}$
Rules
Org
(1)
.:

ntitled	Fund Benefits.		တ်ဝ	က် ဘီ ဘ	တ်တံတိ	ശ്	oń oń	où o	 3					ம்	vi vi	ெ	ൾ ഗ		ာ် ဘင်းစ	റ് ൽ		
	per Cent Be	*	345-2	3463 381·1 410·8	345-2	358-0	383.7	393·7	2			9.19	0 10	343.0	358 0 691-6	468-7	343.0	565.8	402.9	343.0		
KRSIONARY BI	per Cent. 4 p	F	288.7	316.8 339.4								60.7			299.8			473.7		287-2		
VALUE OF DAUGETEES' REVERSIONALY BESTERING	per Cent. 5	બ	238.7	238.4 260.4 279.8	394.7	246.0	236·5 255·6	264.8	2			£0.£	9	236.5	246.0	323.1	236.5	394.7	277.2	236.5		
VALUE OF DAI	9 per Cent. 6	41	159.8	174.2	274·1 159·8	161.3	157.2	178.7	3			0.07	D 0	157.2	161.3	221.8	157-2	274.1	191-0	157.9		
	ė,		71	18	7 7	1	2 0	60 m	_				3	15	- % 28	32	15	2 7 8	9 9	15		_
ENEVITS.	4 per Cent.	બ	62.9	51.1	81.3	:	0.26	65.9	177.2	970	62.9	0.41	14.6	9.7		65·9 37·5	:		129.8	65.9	51.1	:
VALUE OF SOMS' REVERSIONARY BENEFITA.	5 per Cent.	3 2	65.7	48.9	4.77	:	92.5	62.7	1624	92.5	62.7	0.41	14.5	92.2		62.7 36.4	:		122.5	62.7	48.9	:
Some' REVI	6 per Cent.	બ	9.09	47.3	74-2	:	88.1	60.5	148.6	88·1	60.5	0.01	: 00	88.1		60.5 34.9	:		115-1	60.5	47.3	?
VALUE OF	8 per Cent.	બ	51.9	40.4	63.6	:	75.8	51-9	120-2	75.8	51.9	1	: 6	75.8		51.9 29.3	:		97.9	63.6	404	:
	5 5		23	£ 7.	12	:	:=	13	2 40	= ==	2 2 5	=	17	Ξ		13	61 :		6	22 62	17	;
SEMBETT.	4 per Cent.	32	1255-8 1255-8	1255-8	1250-7	1249-2	1249-2		1252-2		1252-2	1050.0	1952-2	1252-2		1258-2	1266.3		1276-2			12762
Wipe's Revrasionary Benefit.	5 per Cent.	બ	1053.3	1053.3	1051:5	1053.3	1053:3		1059.0		1059-0	1010.0	1059-0	1059-0		1067-4	1078-2		1091-4			1001-4
-	6 per Cent.	બા	895.8 895.8 895.8	892.8	893-1	896.7	896.7		903-9		903-9	0.800	6.606	903-9		914:1	926-4		940-8			8.016
VALUE OF	8 per Cent.	બ	642.6	9.759	643.8	1.219	\$-2+9 \$-4-4		654.3		654.3	6.1.10	654.3	654.3		9.899	674.7		9-289			9.289
No. in	List 7.		95	100	98	85	92		80		84	7	18	81		20	62		7.4			63
zi	W.		49 51	58	46	37	39		41		46	91	4 4	54		52	54		38			42
Ages.		Ì	 20			25			53							24	55		26			

a .	်တ်တ	တ် တ	တ်				တ်ပ	ർ ശ്				øż	ø	တ်ဖ	တ် တိ	တ်ဖ	ฑ่	တ်	σά	න්	ശ് ര	ഗ് ഗ	ŝ		٥	ń		
77.8	395.4	899.9 400.4	410.8	179.5			343.0	468-7				502.3	6.54.9	804.0	\$88.4 \$88.4	345-2	440.1	440.]	4 00.4	360-7	410.8	360.7	3		000	#.000		
77.4	330.0	329·3	339-4 169-7	167-2			287-2	390.6				417-9	553.7	691-7	334-2 324-8	288-7	364.4	364.4	333-1	301.9	339-4	301-9	3		9	224.0		
74.2	274.7	271.8	279·8 152·0	151.9			236.5	323.1				346.4	465-8	590.5	277-2	238.7	8.002	800.8	276.9	250.7	279.8	250-7	1			6.0/2		
60.5	186	184.6	191.8	118.3			157-2	221.8				238-7	827.8	426.9	191.0	159.8	706.0	206.0	9-161	170.4	191.3	1704 991.0	0 199			c./81	_	
278	3 × 2	42-	62 63	4			919	25				22	2 22	22	9 0	14	200	8	7	12	19	22 5			-			
129-8	183.7	97.0	171-3	168.3	157.4	113.5	1892	168.3	144.6	97-0	14.6	:			81.3 25.5	4.8		:	177-2	129.8	37.5	144.6	37.5	14.6	å	6.00		
122.5	167-2	92:5	151-6	155.3	1.46.3	107-9	169.7	156.8	135.4	95.2	14.5	:			25.0	8.4		:	162.4	122.5	36.4	135.4	36.4	14.5		1.7.9		
115:1	151.9	88.1	133.9	143-2	135.7	1020	152-0	1432	126.4	88:3	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	:			74-2	4.2		:	148.6	115.1	94.0	126.4	34.9	13.3		e .		
97.9	121-1	75.8	100-9	117.8	112.7	87.7	117.8	117.3	106.3	75.8	6.16	:		,	9.8.6	52		:	120-2	97.9	29.3	106.3	29.3	9.1		6.16		
	- * 5	3=	•	91	_ α	° 2	84	ဂ ဖ	&	=:	2 2	::			2 9	81	5	3 :		6	15	® 5	2 2	12	-			
1276-2	1276-2	1276-2	1288.5				1288.5					1288-4			1301-1		1.001	1301-1	1314.6			1326-9			1326.9	13380	1347.3	
1091-4	1091.4	1091-4	1106.4				1106-4					1106.4			1121.7		2.101.1	1121.7	1138-2			1154:1			1154-1	1168.8	1181.7	
8-076	8-076	8.076	957-0				957-0					957-0			974:1		177	974.1	1009-2			1009-2			1009-2	1026.3	1041.6	
9-289	687-6	9-289	9.202			•	9.202					702.6			718-2		9	718-2	734.7	-		751.5			751.5	783.6	783.6	
11.6	29	8	53	}			29					101			46		9	28 5	51	;		68			12	8 8 8	88	
47	84	20	8	:			4					22			\$		1	57	26 44			47			54	£ 5	88	
99			57	;											28				60 00						;	- G	!	

1. Old Rules (continued).

If entitled to Subsid.	Fund Benefits.		മ് ഗ്	ത് ശ്	න්ග	ก๋	øż	ග්		σά	න්			
VALUE OF DAUGHTERS' REVERSIONARY BENEFITS.	4 per Cent.	£ 777.3	358-0 502-3	370-0	534.3	6.070	346-9	410.8		502.3	388.4	125-9		
EVERSIONAR	5 per Cent.	£ 777.4	299-8	309-8	445.9	F 170	290.4	339.4		417-9	324.8	122.5		
AUGHTERS' E	6 per Cent,	£ 74-2 60-5	246-0	257-6	370.5	74.5	238-4	279-8		346-4	270.5	115-1		
VALUE OF D	8 per Cent.	£ 60.5	161.3	176.8	256.3	0 600	157.4	191.3		238-7	187.5	9.46		
A CO.	50	27 52	2283	11	23	54	16	19		22	6	6	2	
	4 per Cent.	£ 25.2	: :	14.6	:	1	4-8		85.9	37.5	252	189-2		37.5 14.6
VALUE OF SONS' REVERSIONARY BENEFITS.	5 per Cent.	£ 25.0	1.1	14.5	ï	\$	4.8	•	62.7	36.4	25.0	169-7		36.4
SONS' KEVE	6 per Cent	£ 23.5	40	13.3	d	ż	4.2	:	9.09	135-7	23.5	152-0		34.9
VALUE OF	8 per Cent	£ 18.8	11:	9-1	•	:	2-2	1	51-9	29.3	18.8	117.8		29.3
Arms	286	16	13	17	1:	:	18	£ :	13	12	16	2 2		15 17 19
BENEFIT.	4 per Cent.	1353.6	1353.6	1357-8	1357-8	1357·8 1359·0	1359-0	1359-0	1358-1	1349-7	1341-9	1332-3	1332-3 1332-3 1320-3 1320-3	1306-2
IFE'S KEVERSIONARY BEKEFIT.	5 per Cent.	£ 1192·5	1192-5	1201-2	1201-2	1201-2	1207.5	1207.5	1211-4	1214-1	1210-2	120.6	120-6 120-6 120-0 120-0	1191.6
WIFE'S KE	5 per Cent.	£ 1055·1	1055-1	1067-1	1067-1	1067-1	10764	1076-4	1084-2	1094-1	1096-2	1096.2	1096·5 1096·5 1094·7 1094·7	1091-1
VALUE OF W	8 per Cent. 6	£	798-0	811.5	811.5	811.5	823.5	823.5	834.6	852-9	1-098	865-5	865·5 865·5 869·7 869·7	872-1
No. in		32	64	65	73	34	87	76	31	43	20	21	27 23 26 26	25
	W.	99	28	473	55	64	99	62	55	51	4	42	68 68 51	45
Ages,	н	63		64		65		00	00	89	69	02	12	73

											,	
න් න්			ozi c	ń								
858-0 358-0			804-0	914.1		39030-9						
299.8 299.8			691-7	2.567		82752.5						
246.0 246.0			590-5	0-169		27308-4						
161·3 161·3			426.9	2116		18861-2	married.					
17	29	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	32 4	32	4	26	tor.					
::	:	::	:	:		6615-6	Widowers without Children, or with Sons above 19 or Daughters married					-
::	:	::	:	:		6191.7	bove 19			bers.		
::	:	::	:	:		5781-8	th Sons a			Unmarried Members.		
::	:	::	:	:		4779.0	en, or wi			Unmarr		
: :6	:	::	:	:		79	hildr		•			
1306-2 1306-2 1289-7	1289.7 1270.5	1223·1 1168·8	1074.3	1074.3	852.0	93777-6	oithout C					
1191·6 1191·6 1180·8	1180.8	1132-2 1089·	1010.4	1010.4	816-9	81896-7	'idowers a					
1091·1 1091·1 1085·4	1085-4	1050.9	952.5	952.2	782-1	72057-9	#					
872·1 872·1 872·1	872·7 870·9	859.8 841.2	798-9	6.864	671.4	54451.8						
12333	711	20	16	a		Total		79	٦		112 109 83 96 98	
6651	99	67 78	70	7.4	45	73		99	: 		48 55 55 55 55	: :
73	7.	78	81		87	73			Total		4 ed 10 rd rd	56 Total

1. Old Rules (continued) .- Widowers, with Children.

	•	တ်က တံတ် တံ	က်တော်တာ်တာ်တာတ	ർത്ത്ത്	ன்ன்ன்ன்	ည်းတွင်တွင်တွင်တွင်တွင်	ಗೆ ಜಿ	
	4 per Cent.	2399.9 3700-0 343.0 346.9	351.7 358-0 691-6 381-1	534.3 720.8	987.5 565.8 863.0 47.6	54.5 565.8 379.8 360.7 343.0	6 8 · 59 9	12227-0
VALUR OF DAUGHTERS' BENEFITS.	5 per Cent.	829.3 809.3 809.8 801.9 287.2 290.4	2942 2998 2798 3168	339.4 445.9 606.6	874.5 473.7 747.9 48.9	417.9 473.7 473.7 817.8 301.9 390.6	478.7	10807-8
VALUE OF DAUG	6 per Cent.	271.8 277.6 257.6 250.7 236.5 238.4	248.0 489.2 260.4	279 8 370 5 512 9	766.4 394.7 642.7 47.3	2.46.4 2.46.4 2.50.7 2.36.5 3.23.1	394.7	8630-6
	8 per Cent	1846 1768 1704 1572	1646 1613 1745 1745	191.3 256.3 364.9	274.1 469-9 37.8	238.7 274.1 1704 157.2 221.8	274.1	€002-4
	\$	4 I I I I I I I I I I I I I I I I I I I	13 13 18 18	1088	9224	25 4 5 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2442	22
	4 per Cent.	177-2 157-4 144-6	: :		81.3	6.59	:	689-1
VALUE OF SOMS' BENEFITS.	5 per Cent	1624 1463 1354	: :9	25.0		62.7	: ,	645.6
VALUE OF SO	6 per Cent	148·6 135·7 126·4	: :;	2 . 2 . 3 . 5 .	.: 742	9-09	:	603.8
	8 per Cent.	120-2 112-7 106-8	: :6	18.8 18.8	9.89	51-9	:	502⋅8
	1	22 8	19	91 :	. 12	8	:	7
	List 7.	91	99 27	‡ ‡	68	23	4	
	58 8	51	82 93	2 2	69	11	83	۵

f. Now Rules.—Retired Members who have conditionally accepted the new Scheme.—Values of Reversionary Benefits to Wives, Sons, and Daughters, at 8, 6, 5, and 4 per Cent. under the New Rules. VALUATION, 1ST MAY, 1863.

1. W.						,											
W. List 7. g per Cent. 6 per	٧	ă.	No.	VALUE 01	· Wies's RE	VERGOUARY !	BRKEFIT.		VALUB OI	P Sons' REVI	ERSIONARY E	EXECUTE.	1	VALUE OF I	AUGHTERS'	REVERSIONAL	T REMEDITS.
31 113 £41 £910 1084 13011 4 1710 2007 235-5 285-5 6 2221 3010 3770 35 104 6441 9210 10884 13011 1718 2007 2325 2366 12 2040 2341 3438 36 107 6441 9210 10884 13011 1718 2007 2326 2366 12 2040 2341 3438 38 107 6441 9210 10884 13011 1. 177 362 374 258 261 14 1943 2724 3040 39 106 6441 9210 10884 13011 1. 362 374 258 261 14 1943 2724 3049 47 110 6441 9210 10884 13011 1. 362 374 258 261 46 114 114	Н.	₩.	L-t 7.		6 per Cent.	5 per Cent.	4 per Cent.	g g	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	2	8 per Cent.			4
35 110 644.1 921.0 1000.4 1301.1 <t< td=""><td>9</td><td> ;</td><td>3</td><td>3.5</td><td>વ્યકૃ</td><td>₹</td><td>3.00</td><td>•</td><td>A [</td><td>£.000.7</td><td>£</td><td>£.070</td><td>ď</td><td>¥ 3°</td><td>3.0.7</td><td>£.876.6</td><td>£.731</td></t<>	9	;	3	3.5	વ્યકૃ	₹	3.00	•	A [£.000.7	£	£.070	ď	¥ 3°	3.0.7	£.876.6	£.731
35 104 644.1 921.0 1088-4 1901.1 171.8 209.7 285.6 12 204-0 284.1 948-8 36 107 644.1 921.0 1088-4 1301.1 171.8 209.7 285.6 12 204-0 284.1 343.8 38 111 644.1 921.0 1088-4 1301.1 13 105.1 104.3 109.4 4 210-6 304.6 386.9 364.9	î	10	3	1.**0	9410	# 000T	1.1001	•	0.177	200	0 707	0007	- 60	222:1	308	3720	459-5
36 107 644-1 921-0 1088-4 1301-1 4 171-8 209-7 238-6 226-6 12 204-0 284-1 348-8 38 111 644-1 921-0 1088-4 1301-1 12 105-1 116-8 123-2 130-0 3 204-9 287-2 389-6 3 304-8 372-4 389-6 364-9 378-9 389-8 364-9 364-9 379-0 389-6 364-0 364-		35	104	1.449	921.0	1088.4	1301-1	:	:	:	:	:	12	204-0	284.1	343.8	424.8
Second Color		36	107	644.1	921.0	1088.4	1301.1	4	171-8	209.7	232.5	258.6	12	2010	284-1	343.8	424.8
10		2	:	5,1,3	9.190	1,000.1	1.00	ç	5.401	116.0	0.001	0.001	4.	194.3	4.7.7.	9.088	409.4
106 6441 9210 10884 13011 15 620 665 690 7714 6 2224 3306 3396 3396 45 45 45 45 45 45 45 4		ဇ	=	1.440	9410	#.0001	1.1001	2 6	9 5	7.65	104.3	100.0	2 4	9.2.6	304.8	371.6	463.5
10 19 19 19 19 19 19 19								12	36.2	37.9	38.8	39.5	. &	222-1	308.1	3720	459.5
39 106 644-1 921-0 1088-4 1301-1 15 620 66-5 690 71-4 6 222-4 310-7 376-6 47 110 644-1 921-0 1088-4 1301-1 17 36-2 4.5 4.5 4.5 4.5 11 209-5 291-1 376-6 47 110 644-1 921-0 1088-4 1301-1 24 322-6 450-1 376-6 34 8.6 642-6 916-8 1081-5 1290-0 0 142-6 181-7 207-2 237-0 224 322-6 450-1 532-6 34 8.6 642-6 916-8 1081-5 1290-0 0 142-6 181-7 207-2 237-0 22 457-1 532-6 450-1 542-7 34 8.6 642-6 916-8 108-9 122-9 227-4 251-1 477-3 573-6 4.6								18	24.6	25.4	25.8	26.1	6	219.4	304.0	366.8	452.3
39 106 644-1 921-0 1088-4 1301-1 15 620 66-5 69-0 71-4 66 222-1 314-5 274-4 353-9 47 110 644-1 921-0 1088-4 1301-1													14	194.3	272.4	930.6	409-4
39 106 644-1 921-0 1088-4 1301-1 15 62-0 66-5 66-0 77-4 6 222-4 310-7 376-6 47 110 644-1 921-0 1088-4 1301-1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>16</td> <td>194.5</td> <td>274.4</td> <td>333.9</td> <td>414.1</td>													16	194.5	274.4	333.9	414.1
47 110 644-1 921-0 1088-4 1301-1 4.5 <t< td=""><td></td><td>39</td><td>106</td><td>644.1</td><td>921.0</td><td>1088.4</td><td>1301.1</td><td>15</td><td>62.0</td><td>9.99</td><td>0.69</td><td>71.4</td><td>9</td><td>222.4</td><td>310-7</td><td>9.928</td><td>467.1</td></t<>		39	106	644.1	921.0	1088.4	1301.1	15	62.0	9.99	0.69	71.4	9	222.4	310-7	9.928	467.1
47 110 644·1 921·0 1301·1 4.5 4								17	36-2	37.9	38.8	39.5	®	222.1	308-1	372.0	459.5
47 110 644-1 921-0 1088-4 1301-1 24 322-6 450-4 -5427 5267-6 450-4 -5427 450-4								20	4.5	4.5	4.5	4.5	=	209.2	291-1	351.8	434.3
47 110 644:1 921:0 1088-4 1301:1 24 322:6 450-4 542.7								•					13	198.5	277.3	336.0	415.7
47 110 644-1 921-0 1088-4 1301-1 24 322-6 450-4 542-7 543-5 34 85 642-6 916-8 1081-5 1290-0 0 142-6 181-7 207-2 237-0 26 364-0 589-9 603													75	355.6	420.4	. 542.7	664.3
34 85 642-6 916-8 1081-5 1290-0 0 142-6 181-7 207-2 237-0 26 34-3 477-3 573-5 34 85 642-6 916-8 1081-5 1290-0 0 142-6 181-7 207-2 237-0 2 201-0 288-7 508-9 603-7 604-0 504-0 504-0 504-		47	2	644.1	921.0	1088-4	1301-1	:	:	:	:	:	24	322.6	4 20.4	542-7	664.3
34 85 642-6 916-8 1081-5 1290-0 0 142-6 1817-7 207-2 237-0 2 864-0 508-9 603-7 34 86. 642-6 916-8 1081-5 1290-0 1 133-7 151-6 161-7 172-7 1 108-8 152-8 304-8 371-6 304-8 371-6 304-8 371-6 304-8 371-6 304-8 371-6 304-8 371-6 304-8 371-6 304-8 371-6 304-8 371-6 304-8 371-6 304-8 368-8 371-6 304-8 368-8 371-6 304-8 368-8 371-6 304-8 368-8 371-6 304-8 368-8 371-6 304-9 304-9 304-9 304-9 304-9 304-0 308-9 304-0 308-9 304-0 308-9 304-0 308-9 304-0 308-1 304-0 304-0 304-0 304-0 304-0 304-0 304-0 304-0 304-0 30													25	343.3	477-3	573.5	8.669
34 85 642-6 916-8 1081-5 1290-0 0 142-6 1817 207-2 237-0 2 201-0 288-7 354-5 34 86 642-6 916-8 1081-6 1290-0 13 90-5 99-4 104-3 109-4 304-0 366-8 40 99 642-6 916-8 1081-6 1290-0 9 146-3 167-7 179-9 193-3 12 204-0 284-1 343-8 40 99 642-6 916-8 1081-6 1290-0 9 146-3 167-7 179-9 193-3 12 204-0 284-1 343-8 46 105 642-6 916-8 1081-6 1290-0 11 116-3 164-3 109-4 304-0 284-1 343-8 46 105 642-6 916-8 1081-6 1290-0 11 116-3 104-3 109-4 304-0 284-1 343-8 46 105													92	364.0	503.9	603.7	734.4
108 642-6 916-8 1081-5 1290-0	20	34	82	642.6	916.8	1081.5	1290-0	0	142.6	181-7	207-2	237-0	C)	201.0	288.7	354.5	445.5
108 642-6 916-8 1081-5 1290-0 <								40	171-4	9.907	227.5	251.1	4	215.6	304.8	371.6	463.5
108 642-6 916-8 1081-5 1290-0								_	163.8	192.3	208.9	227.4					
108 642-6 916-8 1081-5 1290-0 90-5 994-104-3 1094-3 1094-3 90-6 90-7								2	133.7	151-6	161.7	172.7					
106 642.6 916.8 1081.5 1290.0 9 26 354.0 508.9 603.7 99 642.6 916.8 1081.5 1290.0 9 146.3 167.7 179.9 193.3 12 204.0 284.1 343.8 105 642.6 916.8 1081.5 1290.0 11 760 82.6 86.1 89.7 82.8 86.1 89.7 82.8 86.1 89.7 82.9 85.9 <		;	:	0,0	9,0		0 000.	2	ç.06	7.66	104.3	109.4	•	. 0.0	9	0.000	6.04
99 642·6 916·8 1081·5 1290·0 9 146·3 167·7 179·9 193·3 12 204·0 284·1 343·8 105 642·6 916·8 1081·5 1290·0 11 119·6 184·3 167·4 167·2 189·7 86·1 89·7 89·7 86·1 89·7 872·0 872·0 105 11 119·6 184·3 174·3 272·4 380·1 380·1 380·1 12 105·1 116·8 128·2 130·0 14 194·3 272·4 380·6 12 105·1 116·8 128·2 130·0 14 194·3 272·4 380·4		*	8	042.0	8.916	9.1901	0.062	:	:	:	:	:	2	4.612	0.406	2000	6.704
105 6426 916*8 1081·5 1290·0 11 119*6 128*2 130·0 10 214*9 232*1 308*1 372*0 15*3 15*3 15*3 15*3 15*3 15*3 15*3 15*3		•	5				0.000.	•		1.10	0.04	0.001	8 9	204.0	600	7.000	4.407
105 6426 9168 1081·5 1290·0 11 1196 134·3 142·4 151·2 8 222·1 308·1 3572·0 105·1 116·8 123·2 130·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 298·0 359·7 150·0 10 214·9 250·4 350·6 150·0 10 214·9 250·4 350·6 150·0 10 214·9 250·4 350·4 150·0 10 214·9 250·4 150·0 10 214·9 250·0 10 214·9		3	8		8.016	0.1901	0.0621	2 5	140.0	7.00	1633	130.0	77	0.402	1.107	0.40	0 494
105 6426 9168 1081·5 1290·0 11 1196 134.3 142.4 151.2 8 222·1 308·1 372·0 10 214·9 298·0 359·7 130·0 10 214·9 298·0 359·7 130·0 10 214·9 298·0 359·7 130·0 10 214·9 298·0 359·7 130·0 10 10 10 10 10 10 10 10 10 10 10 10 10								2.	26.0	# 9.00	10401	103					
12 105-1 116-8 123-2 130-0 10 214-9 298-0 359-7 130-0 10 214-9 298-0 201-1 201		97	10,5		916.8	1081.5	1990-0	: :	9.07	184.3	149.4	151.9	α	1.666	308-1	872.0	4.59.5
14 194.3 272.4 330.6 15 192.6 271.1 329.4		}	3				2001	16	105-1	116.8	1939	130-0	2	6.716	298.0	359-7	443.8
192.6 271.1 329.4								3	1001		2021	200	7.7	194.3	272.4	330.6	409.4
													2	9.661	271.1	329.4	408.3
													:		:	3	2

£ New Rules (continued).

VALUE OF SORE' REVERSIONARY BESTER.					Age.		V88		Aga		No in List 7.
per Cent	- →	5 per Cer	6 per Cent. 6 per Cent.	8 per Cent 6 per Cent 6 per Cer	8 per Cent.	4 per Cent. 8 per Cent.	5 per Cent. 4 per Cent. 8 per Cent.	4 per Cent. 8 per Cent.	per Cent, 5 per Cent, 4 per Cent. 8 per Cent.	8 per Cent. 6 per Cent. 4 per Cent. 8 per Cent.	8 per Cent. 6 per Cent. 4 per Cent. 8 per Cent.
બ		43	41		43	43	41	43	# # # # # # # # # # # # # # # # # # #	# # # # # # # # # # # # # # # # # # #	# # # # # # # # # # # # # # # # # # #
109.4	4: ن	2	_	99.4	90.5 99.4	13 90.5 99.4	1290-0 13 90-5 99-4	1081.5 1290.0 13 90.5 99.4 1	916-8 1081-5 1290-0 13 90-5 99-4 1	916-8 1081-5 1290-0 13 90-5 99-4 1	642.6 916.8 1081.5 1290.0 13 90.5 99.4
14.4	14.4		14.3		14:3	19 14.0	19 14.0	19 14.0 14.3	19 14.0	19 14.0 14.3	19 14.0
89.7	86.1			9.78	9.58 0.92	9.58 0.92	14 76.0 82.6	1290.0 14 76.0 82.6	1081.5 1290.0 14 76.0 82.6	916.8 1081.5 1290.0 14 76.0 82.6	642.6 916.8 1081.5 1290.0 14 76.0 82.6
130.0	23-2	<u> </u>	116-8	_	116.8	105.1 116.8	12 105.1 116.8	1282-2 12 105-1 116-8	1077-9 1282-2 12 105-1 116-8	915-6 1077-9 1282-2 12 105-1 116-8	643.8 915.6 1077.9 1282.2 12 105.1 116.8 1
:	•	_	:	:	:	:	1278-6	1077.6 1278.6	917.7 1077.6 1278.6	647.4 917.7 1077.6 1278.6	82 647.4 917.7 1077.6 1278.6
:		•		:			1278.6	1077-6 1278-6	917.7 1077.6 1278.6	647.4 917.7 1077.6 1278.6	92 647.4 917.7 1077.6 1278.6
7.101	42.4			134.3	1.19°6 134°3	13 90.5 09.4	12/00 11 119.0 154.3	1011.0 1218.0 11 119.0 134.3	11 101/10 124.3 101/10 134.3 104.4 1	7.65 4.06 11 0.0727 0.7701 7.716 4.740	7:55 4:05 EI 0.0/21 0.7/01 7.7/6 4.780 46
71.4	0.69	•	9.99		9.99	15 60.2 66.5	15 60.2 66.5	15 60-2 66-5	15 60.2 66.5	15 60-2 66-5	15 60.2 66.5
251.1	227.5			206.6	171.4 206.6	171.4 206.6	5 171.4 206.6	1279-2 5 171-4 206-6	1081.5 1279.2 5 171.4 206.6	923.7 1081.5 1279.2 5 171.4 206.6	654.3 923.7 1081.5 1279.2 5 171.4 206.6
2.101	53.9		134.3		9.67	9.67	9.67	9.67	9.67	9.67	9.67
109-4	104:3			7.66	7.66	7.66	13 90.5 99.4	1279-2 13 90-5 99-4	1081.5 1279.2 13 90.5 99.4	654.3 923.7 1081.5 1279.2 13 90.5 99.4	654.3 923.7 1081.5 1279.2 13 90.5 99.4
39.5	88.8			37.9	36-2 37-9	17 36-2 37-9	17 36-2 37-9	17 36-2 37-9	17 36-2 37-9	17 36-2 37-9	17 36-2 37-9
	:6		:0			. 6	996	2.6.20	1081.5 1279.5	923.7 1081.5 1279.2	654.3 923.7 1081.5 1279.2
39.0	149.4		6.76	2.08	2.00	2002	1970-9	1081.5 1979.9 11 1081.5	923.7 1081.5 1970.9 11 110.6	6584.3 923.7 1081.5 1970.9 11 110.6	81 654.3 923.7 1081.5 1970.9 11 110.6
4 101	1 91 T		0 # 01		n err	0 611					
109.4	104.3		99.4 66.5	90.5		90.2	13	1282.5 13 90.5	1088.1 1282.5 13 90.5	932:1 1088:1 1282:5 13 90:5	663.6 932.1 1088.1 1282.5 13 90.5
14.4	14.4		14.3		14.0	19 14.0	19 14.0	19 14-0	19 14.0	19 14-0	19 14-0
:	:		:	:		:	:	1287.9	1096.8 1287.9	942-6 1096-8 1287-9	674.7 942.6 1096.8 1287.9
193.3	179.9		167-7		146-3	146-3	9 146.3	1295.4 9 146.3	1107.8 1295.4 9 146.3	955-2 1107-3 1295-4 9 146-3	687.6 955.2 1107.8 1295.4 9 146.3
130-0	123-2	_	116:8	_	105.1	105.1	105.1	105.1	105.1	105.1	105.1
109.4 89.7	36.1	-	82.6		82.6	76.0 82.6	76.0 82.6	76.0 82.6	76.0 82.6	76.0 82.6	76.0 82.6
39.5	88.8			37.9	36-2 37-9	36-2 37-9	36-2 37-9	36-2 37-9	36-2 37-9	36-2 37-9	36-2 37-9

																																				_			_				_
424.8	590.3	459.5	484.6	463.5	464.6	484.6	4.44.4	440.0	463.5				408.3	453.0	553.8						590-3	664.3	768.4	945.3	467.1	452.3	409.4	518.4		518.4		464.6	424.8	484.6	494.8	, K	0000			450.9	904		
343.8	479.6	872.0	3.916	371.6	375.3	301.6	4.7.4	0.500	871.6				329.4	36.5.5	448.9						479.6	542.7	633.7	793-2	376.6	366.8	330.6	419.5		419.5		375.3	343.8	391.6	843.8	448.0	0.044		•	8.998			
284.1	396-2	308.1	321.8	304.8	310.3	801.8	200	1.007	804.8				271.1	300.5	370.0				-		396.5	420.4	530.9	673.8	810.7	304.0	272.4	34.51		345-1		310.3	284.1	321.8	284.1	0.078				0.70	2		
204.0	281.7	222-1	227.4	215.6	223.1	4.766		0.102	216.6				9.661	919.1	262.4						281.7	322-6	384.8	501.4	222.4	219.4	194.3	244-2		244-2		223.1	204.0	227.4	0.70	7.696	* 707			910.7	# C19		
21	22	æ ;	8	4	7	. 6		4	•				1,5	2 2	2.5	1	-				ឌ	77	27	32	9	d	1,4	ຂ		8		7	13	61	6	: 5	1			٥	•		_
193.3	39.5	258.5	130-0	151-2			0.07.50	207	9.012	227.4	211.6	172.7	263.5	251.1	240.6	911.6	9 12 1	7.001	109.4	39.2	:				130-0	24.6	26.1		14.4	:		251-1	193.3	71.4	211.6	1.671	71.7	# 100	0.80	100.4	# 604		
179-9	38.8	232.5	123.2	142.4			0.7.0	7.107	5.612	508-9	195.7	1617	233.6	227.5	219.5	195-7	7.67	1474	104.5	28.88	:				123.2	53-2	25.8		14.4	:		227.5	179.9	0-69	195.7	161.7	0.09	0.00	000	104.2	•		
1.67.7	37.9	209.7	116.8	134.3			101.7	7.101	200.2	192.3	181.3	151.6	207.7	206.6	200-7	181.3	127.5	1040	4.0	37.9	:				116.8	51.6	25.4		14.3	:		206.6	167.7	9.99	181.3	151.6	86.5	2.0	- -	7.00			
146.3	36-2	171.8	105.1	119.6			3.07	1420	168·8	163.8	156.4	133.7	165.6	171.4	168-8	156.4	110.6	1130	0.06	36.5	:				105.1	48.6	24.6		14.0	:		171.4	146.3	62.0	156.4	133.7	0.09	200	7 00	90.5	2		
6	17	4	2	=			•	> '	9	~	∞	10	C 1	1 40	· ·	· «	` :	1 :	2 :	17	:				2	16	18		19	:		20	6	15	~	, <u>c</u>	-	1 5	;	8	3		
1295-4 195-4		1295.4		1295-4			1202.0	0.0001					1305.0								1305.0				1314.9				1314.9	1314-9	1325-7	1335-9			1335.9	-			1.99.	1344.0	1351.9	1851.8	0.1001
1107.3	1	1107.3		1107.3			0.0011	7.0211					1120-2								1120-2				1133-1				1133.1	1133-1	1147.5	1161-0			1161.0	;			0.1211	1173.0	1185-0	11850	77077
955-2 955-2		955-2		955-2			0.000	200					6.696	}							6-696				984.9				984.9	6.186	1001-4	1016.4			1016.4	· •			1016.4	1030	10.15.5	1045.5	20401
9.289		9.289		687.6			2.00%						702.6								205.6				718-2			_	718-2	718-2	734.7	751.5	-		751.5				7.81.8	768-0	783.6	783.6	2001
63 115	;	20		69			9	3		_			2	;			_		_		[0]				46				26	88	97	51			8	;			i	- 6	9 6	3 8	8
42		8		20			5	70					77	:		_			_	_	22			_	9				55	57	25	44		_	77	;			-	* 2	2 2	3 8	3
56		_					;	70	_																58						59	9					_		5	2 5	3 3	3	

f. New Rules (continued).

H. W. List 7 6 per Cent 7 per Cent 6 per Cen	6 per Cent.	_				Age				
50 32 £	-		t. 6 per Cent.	5 per Cent.	4 per Cent.		8 per Cent.		6 per Cent. 5 per Cent. 4 per Cent.	4 per Cent
50 32 7980 10578 11940 13569 16 486 516 552 58 64 7980 10578 11940 13569 1144 1144 <t< td=""><td>4</td><td>ન્ય</td><td></td><td>ભ</td><td>બ</td><td>•</td><td>97</td><td>ભ</td><td>લ્સ</td><td>બ</td></t<>	4	ન્ય		ભ	બ	•	97	ભ	લ્સ	બ
44 65 811-5 1068-3 1201-5 1359-6 17 36-2 37-9 38-8 55 40 811-5 1068-3 1201-5 1359-6 17 36-2 37-9 38-8 55 40 811-5 1068-3 1201-5 1359-6 .	1057.8 1194.0			53.2	24.6	12	204.0	284.1	343.8	424.8
58 64 798.0 1057.8 1194.0 1356.9 <t< td=""><td></td><td></td><td></td><td>25.8</td><td>26.1</td><td>13</td><td>198.5</td><td>277.3</td><td>336.0</td><td>415.7</td></t<>				25.8	26.1	13	198.5	277.3	336.0	415.7
38 64 7980 1057-8 11940 1356-9				7.71	14.4	22	384.8	630.9	633.7	768.4
44 65 811-5 1068-3 1201-5 1359-6 17 36-2 37-9 38-8 55 49 811-5 1068-3 1201-5 1359-6	0.7611 8.201	:	:	:	:	17	500.6	283.7	345.4	† .8. †
44 65 811-5 1068-3 1201-5 1359-6 17 36-2 37-9 38-8 55 40 811-5 1068-3 1201-5 1359-6		-				22	281.7	396.3	479.6	590.3
44 65 811-5 1068-3 1201-5 1359-6 17 36°2 37°9 36°8 55 49 811-5 1068-3 1201-5 1359-6			_	9			527-2	704.1	9.52.8	c.186
55 49 811-5 10068-3 1201-5 1359-6 <	1068-3 1201-5			0.00	c se	=	2.602	1.162	0.100	***
64 33 811-5 1068-3 1201-5 1359-6 <t< td=""><td>1068-3 1201-5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	1068-3 1201-5									
64 33 811-5 1068-3 1201-5 1359-6 <t< td=""><td>1068.3 1201.5</td><td>:</td><td>:</td><td>:</td><td>:</td><td>23</td><td>302.0</td><td>423-2</td><td>5112</td><td>627.5</td></t<>	1068.3 1201.5	:	:	:	:	23	302.0	423-2	5112	627.5
64 33 811-5 1068-3 1201-5 1359-6 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>56</td><td>364.0</td><td>503.9</td><td>603.7</td><td>134.4</td></t<>						56	364.0	503.9	603.7	134.4
52 34 823-5 1077-0 1206-9 1359-9 18 24-6 25-4 25-8 60 87 823-5 1077-0 1206-9 1359-9 18 24-6 25-4 25-8 62 76 823-5 1077-0 1206-9 1359-9 19 14-0 14-3 14-4 47 57 834-6 1084-5 1210-5 1358-4 13 90-5 99-4 104-3 11 55 31 834-6 1084-5 1210-5 1358-4 13 90-5 99-4 104-3 11 51 43 852-9 1094-1 1212-3 1349-7 7 163-8 86-5 66-5	10683 12015 1	:	:	:	:	45	760-0	947.7	1069.0	1215.4
58 28 B25.5 1077.0 1206.9 1559.9 18 24.6 25.4 25.8 60 87 823.5 1077.0 1206.9 1359.9 19 14.0 14.3 14.4 62 76 823.6 1077.0 1206.9 1359.9 47 57 834.6 1084.5 1210.5 1358.4 13 90.5 99.4 104.3 1 55 31 834.6 1084.5 1210.5 1358.4 13 90.5 99.4 104.3 1 41 50 860.1 1094.7 1210.5 1341.9 7 163.8 66.5 66.5 69.0 42 21 865.5 1096.5 1206.0 1382.3 2 165.6 207.7 233.6 2 68 27 865.5 1096.5 1206.0 1332.3 2 165.6 207.7 233.6 2 5	1077.0 1206.9									
62 76 823-5 1977-0 1200-5 1359-9 14.0 14.8 14.4 47 57 834-6 1084-5 1210-5 1358-4 13 90-5 99-4 104-3 1 55 31 834-6 1084-5 1210-5 1358-4 13 90-5 99-4 104-3 1 51 43 852-9 1094-1 1210-5 1358-4 15 62-0 66-5 69-0 44 50 860-1 1096-2 1210-2 1341-9 16 48-6 51-6 69-0 86-1 42 21 865-5 1096-5 1206-0 1382-3 2 165-6 207-7 233-6 2 68 27 865-5 1096-5 1206-0 1382-3 2 165-6 207-7 233-6 2 51 12 865-5 1096-5 1206-0 1332-3 1 66-5 66-5 66-5 66-5 66-5	6.9021 0.7701			9.5.8	1.96	16	194.5	274.4	333.9	414:1
62 76 823-5 10770 1206-9 1359-9 <td< td=""><td>6.0071 0.7/01</td><td></td><td></td><td>14.4</td><td>14.4</td><td>2</td><td></td><td></td><td>}</td><td></td></td<>	6.0071 0.7/01			14.4	14.4	2			}	
47 57 834-6 1084-5 1210-5 1358-4 13 90-5 99-4 104-3 1 55 31 834-6 1084-5 1210-5 1358-4 13 90-5 99-4 104-3 1 51 43 852-9 1094-1 1212-8 1349-7 7 163-8 189-7 208-9 2 44 50 860-1 1096-2 1210-2 1341-9 16 48-6 51-6 58-2 42 21 865-5 1096-5 1206-0 1382-3 2 165-6 207-7 233-6 2 68 27 865-5 1096-5 1206-0 1382-3 2 165-6 207-7 233-6 2 51 12 869-7 1094-7 1199-7 1320-3 1 86-5 66-5 66-5 66-5 66-7 1 51 26 869-7 1094-7 1199-7 1320-3 1 86-5 86	1077.0 1206.9			:	:	19	227.4	321.8	391.6	9.187
55 31 834-6 1084-5 1210-5 1358-4 13 90-5 99-4 104-3 1 51 43 852-9 1094-1 1212-8 1349-7 7 163-8 192-3 2089-9 2 44 50 860-1 1096-2 1210-2 1341-9 16 48-6 51-6 53-6 86-1 42 21 865-5 1096-5 1206-0 1382-3 2 165-6 207-7 25-8 25-8 68 27 865-5 1096-5 1206-0 1332-3 3 165-6 207-7 233-6 2 51 12 865-5 1096-5 1206-0 1332-3 3 165-6 207-7 233-6 2 51 12 865-5 1096-5 1206-0 1332-3 3 165-6 207-7 233-6 2 51 26 869-7 1094-7 1199-7 1320-3 17 36-3 37-9	1084.5 1210.5									
51 43 852.9 1094-1 1212-8 1349-7 15 62.0 66-5 699-0 26-6 699-0 26-6 699-0 26-6 699-0 26-7 689-0 26-7 68-1	1084.5 1210.5			104:3	109.4					
51 45 632.9 1094.1 1212.9 151.7 14 76.0 82.6 51.6 53.2 44 50 860.1 1096.2 1210.2 1341.9 16 48.6 51.6 53.2 42 21 865.5 1096.5 1206.0 1332.3 2 165.6 207.7 233.6 2 68 27 865.5 1096.5 1206.0 1332.3 2 165.6 207.7 233.6 2 51 12 869.7 1094.7 1199.7 1320.3 1 66.5 69.0 45 25 872.1 1091.1 1191.6 1306.2 15 87.9 38.8 45 25 872.1 1091.1 1191.6 1306.2 17 36.2 87.9 38.8	1004.1			908-0	4.1.4	6	281.7	396-2	479.6	590-3
44 50 860-1 1096-2 1210-2 1341-9 16 48-6 51-6 53-2 42 21 865-5 1096-5 1206-0 1382-3 2 165-6 207-7 25-8 25-8 68 27 865-5 1096-5 1206-0 1332-3 2 165-6 207-7 233-6 2 51 12 865-5 1096-5 1206-0 1332-3 3 3 3 6 </td <td>9 2177</td> <td></td> <td></td> <td>86-1</td> <td>89.7</td> <td></td> <td></td> <td></td> <td></td> <td></td>	9 2177			86-1	89.7					
42 21 865-5 1096-5 1206-0 1382-3 2 165-6 207-7 233-6 2 68 27 865-5 1096-5 1206-0 1332-3 2 165-6 207-7 233-6 2 51 12 865-5 1096-5 1206-0 1332-3 8 1 2 865-7 1094-7 1199-7 1320-3 8 <t< td=""><td>1096-2 1210-2 1</td><td></td><td></td><td>53.2</td><td>54.6</td><td>o</td><td>219.4</td><td>304.0</td><td>3.66.8</td><td>452.3</td></t<>	1096-2 1210-2 1			53.2	54.6	o	219.4	304.0	3.66.8	452.3
68 27 865-5 1096-5 1206-0 1332-3 68 23 865-6 1096-5 1206-0 1332-3 71 26 869-7 1094-7 1199-7 1320-3 71 25 872-1 1091-1 1191-6 13062 15 62-0 66-5 69-0 45 25 872-1 1091-1 1191-6 13062 15 86-2 87-9 88-8 14-4	1 1006.5 1206.0			233.6	263.5	6	219.4	304-0	8.998	452.3
68 23 865-6 1096-5 1206-0 1332-3 68 23 865-6 1096-5 1206-0 1332-3 51 12 869-7 1094-7 1199-7 1320-3 71 26 869-7 1091-1 1191-6 1306-2 15 62-0 66-5 69-0 45 25 872-1 1091-1 1191-6 1306-2 15 86-2 87-9 88-8 19 14-0 14-3 14-4	0001					13	227.4	321.8	391.6	484.6
68 23 865°0 1095°0 120°0 1326°3 7 1994°7 1199°7 1320°3 7 1850°4 145 25 872°1 1091°1 1191°6 1306°2 15 86°2 87°9 38°8 14°4	1096.5 1206.0									
71 26 869-7 1094-7 1199-7 1320-8 62-0 66-5 69-0 45 25 872-1 1091-1 1191-6 1306.2 15 86-2 87-9 38-8 14-4 14-0 14-3 14-4	2-6611 2-7601									
45 25 872·1 1091·1 1191·6 1306.2 15 62·0 66·5 69·0 17 86·2 87·9 88·8 14·4	1094.7 1199.7									
36.2 37.9 38.8 14.0 14.3 14.4	1091-1 1191-6			0-69	71.4					
				38.8	39.5	-				

428.4	846.0 872.1 908.6	1134.0 1206.7 1016.5 1080.4	1212:3 945:3 1080-4	1108.7 1212.3	61750-5					
345.4	726.5 759.6	972-9 1054-2 859-2 920-0	1062·7 793·2 920·0	947·6 1062·7	50715-4					
283.7	613.4 643.3	843·2 928·8 734·6 792·0	939-2 673-8 792-0	818·6 939·2	42406.0					
200.6	451.7 476-2	649·7 736·6 552·9 603·0	749.0 501.4 603.0	626-9 749-0	30896.3		<i>l.</i>			
17 17	885	8 4 4 8	44 32 36	37	108		marriec			
14.4	:	::	:	:	10468-8		aughters			
	:	::	:	:	9750.0		19 or D			
14:3	:	::	:	:	9095-0		ons above		Vembers.	
14.0	:	::	:	:	7965-5		r with S		Unmarried Members	
: :61	:	::	:	:	87		ldren, o		U_{n_i}	
1306-2 1306-2 1289-7 1289-7	0.0/21	1223·1 1168·8	1074.3	1074·3 854·1	94800-0		hout Chi			
1191·6 1101·6 1180·8	9.2911	1131-9	1010.4	1010-4	82721-1		Widowers without Children, or with Sons above 19 or Daughters married			
1091-1 1091-1 1085-4 1085-4	10767	1050.9	952.5	952·5	72799-2		Wid			
872:1 872:1 872:1 872:7	6.078	859-8	6-86-2	798-9	54451·8 730·	55181-8				
15 22 7	3	20	16	ca es	73			79		112 109 83 96 98 61
66	20	67 78	92	7 3	Total	-		5 Total		48 55 52 53 55 56 Total
			81	87	1			26	'	-1- 11 11 11 11 11 11 11 11 11 11 11 11

1. New Rules (continued). - Widowers, with Children.

				VALUE OF SORS' BEMEFITS.	ns' Benerits.				VALUE OF DAUG	VALUE OF DAUGHTERS' BENEFIFS.	
Age.	No. in	Age.					Age				
			8 per Cent	6 per Cent	5 per Cent.	4 per Cent.		8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
			લ	લ	લ	વર		3	વર	લ	સ
51	91	Ŧ.C	171.4	206.6	227.5	251.1	4	215.6	304-8	371.6	463.5
		~	163.8	192.3	508-9	227.4	=	209.2	291-1	351.8	434.3
		&	156.4	181.3	195.7	211.6	12	204.0	284.1	343.8	424.8
							15 16	192.6	271.1	329.4	408.3
							2 5	919.1	\$477 G-008	96.5.E	414.1
58	99	19	14.0	14.3	14.4	14.4	13	198.5	277.3	336.0	415.7
							17	200.6	283.7	345.4	428.4
;							88	406.1	557.5	6637	811.6
2	22	::	:	:;	:6	::	æ :	1.212	300-2	365.5	453.0
40	41	15	0.29	66.5	0.69	\$.T.L	2 5	9.002	283.7	345.4	428.4
		2	0.0*	0.10	7 00	0 * 0	23	302-0	423.9	511-2	627.5
64	4	:	•	:	:	:	53	428.3	584.5	694.5	846-0
i							40	6.689	884.8	1014:1	1173.4
65	89	:	:	•	:	:	77	322.6	450.4	542.7	664.3
9	ć	9	104.1	0.011	0.901	0.001		6.799	734.6	859-2	1016-5
8	62	2	1.00.1	8.011	1257	190.0	4 5	9.661	272.4	930.0	408.4
							22	281.7	396-2	9.624	590.3
							24	322.6	450.4	542.7	664.3
71	42	13	90.2	99.4	104.3	109.4	2	214.9	298.0	359.7	443.8
							2	204.0	284.1	343.8	424.8
							15	192.6	271.1	329 4	408.3
							21	7.792	370.0	448.9	553.8
							23	302-0	423-2	5112	627.5
							24	322.6	420.4	542.7	664.3
82	4	:	:	:	:	:	49	795-1	971.7	1083-2	1216-2
							52	820.5	989-1	1093.5	1216-9
æ		∞	811.8	928-8	2.986	1069.9	53	9074.6	12275-1	14560-0	17575-3

VALUATION, 1ST MAT, 1863.

8. Old Rules.—Members in the Service who have conditionally accepted the New Scheme.—Values of Reversionary Benefits to Wives, Sons, and Daughters, at 8, 6, 5, and 4 per Cent. under the Old Rules.

_												_		_	_	_		_	_				_			_		_				
	т Векетт	per Cent 6 per Cent. 6 per Cent 4 per Cent.	બ						328-3	393·7 399·9								,	328.3		909.4	1.080	399-9		399-9		383.7	365-8	393-7			
	EVERSIONA	5 per Cent.	બ						265-2	322·7 329·3									265-2		100	7.770	329.3		329.3		312-9	296-9	322.7			
	AUGHTERS' R	6 per Cent.	બ						214.6	264·8 271·3									214.6		0.100	0.807	271.3		271.3		255-6	241.5	264.8			
	Value of Daughters' Reversionary Benefits.	8 per Cent.	બ						1410	178-7									141-0		404	1.011	184.6		184.6		171-1	160-2	178.7			
	864	•							•	20 4									•		•	•	4		7		67	_	တ			
	SENEFITS.	4 per Cent.	બ				185-9		189-2		171-3	189-2		185-9	189-2	183·7	177-2	168.3	:	171.3	189-2	2.691	185.9	187.8	185-9	189-2	:	177-2	171.3	189-2	177-2	168.8
	Value of Som' Reversionary Benefity	8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent.	બ				165.5		169.7		151.6	169-7		165.5	169.7	167-2	162.4	165.3	:	151.6	169.	7.691	165.5	169.7	165.5	169.7	:	162.4	151.6	169.7	162.4	155.3
	P Some' REV	6 per Cent.	બ				147.3		152-0		133.9	152-0		147.3	152.0	151.9	148.6	143.2	:	133-9	1520	0.201	147.3	153.1	147.3	152.0	:	148.6	133.9	152.0	148.6	143-2
	VALUE O	8 per Cent.	બર				112.5		117.8		100	117.8		112.5	117-8	121-1	120-2	117.3	:	100.9	117.8	8./II	112.5	120.4	112.5	117.8	:	120-2	100-9	117.8	120-2	117:3
	5	į.					-		83		•	63		-	7	7	ş	9	:	0	69 6	24 m	7	80	7	63	:	ۍ	•	67	φ,	9
	BENEFIT.	4 per Cent.	બ	1085-1	1101.9	1119-6	9.6111	1137.9	1156-2		1173.6		1173-6	1173.6	1173.6				1190.7	1190-7		7.0611	1190.7		1206-6		1206-6	1221.6	1221.6			
	TEMONARY	5 per Cent.	બ	843.0	858-0	873.9	873.9	890.7	907.2		923-7		923-7	923.7	923.7				939.6	939.6	9	9.666	939.6		954.9		954.9	9.696	9.696			
	op Wipe's Reversionart Benefit.	6 per Cent. 5 per Cent. 4 per Cent.	43	670.5	684.6	0.669	0-669	714:0	729-0		744.0		744.0	744.0	744.0				7.88-7	7.867	3	1.901	758-7		772.8		772-8	786.3	786.3			
	VALUE OF	8 per Cent.	લર	498.0	2.906	5142	514-2	522.9	531.3		539-7		539.7	539.7	539.7				548-4	548.4		248.4	248.4		8-999		8.999	565-2	565-2			
	No. tn	List 6.		158	151	129	140	131	133		110		121	116	105				114	103	:	=	102	!	101		88	115	104			
	ij	₩.		22	76	12	75	24	ខ្លួ		20	ì	21	25	88				61	8		7 7	88	1	22		88	22	8			
	AGES.	H		838	22	24	i	22	56		27								88						53			ຂ				

g. Old Rules (continued).

		WIPD'S KEVERGORART BENEFIT.	1	VALUE O	P SONS KEY	Value of Sons' Reversionary Benefits.	SENERTTS.		VALUE OF D	AUGRTER'	REVERSIONAL	VALUE OF DAUGHTERS' REVERSIONARY BENEFITA.
per Cent 5 1	per Cent.	4 per Cent.	E	8 per Cent.	6 per Cent.	5 per Cent	4 per Cent.	8	8 per Cent.	6 per Cent	5 per Cent.	4 per Cent.
	94	બ		43	3	3	3		41	41		648
786-3	9-696	1221.6	-	112.5	147.8	165.5	185.9	4	184.6	271.3	329.3	399-9
	83.1	1235-1	ဗာ က	117.3	143.2	155.3	168.3			_		
811.8	995.7	1247-7	•	0.001	0.00	3.11						
	7.56	1247.7	•	100.9	133-9	151.6	171.3	-	160-2	241.5		365-8
			es :	120.4	153.1	169.7	187-8	9	191-0	277-2	334-2	402-9
	07-1	1258.5	; eq	117.8	152.0	169.7	189-2					
823-2 10	1007:1	1258.5	: •	9:	1:5:	1001	. 60	→ 1	184.6			399.9
	1.,	0.0071	9	2.28	102.0	107-9	113.5	٠ -	191.6	276.9	333·1	400.4
	6	1969-6						x	190.3			395.4
834-9 101	1019-1	1269-6	2	120-2	148.6	162.4	177-2					
		1269-6	01 es	117-8	152·0 153·1	169-7	189-2 187-8					
	9	0.1001	'n	120-2	148.6	162.4	177-2					
846.6 108	9.080	1281-0	9	120-2	148.6	162.4	177-2	*	190.3			395.4
	19.9	1991-5				į			164-6	243.9	2942	351-7
857-1 104	1042-2	1291-5	. •	100-9	133.9	151.6	171.3	· es	1787			393.7
			က	120.4	153.1	169-7	187.8					
			က မာ	120-2	1486	162.4	177-2					
857-1 104	1042-2	1291-5	:	:	:	:	:	es 4	178-7			393.7
									190.4			395.4
857-1 104	1042-2	1291.5	91	117.3	143.2	155.3	168.3		160-2			365.8
		1	13.	51.9	90.9	62.7	6.99	22	170-4	250-7	301.9	360.7
869-1 10 869-1 10	10539	1301.7	:	:	:	:	:	-	0.1 * 1.0			2.82

																																						_							
	395.4	388.4	399.9	9000	388.7						399.9		383.7		899-9	351.7	328.3					7.007	1004	0.076	1 107	399.9	370.0		402.9					328· 3	399.9	402.8	388.4		402.9	379.8		402.8	2.098		
	330-0	324.8	329.3	0.420	319.0						329.3		812.9		329.3	294.2	265.2					333.1	1 000	9.600	467	329.3	308-8		334.2					265-2	329-3	333-0	324.8		334-2	317.8		333-0	301.9		
	274.7	270.5	271.3	0.077	9.55.6	2					271.3		255.6		271.3	243.9	514.6					0.926	200	0.707	6.10	271.3	9.222	1	7.1.7					214.6	271.3	275.3	270.5		277-2	264.4		275-3	250.7		
	190.4	187.5	184.6	0 / 0 / 7	171.						184.6		171.1		184.6	164.6	141-0	-				3.101	126.0	9.071	0.701	184.6	176.8	-	0-161	-				141.0	184.6	188.7	187.5		191.0	182.9		188.7	170.4		
	œ	<u>_</u>	4 (n c	- c	•					7		C4		4	13	0					7	- :	= :	2	7	=		9				-	•	→	2	6		9	01		5	13	!	
	157.4		51.1		171.8	9.50	6.221		144.0	113.5	189-2	81.3	177-2	168.3	168.3	37.5	:	185.9	189-2	183.7	8	183.7	1001	0.011		189-2	144.6	129.8	171.3	189-2	144.6	129.8	113:5	185.9	157.4	144.6	27.0	62.9	51.1		187-8	144.6	113.5	37.5	
	146.3		6.8		: 2	165.5	169.4		135.4	107-9	169.7	77.4	162.4	155.3	155.3	36.4	:	165.5	169.7	167.2	77.4	6.7.9	9 0	6.701		169.7	135.4	122.5	151.6	169.7	135.4	1.22.9	107.9	165.5	146.3	135.4	92.2	62.7	47.9		169.7	135.4	107-9	36.4	
	136.7		47.3		1 22.0	147.3	9.87	0.00	120.4	105.0	152.0	74.2	148.6	143.2	143.2	34.9		147.3	117.8	151.9	74.5	14.0	0 101	0.201		152.0	126.4	115.1	133.9	152.0	1.92.I	115.1	102.0	147.3	135.7	126.4	88.1	60.5	47.3		153.1	126-4	102.0	34.9	
	112.7		40 .		:00	119.5	9001	9 6	100.3	87.7	117.8	63.6	120-2	117.3	117.3	29.3	;	112.5	117.8	121.1	9.89	1919	1 101	1.18		117.8	106.3	97-9	100-9	117.8	106.3	97.9	87.7	112.5	112.7	106.3	75.8	61.9	40.4		120.4	106.3	87.7	29.3	_
	7		<u>+</u>		: •	> ~	- 4	9 0	20	2	67	12	2	9	9	15		_	8	7	• •	9 4	* 5			67	∞	6	0	67	x	6	_	_	~	8	Ξ	23	14	}	က	8	10	15	
	1301.7		1301-7	91101	5.11.51 5.11.61	91101					1311.9		1311.9		1311-9		1320-9	1320-9				1800.0	10203			1329-0			1329-0					1329-0					1329-0		1329-0				
-	1053.9		1053-9		1065.3	6 0001		_			1065-3		1065-3		1065.3		10758	1075-8				1078.0	0.0701			1085.7			1085.7			_		1085.7					1085.7		1085-7				
	869.1		869.1		1.198	1.100					881.1		881.1	_	881.1		891.9	6.168	3			9.10	6.160			903.0			903-0					903.0					903-0)	903.0		-		
	621.3		621.3		20.3						630.3		630.3		630.3			0.689					0.600			647.7			647.7					2.2.49					647.7		2.249	•			
	71		22	;	25	7					59		7.4		55	}	9	4 9	3			0	ĉ			51			46					20					9	3	49				
	8	3	34		7 7	70		_			37	;	88		30	3	06	3 6	}			è	*		_	8			33,					:2					36	 :	33		_		
				- 1	8												30	3								9															07				
		_				_	_			-		_		-			-	-			_	-					-	_										-		-	-				

g. Old Rules (continued).

## Per Cent, 6 per Cent, 4 per Cent ## E		1			VALUE OF SOME KEVERHONAKE DEMENTS.	EPIEVITS.	1	VALUE OF D	Value of Daughters' Reversionary Benefity.	RVERSIONAL	т Ванкита
903.0 903.0 911.1 911.4 917.4 917.4 917.4 917.4	nt. 4 per Cent.		per Cent.	6 per Cent	per Cent. 6 per Cent. 6 per Cent. 4 per Cent	4 per Cent.	390	8 per Cent	per Cent 6 per Cent, 5 per Cent, 4 per Cent.	5 per Cent.	4 per Cent.
903.0 911.1 911.4 917.4 917.4 917.4 917.4	F 1990-0		બ	બ	બર	બ		બ	બ	ધ	3
911.1 917.4 917.4 917.4 917.4 917.4 917.4		18	2.5	4.2	4.8	8.4	13	164.6	243.9	294.2	351.7
917.4 917.4 917.4 917.4 917.4 917.4							01	7 /01	0.007	7 107	0.040
917.4 917.4 917.4 917.4 917.4 917.4	1334.1	63	120.4	153.1	169.7	187.8	9	191.0	277-2	334-2	402.9
917.4 917.4 917.4 917.4 917.4		9 2	117.3	143:2	155.3	168:3	9	182.9	264.4	817.8	379.8
917.4 917.4 917.4 917.4 917.4 920.7		14	40.4	47.3	48-9	51-1			-		
917.4 917.4 917.4 917.4 917.4	7 1336-2	•	120.4	153.1	169.7	187.8	~	160-2	241.5	596.9	365.8
917.4 917.4 917.4 917.4 917.4							10 1	188.7	275.3	333.0 223.1	402.8
917.4 917.4 917.4 917.4 917.4							- ∞	190.4	274-7	330.0	395.4
917.4 917.4 917.4 917.4 920.7	7 1336-2	9	117.3	1432	155.3	168.3	က	178-7	264.8	322.7	393.7
917.4 917.4 917.4 917.4 920.7		8	106.3	126.4	135.4	144.6	9	182.9	7.79	317.8	379.8
917.4 917.4 917.4 917.4 920.7		=	15.8	88.1	95.2	92.0		,		,	
917.4 917.4 917.4 920.7	7 1336-2	_	112:5	147.3	165.5	185.9	4	184-6	271-3	329.3	399-9
917.4 917.4 917.4 920.7		ω <u>c</u>	106.3	126.4	135.4	144.6	5	164.6	243.9	294.2	351.7
917.4 917.4 917.4 920.7	7 1336.9	2 9	0.001	1 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.191	171.9	c	171.1	955.6	219.0	289.7
917.4 917.4 920.7		15.	29.3	34.9	36.4	37.5	9 00	190-4	274.7	330.0	395.4
917-4 917-4 920-7	7 1336-2	7	112.5	147.3	165.5	185.9	0	141.0	214.6	265-2	328.3
917-4 917-4 920-7		4	121.1	151-9	167-2	183.7	93	178-7	264.8	322.7	893-7
917-4 917-4 920-7		9	117.3	143-2	155.3	168.3	∞	190-4	274.7	3 30-0	395.0
917·4 917·4 920·7		13	51.9	9.09	62.7	62-9	5:	157-2	236.5	287-2	3430
917.4 920.7 920.7	7 1836.0	c	117.0	1 69.0	160.7	0.001	-	0.101	240.0	0.882	955.0
917·4 920·7 920·7	_	9 6	117.3	143.2	155:3	168-3	- 4	184.6	271.3	329.3	899.0
920.7	7 1336-2	60	120.4	153.1	169.7	187.8	11	176.8	257.6	809.8	370-0
920.7		10	120-2	148.6	162.4	177-2	13	164.6	243.9	294-2	351.7
920.7		12			14.5	14.6	19	191.3	279.8	339.4	4 10 .8
7.07.8	1334.7	~ 6	112.7	135.7	146.3	157.4	•	000.		0	
	_	ب د	7.0.7	153.1	169.7	8.781	-	7.091	241.5	6.967	365.8
		2 :	6.19	9 6.	1.79	5.00	4. 1	184.0	271.3	2.622	6.662
_		1	* .0 *	e./#	40.5	1.10	00	199.	2/0.9	0.000	8.704
_	_						22	170.4	250.7	301.9	\$ CO.0

8.5 66876 9907 10089 13847 0 1009 1879 1816 1719 889 1816 1774 889 1816 1774 889 1816 1877 1889 1816 1879 1819 1879 1819 1879 1819 1879 1819 1879 1819 1879 1819 1879 1819 1879 1819 1879 1819 1879 1819 187							
8.5 68.96 930.7 1098.9 1334.7 0 100.9 188.9 151.6 171.4 8 189.7 225.8 4.4 665.6 930.7 1098.9 1834.7 1179.1 189.7 118.9 189.7 225.8 25 665.1 921.3 1097.1 1829.9 121.1 181.9 182.9 189.7 217.1 285.6 25 664.2 918.6 1092.0 1821.5 185.7 2 177.4 81.9 164.6 244.9 25 664.2 918.6 1092.0 1821.5 185.9 185.1 185.9 177.2 187.9 185.6 185.9 177.1 285.6 244.7 245.9 187.1 188.1 92.5 97.0 187.1 188.1 187.5 188.1 187.5 188.1 187.5 188.7 287.5 188.7 2 177.1 285.6 287.5 187.5 188.1 187.5 187.5 187.5 287.5 187.5	402-8 395-4 351-7	383.7	393.7 388.4 360.7 351.7 370.0	3469 3837 35198 3517 4029	3586 3798 3798 3798 440:1 340:0 345:2 410:8	383.7 402.9 400.4 370.0	346.9
8.5 665-6 920-7 1098-9 1334-7 2 117-8 152-0 168-7 168-7 189-7 8 189-7 1699-1 189-7 168-8 189-7 168-8 189-7 168-8 189-7 168-9 189-7 168-9 189-7<	888.0 880.0 294.2	812.9	322.7 324.8 301.9 294.2 309.8	8120 8176 8176 8940 840 840	296-9 322-7 317-8 299-8 334-4 339-8 288-7	312.9 334.2 333.1 309.8	290.4
85 663-6 9207 1098-9 1334.7 2 1176 185-9 187-1 8 44 663-6 9207 1098-9 1334.7 2 1177 120-0 167-1 187-7 187-7 187-1 187-7 187-7 187-7 187-7 187-7 187-7 187-7 187-7 187-7 187-7 187-7 187-7 187-7 188-7 2 2 664-2 918-6 1092-0 1321-5 1 177-1 187-7 188-7 188-7 187-8 188-7 187-8 188-7 187-8 188-7 187-8 188-7 187-8 188-7 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 187-8 188-1 <td>275·3 274·7 243·9</td> <td>265.6</td> <td>264.8 270.5 250.7 243.9 257.6</td> <td>255 6 255 6 243 9 277 2 243 9</td> <td>241.5 264.8 264.4 246.0 300.8 277.2 257.6 238.7</td> <td>255-6 277-2 276-9 257-6</td> <td>238-4</td>	275·3 274·7 243·9	265.6	264.8 270.5 250.7 243.9 257.6	255 6 255 6 243 9 277 2 243 9	241.5 264.8 264.4 246.0 300.8 277.2 257.6 238.7	255-6 277-2 276-9 257-6	238-4
45 66836 9207 10989 13347 2 1170 1879 1	188·7 190·4 164·6	171:1	178.7 187.5 170.4 164.6 176.8	157.4 171.1 182.9 164.6 171.1 191.0	160-2 178-7 182-9 161-3 206-0 191-0 159-8 191-3	171.1 191.0 191.6 176.8	157.4
85 663-6 920-7 1098-9 1334-7 2 117-8 152-0 116-3 44 663-6 920-7 1098-9 1334-7 2 117-8 152-0 116-3 37 665-1 920-7 1098-9 13 7 120-0 177-9 25 665-1 918-6 1097-1 1321-5 4 121-1 151-9 167-2 177-4 25 664-2 918-6 1092-0 1321-5 4 121-1 151-9 167-2 177-4 34 664-2 918-6 1092-0 1321-5 1 75-8 86-5 627-6 627-7 107-9 167-1 167-1 167-1 167-1 167-1 167-1 167-2 147-3 148-5 167-2 <td>3 8 8</td> <td>R</td> <td>8 6 7 1 1 2 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1</td> <td>5 6 5 5 6 6 5</td> <td>(20) 17 11 12 14 15 19</td> <td>11.76</td> <td>16</td>	3 8 8	R	8 6 7 1 1 2 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	5 6 5 5 6 6 5	(20) 17 11 12 14 15 19	11.76	16
85 663-6 920-7 1098-9 1334-7 0 100-9 183-9 44 663-6 920-7 1098-9 1334-7 2 117-8 152-0 37 665-1 921-3 1097-1 1829-9 12 63-6 74-2 25 664-2 918-6 1092-0 1321-5 4 121-1 151-9 151-9 25 664-2 918-6 1092-0 1321-5 1 75-8 88-1 26 664-2 918-6 1092-0 1321-5 1 75-8 88-1 27 664-2 918-6 1092-0 1321-5 1 75-8 88-1 28 661-2 918-6 1067-1 1277-7 4 121-1 147-3 29 648-6 901-8 1067-1 1277-7 4 121-1 151-9 20 648-6 901-8 1067-1 1277-7 4 121-1 149-4 44-1 895-5	171.3 189.7 157.4 113.5 81.3	183.7 129.8 97.0 65.9 37.5	177-2 113-5 97-0 97-0	51·1 183·7 129·8 81·3	81:3 4.8 4.8 183:7 65:9 37:5 14:6	1772 1892 1574 1135 252	87.5
85 663-6 920-7 1098-9 1334-7 0 100-9 44 665-1 920-7 1098-9 1334-7 2 117-8 37 665-1 921-3 1097-1 1329-9 12 63-6 25 664-2 918-6 1092-0 1321-5 4 121-1 25 664-2 918-6 1092-0 1321-5 4 121-1 26 664-2 918-6 1092-0 1321-5 4 121-1 26 664-2 918-6 1092-0 1321-5 1 102-1 27 664-2 918-6 1062-0 1321-5 1 102-2 28 661-2 918-6 1067-1 1277-7 4 121-1 18 648-6 901-8 1067-1 1277-7 4 121-1 29 648-6 901-8 1067-1 1277-7 4 121-1 20 648-6 901-8 1066-1 1264-5 </td <td>151.6 169.7 146.3 107.9</td> <td>167-2 122-5 92-5 62-7 36-4 14-5</td> <td>162-4 167-9 92-5 92-5</td> <td>48.9 167.2 122.5 77.4</td> <td>77.4 4.8 4.8 167.2 62.7 36.4</td> <td>162.4 169.7 146.3 107.9 25.0</td> <td>36.4</td>	151.6 169.7 146.3 107.9	167-2 122-5 92-5 62-7 36-4 14-5	162-4 167-9 92-5 92-5	48.9 167.2 122.5 77.4	77.4 4.8 4.8 167.2 62.7 36.4	162.4 169.7 146.3 107.9 25.0	36.4
35 663-6 920-7 1098-9 1334-7 2 44 663-6 920-7 1098-9 1334-7 2 37 665-1 921-3 1097-1 1329-9 12 25 664-2 918-6 1092-0 1321-5 4 26 664-2 918-6 1092-0 1321-5 1 27 664-2 918-6 1092-0 1321-5 1 28 661-2 918-6 1092-0 1321-5 1 29 664-2 907-2 1075-2 1289-7 14 20 648-6 901-3 1067-1 1277-7 4 20 648-6 901-8 1067-1 1277-7 4 20 648-6 901-8 1067-1 1277-7 4 17 644-1 895-5 1058-1 1264-5 5 18 644-1 895-5 1058-1 1264-6 7 10 10 10 <td>183.9 152.0 135.7 102.0 74.2</td> <td>151.9 115.1 88.1 60.5 13.3</td> <td>147.5 148.6 102.0 88.1</td> <td>47·3</td> <td>74.2 4.2 151.9 60.5 34.9</td> <td>148·6 152·0 135·7 102·0 23·5</td> <td>34.9</td>	183.9 152.0 135.7 102.0 74.2	151.9 115.1 88.1 60.5 13.3	147.5 148.6 102.0 88.1	47·3	74.2 4.2 151.9 60.5 34.9	148·6 152·0 135·7 102·0 23·5	34.9
35 663-6 920-7 1098-9 1334-7 44 663-6 920-7 1098-9 1334-7 37 665-1 921-3 1097-1 1329-9 25 664-2 918-6 1092-0 1321-5 28 664-2 918-6 1092-0 1321-5 21 662-2 918-6 1092-0 1321-5 21 662-2 907-2 1075-2 1289-7 22 648-6 901-3 1067-1 1277-7 20 648-6 901-8 1067-1 1277-7 20 648-6 901-8 1067-1 1277-7 32 644-1 895-5 1058-1 1264-5 13 644-1 895-5 1058-1 1264-5	100.9 117.8 112.7 87.7 63.6	121.1 97.9 75.8 51.9 29.3	112-5 120-2 87-7 75-8 75-8	40.4 121.1 97.9	63.6 2.2 121.1 51.9 29.3	120-2 117-8 112-7 18-8	29.3
35 663-6 920-7 1098-9 44 663-6 920-7 1098-9 37 665-1 921-3 1097-1 25 664-2 918-6 1092-0 21 664-2 918-6 1092-0 22 664-2 918-6 1092-0 23 661-2 918-6 1092-0 24 648-6 901-3 1067-1 25 648-6 901-8 1067-1 26 648-6 901-8 1067-1 17 644-1 895-5 1058-1 18 644-1 895-5 1058-1	00700	9 6 11 13 17 17 17 17 17 17 17 17 17 17 17 17 17	1 110 2	4 4 6 2	12 18 18 15 17	10 7 2 2 2 10 10 10 10 10 10 10 10 10 10 10 10 10	(19)
85 663-6 920-7 44 663-6 920-7 37 665-1 921-3 25 664-2 918-6 21 664-2 918-6 22 664-2 901-3 24 664-2 907-2 26 648-6 901-3 27 648-6 901-8 28 644-1 896-5 13 644-1 895-5	1334.7	1321.5	1309.8	1289-7	1277.7	1264·5	1255-8
85 663 6 44 663 6 37 665 1 28 664 2 29 664 2 20 648 6 20 648 6 22 648 6 34 664 2 20 648 6 30 648 6 31 644 1 13 644 1	1098-9	1092.0	1083-9	1075-2	1067·1	1058·1	1053.3
23 4 4 25 23 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	920.7	921.3	918.0	907-2	901.8	895.5 895.5	892.8
	663-6	665.1		652.2	648.6	644.1	642.6
36 32 41 4 4 8 89 89 89 89 89 89 89 89 89 89 89 89 8	85.4 4.	5.53	4. 8. 4. 8.	18	50 50	17	7
	9 S	85 85 85 85 85 85 85 85 85 85 85 85 85 8	2 9	31 %	4 4	36	32
44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		44	46	44		6	20

g. Old Rules (continued).

Ages.	No. in	VALUE OF	`-	Wipe's Reversionary Behrpit.	BEFERTT.	Ş	VALUE O	Value of Some' Reversionary Bengytta	ERHORARY E	ENERTTE.		VALUE OF I	Valur of Daugeters' Reversionary Benefits	REVERSIONAR	T BENEFITS
₩	List 6.	8 per Cent.	6 per Cent.	per Cent. 5 per Cent. 4 per Cent.	4 per Cent.	1 1 1	8 per Cent.	per Cent, 6 per Cent, 5 per Cent, 4 per Cent	5 per Cent.	4 per Cent.	<u>.</u>	8 per Cent.	6 per Cent.	6 per Cent. 5 per Cent.	4 per Cent.
		£	F	મ	4		બ	¥	બ	4		44	£	c ₄ 2	41
34	6	642.6	8.568	1053.3	1255.8	4	121.1	151.9	167-2	183.7	_	160-2	241.5	296.9	365.8
)			1)		40	120-2	148.6	162.4	177-2	6	1711-1	95556	319.9	383.7
						~	112.7	135.7	146.3	157.4	14	161.3	0.976	8-666	358-0
						. 0	97.9	115-1	122.5	129.8	:		2		
40	91	649.6	8-6-68	1053.3	1955.8	•	120.4	153-1	1607	187.8	=	176.8	9.22.6	309.8	370.0
:	:	;	222			0	6.26	115.1	122.5	129.8	:	:		2	
						<u>~</u>	6.19	60.5	69.7	6.49					
						7	40.4	47.3	48.9	51.1					
43	12	642.6	892.8	1053.3	1255-8			1							
55	Ξ	642.6	892.8	1053.3	1255-8	12	9.89	74-2	777-4	81.3	-0	188.7	275.3	333-0	402.8
		1				14	40.4	47.3	48.9	51.1	91	157.4	238.4	290.4	346.9
						91	18.8	23.5	25.0	25-2	(21)	221.8	323.1	9008	468.7
						18	22	4.2	4.8	4.8					
40	40	643.8	893.1	1051.5	1250.7	9	2.28	102-0	107-9	113.5					
						16	18-8	23.5	25.0	25-2					
44	9	643.8	893.1	1051.5	1250-7	=	75.8	88.1	92.2	0.26					
						13	9.89	74-2	177.4	8.13					
45	2	643.8	893.1	1051.5	1250.7	67	117.8	152.0	169.7	189-2	တ	178-7	264.8	322.7	393-7
						9	117-3	143-2	155-3	168-3	16	157.4	238.4	290.4	346-9
						=	75.8	88.1	95.2	0.26	(18)	191.3	279.8	339.4	410-8
						17	9.1	13.3	14.5	14.6	(33)	256.3	370.4	445.9	534.3
											(34)	274.1	394.7	473.7	565.8
48	_	643.8	893-1	1051.5	1250-7	o	6.26	113-1	122.5	129.8	91	157.4	238.4	290.4	346.9
		_				11	75.8	88.1	92.9	97.0			_		
						8	5.5	4.5	4.8	4.8			_		
49	16	643.8	893.1	1051.5	1250-7	:	:	:	:	:	40	188.7	_	333.0	402.8
											01	182-9	564.4	817.8	879.8
											16	157.4		290.4	346.9
_											17	161.3	_	299-8	358.0
52 37	~	647.4	896.7	1053.3	1249-2	_	112.5	147.8	165.5	185-9	9	191-0		334.5	405.9
						4	121.1	151-9	167.2	183.7	13	170.4		301.9	2.098
						œ	106.3	126.4	135.4	144.6	17	161.3		299.8	358.0
	_					2	87.7	102.0	107.9	113.5					
						18	29.8	34.9	36.4	37.5					
_	-				_	٠	-			•		-			

358-0 393-7 400-4 346-9 381-1	52297-1		383.7 399.9 402.9	879.8	383.7 393.7 400.4	358·0	402.9	399-9 345-2 381-1	6241.5
299·8 322·7 338·1 290·4 316·8	43297-8 5		312-9 329-3	333·1 317·8	312.9 322.7 333.1	299.8 299.8	334.2	329·3 288·7 316·8	5175.0
246-0 264-8 276-9 238-4 260-4	35714-9 4		255·6 271·3 277·2	276.9	255.6 264.8 276.0	250.7 246.0	277-2	271.3 238.7 260.4	4171.8
161.3 178.7 191.6 157.4 174.2	24228-7		171·1 184·6 191·0	191.6	17871	170.4	191-0	184-6 159-8 174-2	2900.0
17 3 7 7 16 18	137		0.40	100	2 63 65	-276	9	448	16
187.8 168.3 66 -9	23110.6			1713 1772 813	14.6 183.7 4.8	4.8	177-2 81-3 37-5 4-8	65.9	1070-3
1697 155.8 62.7	21202-2		:	151.6	14.5 167.2 4.8	4.8	162.4 77.4 36.4 4.8	62.7	1-686
158·1 143·2 60·5	19397-2	ers.	:	133.9	13:3	4.5	148 6 74 2 34 9 4 2	60.5	913-2
1204 1173 51 9	15689-1	Widowers.	:	100.9 120.2 63.6	9:1 9:1 2:2	5.5	120-2 63-6 29-3 2-2	51.9	738.4
8 6 (19) 13	172		:	0 2 2 2	14 18	18	122 18	13	13
1266.3	116427-0		:	::	:	:	:	:	:
1078-2	94672.8		:	::	:	•	r	:	:
926.4	78400.5		:	::	;	:	:	:	
674.7	56447-7		:	: :	:	:	:	:	:
~ •9	83		06	30	88	24	53	19	:
82 44	Total					~	50	6	:
55			32	36 42		46	46	49	Total

g. Old Rules (continued).—Bachelors in the Service living 1st May, 1863.

No. in List 6.	32	56
Age	43	
No. in List 6.	79 58 66 63	5 \$
Age.	36 37 39	43
No. in List 6.	98 98 91	88
Αge.	32 33	8 8
No. in List 6.	107 108 123 99	76 6
Age.	88 83	
No. in List 6.	109 112 122 126	138
Age.	. 72	
No. tn List 6.	128 132 137 113	106
γÊυ	25 26	27
No. in List 6.	124 135 139 120	127
Age.	24 25	
No. in List 6.	136 141 142 149	157
Age.	23	
No. in List 6.	159 134 144 147	156
Age.	22	
No. in List 6.	143 145 146 150	148
Aga	20	21
₹		

Members who had resigned the Service but whose Families are entitled to Benefits.

	No. th	VALUE 01	of Wife's Reversionary Benefit.	VERSIONARY .	BEGGETT.		VALUE OF	P Some' REV	VALUE OF SORS' REVERSIONARY BEHEFITS.	ENEFITS.		VALUE OF I	Value of Daugriess' Reversionary Benefits.	REVERSIONAR	T BEKEFITE.
	Liet 6.	8 per Cent.	6 per Cent.	6 per Cent. 5 per Cent. 4 per Cent.	4 per Cent.	Š	8 per Cent.	6 per Cent.	8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent.	4 per Cent.	ė.	8 per Cent.	8 per Cent. 6 per Cent. 5 per Cent. 4 per Cent.	5 per Cent.	4 per Cent.
		બ	લ	ચ ,	લ		લ	બ	વ	વ		બ	વા	વર	4
52 4	::	648.6	901·8 921·3	1067-1	1277·7 1329·9		106.3	126.4	135.4	144.6	49	188-7	275.3	333-0	402-8
						22	87.7 51.9	102·0 60·5	107-9	113.5	22 82	170.4	250-7	301.9 316.8	360·7 381·1
						15 16 (19)	29.3 18.8	23.5 23.5	36.4 25.0	37.5	(21)	221.8	\$23.1	9.068	468.7
I	8	1313.7	1828-1	21642	2607.6	2	294-0	847·3	367-4	386.7	4	755·1	1109.5	1342:3	1613.3

VALUATION, 1ST MAX, 1863.

8. Non Rules.—Members in the Service who have conditionally accepted the New Scheme.—Values of Reversionary Benefits to Wives, Sons, and Daughters.

Aon H. W. 22 22 23 17 24 24 24 24 24 24 24 24 24 24 24 24 24	No. in List 6. 158 158 159 129 131 138 110 110 110 110 110 110 110 110 110 11	8 per Cent. £ 480-0 506-1 514-2 512-9 522-9 522-9 531-3	### 6 per Cent 6 per Cent 4 per Cent 25-2 ### 2	£ per Cent 4 \$ 987.6 997.8 997.8 997.8 1008.6 1019.4 1019.4	Smarrr.	₽8	VALUE OF	Some REVI	VALUE OF SORS' REVERSIONARY BENEFITS	BREETTS.		VALUE OF E	Value of Daugeters' Reversionary Brhepits.	RVERETORAR:	r Bankrith.
	158 159 140 110	8 per Cent. 4.98.0 506.1 514.2 514.2 522.9 522.9 531.3	£ 7824 7935 7935 8037 8037 8142 8142	\$ per Cent, 4 \$ 987.6 997.8 997.8 1008.6 1019.4 1019.4	per Cent.		B per Cent.								
	158 159 129 140 131 133 110 110	£ 4980 606:1 506:1 514:2 514:2 522:9 531:3	£ 782.4 793.5 793.5 803.7 814.2 814.2	987.6 997.8 997.8 1008.6 1019.4 1019.4				6 per Cent.	per Cent. 6 per Cent. 6 per Cent.	4 per Cent.	\$ \$	8 per Cent.	6 per Cent	5 per Cent	4 per Cent.
	158 151 153 153 134 138 118 110	498-0 506-1 514-2 514-2 522-9 522-9 531-3	782.4 793.5 793.5 803.7 814.2 814.2 824.7	987.6 997.8 997.8 1008.6 1019.4 1019.4	43		93	વર	વર	æ		લ	સ	3	3
	151 153 129 131 131 110 110	506-1 506-1 514-2 522-9 522-9 531-3 539-7	7935 7935 8037 8037 8142 8142 8247	997.8 997.8 1008.6 1019.4 1019.4	1273-2										
	153 129 131 133 110 110	506-1 514-2 518-2 522-9 522-9 531-3	7935 8037 8037 8142 8142 8247	997.8 1008.6 1019.4 1019.4	1283.4										
	129 140 131 133 118 110	5142 5142 5229 5229 5313	803.7 803.7 814.2 814.2 824.7	1008-6 1019-4 1019-4	1283.4										
	131 133 133 110 121 121	51142 5229 5229 531.8 539-7	8037 814-2 814-2 824-7	1019:4 1019:4 1030:0	1993.3										
	133 113 110 121 121	522.9 522.9 531.8 539.7	814-2 814-2 824-7	1019-4	1903-3	_	1.57.7	206.€	227.0	9.57.0					
-	133 110 110 1121 116	522.9 531.3 539.7	814-2	1019-4	1303.8	•		2	;						
	118	531.3	824.7	10900	1303.8										
	110	539-7	:		1313.4	8	165.6	207.7	233.6	263.5	۰	167.1	243.9	302.0	382.6
	120	539.7))	· 63	209.3	298-2	364.9	456.7
	110	539.7	_	_							4	215.6	304.8	371.6	463.5
	121		834.6	1040.4	1323.0	0	142.6	181.7	207-2	237.0					
21 25 28	121					C	165.6	207.7	233.6	263.5					
58 88 88	116	539-7	834.6	1040-4	1323-0										
88		539-7	834.6	1040.4	1323-0	_	157-7	206.6	227-0	257.9					
	COT	539.7	834.6	1070.1	1323.0	8	165-6	207-7	233.6	263.5					
			:			4	171-8	209.7	232.6	258.5					
						40	171.4	206.6	227.5	251.1					
						9	168.8	200.7	219.5	240.6					
28 19	114	548.4	844.8	1050.6	1332.0	:			:		0	167.1	243.9	302.0	382.6
20	103	548.4	844.8	1050-6	1332.0	0	142.6	181.7	207-2	237.0					
i 						87	165.6	207.7	233.6	263.5				_	
24	111	548.4	844.8	1050.6	1332.0	8	165.6	207.7	233.6	263.5	၈	209.3	298-2	364.9	456.7
						2	171.4	506.6	227.5	251.1					
58	102	548.4	844.8	1050.6	1332-0	~	157.7	506-6	227-0	257-9	4	215.6	804.8	371.6	463.5
						es	169.8	210.1	234.7	262.8					
29 25	<u>=</u>	8-959	855-0	1060.5	1340-7	_	157.7	506.6	227.0	257-9	4	215.6	804.8	371.6	463.5
_						67	165.6	207.7	233.6	263.5					
	86	8-999	855.0	1060.5	1340-7	:	:	:	:	:	63	201.0	288.7	354.5	445.5
30 25	115	565-2	864.3	1068.3	1348-5	40	171-4	9.902	227.5	251.1	_	188.9	273.5	337.3	425.6
_	20	565-2	864.3	1068-3	1348.5	0	142.6	181-7	207-2	237-0	~	209-3	298-2	364.9	4.96.7
						67	166-6	207.7	233.6	263.5					,
						40	171.3	506.6	227.5	251.1					
						9	168.8	200.7	21.95	240.6					
			_	-		-	157.7	9.90%	927.0	9.57.9					
				-		-		-							

g. New Rules (continued).

\$ per Cent. \$ per Cent.	AGE	si	No. in	VALUE OF	v Wirs's Re	Wife's Reverencement Brunder.	BRHEFFT.	1	VALUE O	P Some' REV	Value of Som' Reversionary Benefits.	SECTION.		VALUE OF 1	VALUR OF DAUGHTERS' REVERSIONARY BENEFITS.	REVERSIONAL	и Ввиши
30 97 £6.5 £ <th>H</th> <th>È.</th> <th>List 6.</th> <th></th> <th>per Cent.</th> <th>per Cent.</th> <th>4 per Cent.</th> <th>į.</th> <th></th> <th>6 per Cent.</th> <th>5 per Cent.</th> <th>4 per Cent.</th> <th>•</th> <th>8 per Cent.</th> <th>6 per Cent.</th> <th>5 per Cent</th> <th>4 per Cent.</th>	H	È.	List 6.		per Cent.	per Cent.	4 per Cent.	į.		6 per Cent.	5 per Cent.	4 per Cent.	•	8 per Cent.	6 per Cent.	5 per Cent	4 per Cent.
30 97 565-2 864-3 1076-3 1184-6 6 168-8 2007 219-5 240-6 4 215-6 18 95 573-1 1878-3 1076-7 1851-4 0 142-6 181-7 207-2 237-0 1 188-9 23 100 581-1 882-0 1084-5 1861-4 0 142-6 181-7 207-2 237-0 1 188-9 24 88 581-1 882-0 1084-5 1861-4 0 142-6 181-7 207-2 237-0 1 188-9 29 86 588-6 889-2 1091-1 186-6 9 146-3 167-7 137-7 238-6 285-7 1 188-9 1 188-9 188-9 188-9 188-9 1 188-9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	İ			41	વર	બ	વર		બ	બ	*	બર		બ	ભ	બ	બ
19 9.6 575.1 878.3 1076.7 18.5-1 8 109 23.7 28.7 28.7 18.9 23 100 581.1 882-0 1084-6 1861-4 0 142-6 181.7 207-2 237-0 1 188-9 24 88 581.1 882-0 1084-6 1861-4 0 142-6 181.7 207-2 237-0 1 188-9 25 88 588-6 889-2 1091-1 186-6 2 165-6 207-7 238-6 252-4 2 2 166-6 207-7 238-6 252-4 2 2 2 166-6 207-7 238-6 252-4 2 2 166-6 207-7 238-6 252-4 2 2 2 166-6 207-7 238-6 252-4 2 2 166-6 207-7 138-6 2 2 2 2 166-6 207-7 238-6 2 2 2 2 <t< td=""><th>30</th><td>30</td><td>97</td><td>565-2</td><td>864.3</td><td>1068.3</td><td>1348.5</td><td>9</td><td>168.8</td><td>200.7</td><td>219.5</td><td>240.6</td><td>4</td><td>215.6</td><td>804.8</td><td>371.6</td><td>463.5</td></t<>	30	30	97	565-2	864.3	1068.3	1348.5	9	168.8	200.7	219.5	240.6	4	215.6	804.8	371.6	463.5
18 92 581-1 8820 1084-5 1861-4 0 1426 181-7 207-2 237-0 1 188-9 188-9 188-9 188-9 188-9 1861-4 0 1426 181-7 207-2 237-0 1 188-9 222-4 262-8 6 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 156-8 222-4 222-8 222-4 156-8 222-4 216-8 222-4 216-8 222-4 216-8 222-1 156-8 156-8 156-8 156-8 156-8 222-1 156-8 156-8 156-8 256-9 156-8 256-1 256-1 256-1 256-1 256-1 256-1 256-1 25	E	18	98	573.1	873.3	1076-7	1355-1	60	169.8	210-1	234.7	262-8					
23 100 581-1 8820 1084-5 1861-4 0 142-6 181-7 207-2 237-0 1 188-9 24 88 581-1 8820 1091-1 1365-6 2 165-6 210-7 238-6 6 222-4 29 86 588-6 889-2 1091-1 1365-6 9 146-8 107-7 238-6 263-5 4 215-2 29 86 588-6 889-2 1091-1 1365-6 9 146-8 167-7 179-7 159-6 159-7 159-6 159-7 159-6 159-7 159-6 159-7 159-6 159-7 159-6 222-1 159-6 222-1 159-7 159-6 159-7	32	82	92	581.1	882.0	1084.5	1361-4			-	1						
34 88 581-1 8820 10845 186-6 2 165-6 2077 2347 262-8 6 222-4 29 88 588-6 889-2 1091-1 186-6 2 165-6 2077 238-6 268-6 2 206-8 2077 238-6 268-6 2 206-8 2077 238-6 268-6 2 206-8 2077 238-6 268-6 2 206-8 2077 238-6 268-6 2 206-8 2077 238-6 268-6 2 206-8 2077 238-6 268-6 2 206-8 2077 238-6 268-6 2 208-8 2<		23	8	581.1	882-0	1084.5	1361.4	•	142.6	181.7	207.2	237.0			1		
22 83 588-6 889-2 1091-1 1365-6 2 165-6 2077 234-7 282-3 0 222-4 282-3 282-4 282-3 282-4 285-6 286-6 2 165-6 2077 238-6 268-5 2 286-6 2 165-6 2077 238-6 268-5 2 289-6 289-5 1091-1 1365-6 0 146-8 167-7 179-9 198-3 2		\$	88	581-1	882.0	1084.5	1361.4	0	142.6	181.7	207-2	237.0		188-9	273.5	337.3	425.6
22 88 5886 8892 1091-1 18656 2 165 6 2077 123 6 26 109 6 2016 6 2077 123 6 2016 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017 110 6 2017								:o :	8.691	1.017	234.7	262.8		7.7.7.	210./	9.9/2	4 67.1
29 86 5886 8892 1091-1 13656 4 2156 29 86 5886 8892 1091-1 13656 9 1463 1677 1799 1983 5 2199 22 84 5861 897-3 10980 1370-7 5 171-4 2066 227-5 251-1 8 222-1 34 77 604-2 906-7 1106-5 1876-8 5 171-4 206-6 227-5 251-1 8 222-1 34 77 604-2 906-7 1106-5 1876-8 5 171-4 206-6 227-5 251-1 8 222-1 25 65 612-6 914-1 1112-4 1380-6 0 142-6 187-7 262-8 3 209-3 29 65 612-6 914-1 1112-4 1380-6 0 142-6 187-1 206-7 237-6 257-1 188-9	of	66	8	588.6	889-2	1001	1365.6	: 6	16.6	207.7	933.6	263.5					
22 86 588-6 889-2 1091-1 1365-6 9 146-3 167-7 179-9 198-3 5 219-9 22 84 596-1 897-3 1098-0 1370-7 5 171-4 206-6 227-5 251-1 8 222-1 84 596-1 897-3 1098-0 1370-7 5 171-4 206-6 227-5 251-1 8 222-1 84 77 604-2 906-7 1106-5 1370-7 5 171-4 206-6 227-5 251-1 8 222-1 22 66 612-6 914-1 1112-4 1380-6 0 147-4 206-6 227-5 251-1 13 198-5 29 65 612-6 914-1 1112-4 1380-6 0 147-4 206-6 227-5 251-1 13 198-5 29 612-6 914-1 1112-4 1380-6 0 167-8 210-1 237-6 251	3	18	%	588.6	889-2	1091-1	1365.6	1		; ;	:	:	_	215.6	304.8	371-6	463.5
22 84 696-1 897-3 1098-0 1370-7 5 171-4 206-6 227-5 251-1 8 222-1 34 696-1 897-3 1098-0 1370-7 5 171-4 206-6 227-5 251-1 8 222-1 34 73 604-2 906-7 1105-5 1876-8 5 171-4 206-6 227-5 251-1 8 222-1 34 77 604-2 906-7 1105-5 1876-8 5 171-4 206-6 227-5 251-1 8 222-1 29 65 612-6 914-1 1112-4 1380-6 0 142-6 227-5 251-1 8 209-3 30 75 612-6 914-1 1112-4 1380-6 0 142-6 227-5 251-1 8 209-3 30 75 612-6 914-1 1112-4 1380-6 0 142-6 227-5 251-1 8 222-1		32	8	9.889	889.2	1091-1	1365.6	6	146.3	167.7	179-9	193.3		219-9	309.0	375.4	466.8
22 84 596·1 897·3 1098·0 1370·7 5 171·4 206·6 227·5 251·1 8 222·1 34 80 596·1 897·3 1098·0 1370·7 2 165·6 207·7 233·6 263·5 251·1 8 222·1 251·1 284·7 268·8 263·5 261·1 8 252·1 251·1 284·7 268·8 265·8 267·5 251·1 284·7 268·8 267·1 267·1 266·8 227·5 251·1 13 198·5 171·4 206·6 227·5 251·1 13 198·5 167·1 188·6 207·1 266·6 227·5 251·1 13 198·5 167·1 188·6 200·3 167·1 188·6 200·3 167·1 188·6 200·3 167·1 267·1 188·7 268·1 168·8 200·7 219·5 251·1 188·7 268·1 168·8 200·7 219·5 240·6 167·1 1112·4 1880·6								10	133.7	151.6	161.7	172.7		223.1	\$10.3	375.3	464.6
22 84 596-1 897-3 1098-0 1370-7 5 171-4 206-6 227-5 251-1 84 896-1 897-3 1098-0 1370-7 2 165-6 207-7 238-6 263-5 84 73 604-2 906-7 1106-5 1876-8 5 171-4 206-6 227-5 251-1 8 222-1 24 77 604-2 906-7 1106-5 1876-8 5 171-4 206-6 227-5 251-1 8 222-1 25 65 612-6 914-1 1112-4 1380-6 1 171-4 206-6 227-5 251-1 8 222-1 29 69 612-6 914-1 1112-4 1380-6 1 1 206-6 227-5 251-1 8 222-1 30 75 612-6 914-1 1112-4 1380-6 1 1 2 2 2 2 2 2 2			į		1		1						∞	222-1	308.1	372.0	459.5
82 81 596-1 897-3 1098-0 1370-7 5 171-4 206-6 227-5 251-1 84 73 604-2 906-7 1106-5 1876-8 2171-4 206-6 227-5 251-1 84 77 604-2 906-7 1106-5 1876-8 5 171-4 206-6 227-5 251-1 8 222-1 22 65 612-6 914-1 1112-4 1380-6 7 167-8 3 209-3 29 69 612-6 914-1 1112-4 1380-6 7 206-6 227-5 257-1 3 209-3 29 612-6 914-1 1112-4 1380-6 <th><u>*</u></th> <td>83</td> <td>8</td> <td>596-1</td> <td>897.3</td> <td>1098-0</td> <td>1370-7</td> <td></td> <td>į</td> <td>-</td> <td>1</td> <td>,</td> <td></td> <td></td> <td></td> <td></td> <td></td>	<u>*</u>	83	8	596-1	897.3	1098-0	1370-7		į	-	1	,					
84 80 596·1 604-2 906·7 1106·5 1876·8 5 171·4 206·6 227·5 255·1 84 73 604-2 906·7 1106·5 1876·8 5 171·4 206·6 227·5 251·1 8 222·1 22 65 612·6 914·1 1112·4 1380·6 0 142·6 187·7 207·2 237·0 3 209·3 29 69 612·6 914·1 1112·4 1380·6 0 142·6 187·7 207·2 237·0 3 209·3 30 75 612·6 914·1 1112·4 1380·6 0 142·6 187·7 207·2 237·0 3 209·3 30 75 612·6 914·1 1112·4 1380·6 0 168·8 200·7 219·5 240·6 1 189·9 84 76 612·6 914·1 1112·4 1880·6 6 168·8 200·7 219·5 </td <th></th> <td>32</td> <td>æ 8</td> <td>596.1</td> <td>897.3</td> <td>1098-0</td> <td>1370-7</td> <td>9</td> <td>171.4</td> <td>9.902</td> <td>227.5</td> <td>251.1</td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		32	æ 8	596.1	897.3	1098-0	1370-7	9	171.4	9.902	227.5	251.1	_				
84 73 604-2 906-7 1106-5 1876-8 5 171-4 206-6 227-5 251-1 8 222-1 34 77 604-2 906-7 1106-5 1876-8 5 171-4 206-6 227-5 251-1 13 198-5 22 65 612-6 914-1 1112-4 1380-6 0 142-6 181-7 207-2 237-0 3 209-3 29 69 612-6 914-1 1112-4 1380-6 0 142-6 181-7 207-2 237-0 3 209-3 30 75 612-6 914-1 1112-4 1380-6 6 168-8 200-7 219-5 240-6 3 209-3 30 7 612-6 914-1 1112-4 1380-6 6 168-8 200-7 219-5 240-6 1 189-9 84 76 612-6 914-1 1112-4 1880-6 6 168-8 200-7		\$	2	1.969	9.789	10880	13/0/21	, o	9.691	2016	233.0	0.696					
84 73 604-2 906-7 1106-5 1875-8 5 171-4 206-6 227-5 251-1 8 222-1 22 65 612-6 914-1 1112-4 1380-6 0 142-6 181-7 207-2 237-0 3 209-3 29 69 612-6 914-1 1112-4 1380-6 0 142-6 181-7 207-2 237-0 3 209-3 30 75 612-6 914-1 1112-4 1380-6 0 168-8 200-7 219-5 240-6 3 209-3 30 75 612-6 914-1 1112-4 1380-6 0 168-8 200-7 219-5 240-6 3 209-3 84 76 612-6 914-1 1112-4 1380-6 6 168-8 200-7 219-5 240-6 1 18-9 22 62 621-8 914-1 1112-4 138-6 7 163-8 99-4								3 40	171.4	9.90%	207.5	251.1					
34 77 604-2 905-7 1105-5 1875-8 5 171-4 206-6 227-5 261-1 8 222-1 29 65 612-6 914-1 1112-4 1380-6	35	34	73	604.2	2.906	1105-5	1875-8	,			· ·		_				
22 65 612-6 914-1 1112-4 1380-6 0 142-6 181-7 207-2 237-0 3 209-3 29 69 612-6 914-1 1112-4 1380-6 0 142-6 181-7 207-2 237-0 3 209-3 30 75 612-6 914-1 1112-4 1380-6 23-7 267-6 257-6 251-1 30 75 612-6 914-1 1112-4 1380-6 5 219-5 240-6 3 209-3 84 76 612-6 914-1 1112-4 1380-6 6 168-8 200-7 219-5 240-6 1 18-9 22 62 621-8 922-5 1119-9 138-5 </td <th></th> <td>*</td> <td>11</td> <td>604-2</td> <td>905.7</td> <td>1105.5</td> <td>1375-8</td> <td>20</td> <td>171-4</td> <td>206.6</td> <td>227.5</td> <td>251.1</td> <td><u>د</u> م</td> <td>222.1</td> <td>308-1</td> <td>372-0</td> <td>459.5</td>		*	11	604-2	905.7	1105.5	1375-8	20	171-4	206.6	227.5	251.1	<u>د</u> م	222.1	308-1	372-0	459.5
22 69 612°6 914°1 1112°4 1380°6 0 142°6 181°7 207°2 23°7 3 209°3 29 69 612°6 914°1 1112°4 1380°6 0 163°8 210°1 234°7 26°8 28°8 209°3 209°3 30 76 612°6 914°1 1112°4 1380°6 6 168°8 200°7 219°5 240°6 8 222°1 84 76 612°6 914°1 1112°4 1380°6 6 168°8 200°7 219°5 240°6 8 222°1 22 62 621°8 922°5 1119°9 1886°4 7 163°8 104°3 109°4 12 204°0 25 64 621°8 922°5 1119°9 1886°4	- ;	6	å	0.00	2,45	1119.7	1900.6						<u> </u>	198.5	2//2	336.0	415.7
30 75 612·6 914·1 1112·4 1380·6 169·8 200·7 219·5 240·6 227·5 251·1 209·3 34 76 612·6 914·1 1112·4 1380·6 6 168·8 200·7 219·5 240·6 3 209·3 24 76 612·6 914·1 1112·4 1380·6 6 168·8 200·7 219·5 240·6 8 222·1 25 62 621·3 922·5 1119·9 138·5·4	8	7 6	2 6	0.710	1416	11124	1380-6	:=	149.6	181.7	907-9	987-0	_	107	989	964.9	9020
30 75 612·6 914·1 1112·4 1380·6 6 168·8 200·7 219·5 240·6 3 209·3 34 76 612·6 914·1 1112·4 1380·6 6 168·8 200·7 219·5 240·6 3 209·3 22 621·8 914·1 1112·4 1380·6 6 168·8 200·7 219·5 240·6 1 188·9 22 62 621·8 922·5 1119·9 1385·4 <		}	3	2				. 60	169-8	210-1	234.7	262.8) } !	}	-	-
30 75 612-6 914-1 1112-4 1380-6 <th< td=""><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td>20</td><td>171.4</td><td>9.902</td><td>227.5</td><td>251.1</td><td></td><td></td><td></td><td></td><td></td></th<>								20	171.4	9.902	227.5	251.1					
30 76 612-6 914-1 1112-4 1380-6 5 209-3 34 76 612-6 914-1 1112-4 1380-6 6 168-8 200-7 219-5 240-6 1 188-9 22 62 621-8 922-5 1119-9 1385-4			i			-		9	168.8	200.7	219.2	240.6					
34 76 612-6 914-1 1112-4 1380-6 6 168-8 200-7 219-5 240-6 1 188-9 22 62 621-8 922-5 1119-9 1385-4		ຂ	75	612.6	914·1	1112.4	1380.6	:	:	:	:	:		209.3	298-2	364.9	456.7
34 76 612-6 914-1 1112-4 1380-6 6 168-8 200-7 219-5 240-6 1 188-9 22 62 621-8 922-5 1119-9 1385-4													0 00	219.9	308-1	372.0	459.5
22 62 621·3 922·5 1119·9 1385·4 <th< td=""><th></th><td>34</td><td>92</td><td>612.6</td><td>914.1</td><td>1112.4</td><td>1380.6</td><td>9</td><td>168.8</td><td>200.7</td><td>219.5</td><td>240.6</td><td>~</td><td>188-9</td><td>273.5</td><td>337.3</td><td>425.6</td></th<>		34	92	612.6	914.1	1112.4	1380.6	9	168.8	200.7	219.5	240.6	~	188-9	273.5	337.3	425.6
22 62 621·3 922·5 1119·9 1385·4 104·3 109·4 12 204·0 25 64 621·3 922·5 1119·9 1385·4								7	163.8	192.3	208.9	227.4	2	214.9	298-0	859.7	443.8
22 62 621-3 922-5 1119-9 1885-4	;		;	-	3			133	90.9	99.4	104:3	109.4	7	204-0	284.1	343.8	424.8
	22	2 23	62	621.8	922.9	1119-9	1385.4	:	:	:	:	:	-	1.291	243:9	205.0	382.0
		}	;	;													

459.5	468:5	452·3 382·6 445·5			463.2	445.5	•	463.5	382.6				464.6	434.3	463.5	434.3	467.1				382.6	463.5	466.8	452.3		467.1		466-8	424.8	
372-0	371.6	366·8 302·0 354·5			371.6	354.5		336-0	302.0				375.3	351.8	871.6	351.8	376.6	;			302.0	371.6	375.4	3998	į	376.6	3	375.4	343.8	
308-1	304.0	243.9 248.9 288.7			304.8	288.7	9	277.3	243.9				310.3	291.1	804.8	291.1	310.7				243.9	804.8	309.0	304.0		310-7		309-0	284:1	
222.1	219.4	219.4 167·1 201·0			215.6	201-0	9	198.5	167.1				223·I	209.5	215.6	209.2	222.4				1.291	215.6	219-9	219.4		222.4	i	219.9	204-0	
	ນ 4 .	000			4	61	,	4 65	0			,	<u> </u>	= °	4	=	9	,			•	4	10	6	,	9 9	?	*0	21	
227.4	2.68	237.0	257·9 251·1	211.6	263.5	251.1	240.6	71.4	:	257.9	258.5	130-0	258.5	172.7	263.5	211.6	237.0	263.5	211.6	193.3	257.9	227.4	211.6	151.2	109.4	2.68	262.8	211.6	172.7	*:
208-9	86.1	207-2	227·0 227·5	195.7	233.6	227.5	219.5	0.69	: 3	0.727 0.33.6	232.5	123-2	232.5	161.7	233.6	195.7	207-2	233.6	195.7	1799	227-0	208.9	195.7	142.4	104:3	7.98	234.7	195.7	161.7	2.60
192.8	9.28	181.7	206.6	181.3	207.7	206-6	200.7	2.00.7		206.6	209.7	116.8	7.602	9.151	207.7	181.3	181.7	207.7	181.3	151.6	206.6	192.3	181.3	134.3	7. 66	9.7.8	210.1	181.3	151.6	0.00
168-3	0.92	142.6	157.7	133.7	165.6	171.4	168.8	62.0		165.6	171.8	105.1	8.171	133.7	165.6	156.4	142.6	165.6	156.4	133-7	157.7	163.8	156.4	119.6	30.2	0.97	169.8	156.4	133.7	0.20
7	7	:•	- ·	8 9	87.5	2 10	9 9	15	:-	→ 67	*	12	4 5	3	63	& c	n 0	63	&	n	-	2	æ ;	=:		¥.	•	ω,	2:	<u>-</u>
1385.4	1385.4	1390.5			1390.5	1390.5	1800.6	0.0801	1394.4	1984.4		1001	1334.4		1398.0		1398-0				1398-0				0000	0.8691	1398-0			
1119-9	1119-9	1127:1			1127.1	1127.1	1107.1	1.7911	1133-7	1.0011		1100.7	/.eerr		1140.3		1140.3				1140.3				9 0 7 7 1	0.0411	1140.3			
922.5	922.5	931-2			931-2	931-2	9180	9 106	939-3	6 868		8,080	e Rek		2.1.1		247.7				2.4.6				4.4.0	1.146	947-7			
621.3	621.3	630.3			630.3	630.3	8.089		639.0	0.600		0.069	0.660		647.7	_	647.7				2.279				4.7.0	7.770	647.7	•		
r z	73	67			29	7.4	<u></u>	3	61	8		2	 ?		51		46				20				5	3	49			
88	ಪ	3.22			37	8	0	3	8 8	3		2	.		ಜ	•	33				35				26	3	68			
	37	88							33						\$														_	
										_	_	_	_		_			_	_		_	_	_	_	_		_	_	_	

g. New Rules (continued).

AGES.	ES.	No. in	VALUE OF		Wipe's Revennionary Benefit.	BREEFIT.		VALUE OF	VALUE OF SONS' REVERSIONARY BENEFITS.	ERSIONARY	BENEVITS.		VALUE OF D	Value of Daughters' Reversionany Benefits.	CRYBUSIONAR	T BENEFITS
н	W.	List 6.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent,	Age.	8 per Cent.		6 per Cent. 5 per Cent.	4 per Cent.	Age.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent,
	5	:	4	- 41 c	3.00	#		બ	4	43	4		ઞ	**	3	3
9	4 4	£ 55	647.7	947.7	1140-3	1398-0	18	24.6	25.4	25.8	26-1	13	198.5	277.3	336-0	415-7
11	30	43	654.6	953-1	1144-2	1398-6						12	0.761	2/1.1	1.622	408.3
	37	45	654.6	953-1	1144-2	1398-6	00 0	169.8	210-1	234.7	262-8	9 0	222.4	310-7	376.6	467-1
							12	105.1	116-8	123-2	130-0	2	2 + 19	0.007	1.000	440 0
				0.7	1000		14	0.92	82.6	1.98	2.68				1000	7
42	25	7	650-0	2.926	1145.7	1396.5	60	169.8	210-1	234.7	262.8	-	188-9	273.5	337.3	455.6
												101	219-9	309-0	375.4	466.8
	ŀ											- 00	1.666	308-1	379.0	495-0
	32	70	0-099	956.7	1145.7	1396.5	9	168-8	200-7	219.5	240.6	000	209-3	298-2	364-9	456-7
							8	156.4	181-3	195.7	211.6	10	214-9	298-0	359-7	443.8
							11	119.6	134.3	142.4	151-2					
	34	39	0-099	2.996	1145-7	1396.5	1	157.7	506-6	227-0	257-9	*	215.6	304.8	371-6	463.5
							80	156.4	181.3	195.7	211.6	13	198.5	277.3	336.0	415.7
							10	133.7	151-6	161.7	172.7					
	35	28	0.099	2-996	1145-7	1396.5	0	142.6	181-7	207-2	237-0	CI	201.0	288-7	354.5	445.5
	3						15	62.0	6.99	0.69	71.4	8	222-1	308-1	372.0	459.5
	38	31	0.099	956-7	1145.7	1396.5	-	157.7	206-6	227-0	257-9	0	1-291	243.9	302-0	382.6
	1						4	171-8	209.7	232.5	258-5	63	209-3	298-2	364-9	456.7
							9	168-8	200-7	219-5	240.6	8	222-1	308-1	272-0	459.5
							13	90.2	₹-66	104.3	109.4	15	192.6	271-1	329-4	408-3
			70	25.55	To You	1000			1			17	200-6	283-7	345.4	428.4
	39	52	0.099	2.996	1145.7	1896.5	CI	165.6	207.7	233.6	263.5	-	188-9	273.5	337.3	425.6
							9	168.8	200.7	219.5	240.6	7	215.6	304-8	371.6	463.5
	45	40	0-099	2996	1145.7	1396.5	00	169-8	210-1	234.7	262.8	11	209-5	291-1	351-8	434.3
							10	171.4	506.6	227.5	251.1	13	198-5	277-3	336.0	415.7
		113		1000		100	17	36-2	37-9	38.8	39.5	19	227.4	321.8	391.6	484-6
43	28	22	2.220	057.6	1149.0	1401-1	-	0.50	100.3	0.800	1.200					

425.6 463.5 466.8	424-8 466-8 459-5 415-7	445.5	456.7 452.3 424.8	415.7 434.3 414.1 445.5 443.8	415.7 445.5 467.1	425.6 426.7 443.8 428.4 518.4
337.3 371.6 375.4	343.8 375.4 372.0 336.0	354.5	364:9 366:8 343:8	336.0 351.8 333.9 354.5 359.7	354.5 376.6	337.3 364.9 359.7 345.4
278.5 304.8 309.0	284·1 309·0 308·1 277·3	288.7	298-2 304-0 284-1	291:1 291:1 274:4 288:7 298:0	277·3 288·7 310·7	273.5 298.2 298.0 283.7 345.1
188.9 215.6 219.9	204-0 219-9 222-1 198-5	201-0	209·3 219·4 204·0	198.5 209.5 194.5 201.0	198.5 201.0 222.4	209.8 209.8 214.9 244.2
~ 4 10 CC	12 6 8 13	Ø		102	20.00	21 co 11 co 12 co
262-8 109-4 89-7	887-0 263-5 227-4 172-7	258·5 193·3 161·2 109·4 71·4	39.5 257.9 251.1 172.7 151.2	151-2 89-7	258·5 193·3	130.0 130.0 26.1
234·7 104·3 86·1	207-2 233-6 208-9 161-7	232.5 232.5 179.9 142.4 104.3 69.0	227-0 227-0 161-7 142-4	142.4	232.5	123.2 123.2 25.8
210·1 99·4 82·6	181.7 207.7 192.3 151.6	209-7 167-7 134-3 99-4 66-5	87.9 206.6 206.6 151.6 134.3	134.8	209.7 167.7	116.8 25.4
169-8 90-5 76-0	142·6 165·6 163·8 133·7	171.8 146.3 119-6 90-5 62-0	36-2 157-7 171-4 133-7	119.6	171.8	105·1 105·1 24·6
8 13 14	08709	4 6 11 13 13 15 15 15 15 15 15 15 15 15 15 15 15 15	100111	= 3	400	228
1891-1	1891-1 1891-1	1382·7 1370·7	1870-7	1355.7	1317-0	1317-0
1143-9	1143.9	1139.4	1131.6	1121-1	1099.5	1099-8
927-6	927.6	955.8	951.3	943.8	928.8	928.8
963.6	663·6 663·6	665-1	664-2	661.2	648.6	648.6
8	% 4	25	z	23	18	20
8	98 89 80	39	43	40 84	E G	4
		44		46	8	

g. Nov Rules (continued).

1. W.	_	_	No. in		WIFE IN	of Wife Reversionary Benefit	BENEVIT.		VALUE O	P SONS' KEV	Value of Sons' Reversionary Brnefits.	BRITERITIE.		VALUE OF I	VALUE OF DAUGHTEIS' REVERSIONARY BENEFITS.	REVERSIONAL	r Beneric
41 22 £	 남		List 6.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Ė	8 per Cent.	6 per Cent	5 per Cent.	- ▼	\$	8 per Cent.	6 per Cent.		4 per Cent
32 17 4 18 17 20 10 22.2 20 10 22.2 20 10 22.2 20 10 <t< td=""><td>9</td><td> ;</td><td>8</td><td>94 S</td><td>3,8</td><td>300</td><td>3.5</td><td>,</td><td>₩.</td><td>36</td><td>₹.6</td><td>₹</td><td>٩</td><td>4 ફે</td><td>સ ટ્રે</td><td>35 g</td><td># F</td></t<>	9	;	8	94 S	3,8	300	3.5	,	₩.	36	₹.6	₹	٩	4 ફે	સ ટ્રે	35 g	# F
32 17 644-1 921-0 1088-4 1301-1 5 77 665-6 695-6 714 14 194-8 277-4 281-8 379-6 194-8 277-4 281-8 277-4 281-8 277-4 281-8 277-4 281-8 277-4 281-8			22	0.46.0	0.026	0.8601	0./161	* ==	90.2	7-66	104.3	109.4	°=	203.2	291.1	351.8	434.3
32 17 644:1 921:0 1088-4 1801:1 5 174 206-6 227:5 251:1 257-4 381-8 36 13 644:1 921:0 1088-4 1801:1 5 171-4 206-6 227:5 251:1 252:4 381-8 36 13 644:1 921:0 1088-4 1801:1 2 165-6 207.7 238-6 263-5 11 209-5 291:1 209-7 233:1 310-3 32 14 642-6 916-8 1081-5 1290-0 165-6 620-6 267-6 267-6 267-7 258-5 14-4 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15</td> <td>62.0</td> <td>9.99</td> <td>0.69</td> <td>71.4</td> <td>: 2</td> <td>194.8</td> <td>272.4</td> <td>930.6</td> <td>409-4</td>								15	62.0	9.99	0.69	71.4	: 2	194.8	272.4	930.6	409-4
32 17 644·1 921·0 1088·4 1801·1 5 171·4 206·6 227.5 251·1 2 2024 310·7 36 13 644·1 921·0 1088·4 1801·1 2 165·6 207.7 238·6 268·5 11 209·5 291·1 32 14 642·6 916·8 1081·5 1290·0 15 620 66·6 69·0 71·4 16 194·5 274·4 188·9 277·4 189·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 209·5 291·1 200·6 209·1 200·1 209·5 201·1 200·6 200·1 200·1 200·1 200·1 200·1 200·1 200·1 200·1 200·1 200·1 200·1 200·1 200·1 200·1								17	36-2	87.9	38.8	39.8	19	227.4	321.8	891.6	484.6
36 13 644-1 921-0 1088-4 1301-1 2 165-6 207-7 233-6 217-7 223-1 310-3 32 14 642-6 916-8 1081-5 1290-0 15-6 65-6 690 71-4 16 134-7 1727-7 16-6 207-7 233-6 237-1 10-6 231-1 209-6 231-1 201-0 231-1 201-0 231-1 201-0 231-1 201-0 231-1 201-0 201-0 201-0 201-0 201-0 201-0 2	49	32	17	644.1	921-0	1088.4	1301-1	2	171.4	506.6	227.5	251.1	c9 4	201.0	288-7	354.5	445.5
36 13 644:1 921-0 1088-4 1301-1 2 165-6 2077 233-6 265-5 11 209-5 291-1 32 14 642-6 916-8 1081-5 1290-0 15 646-5 690-9 774-4 144-4 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>۰,</td><td>223-1</td><td>310.3</td><td>375.3</td><td>464.6</td></td<>													۰,	223-1	310.3	375.3	464.6
32 14 642-6 916-8 1081-5 1290-0 1857 114-6 144-7 172-7 163-8 192-3 208-9 227-4 144-14-1 16 185-7 156-6 66-6 66-6 66-6 66-6 66-6 66-6 66-6 66-6 66-6 7 71-4 16 194-6 174-4 144-4 <t< td=""><td></td><td>36</td><td>13</td><td>644.1</td><td>921-0</td><td>1088-4</td><td>1301-1</td><td>87</td><td>165-6</td><td>207-7</td><td>233.6</td><td>263.5</td><td>Ξ</td><td>209.2</td><td>291.1</td><td>351.8</td><td>434.3</td></t<>		36	13	644.1	921-0	1088-4	1301-1	87	165-6	207-7	233.6	263.5	Ξ	209.2	291.1	351.8	434.3
32 14 642-6 916-8 1081-5 1290-0 15 161-6 161-7 172-7 172-7 134-4 144-4<								7	163.8	192.3	208-9	227.4					
32 14 642-6 916-8 1081-5 1290-0 15 642-6 690-0 71.4 16 194-5 274-4 34 9 642-6 916-8 1081-5 1290-0 15 620-0 66-5 690-0 71.4 16 194-5 274-4 34 9 642-6 916-8 1081-5 1290-0 4 171-8 209-6 227-5 258-5 1 188-9 273-6 40 16 642-6 916-8 1081-5 1290-0 3 166-8 107-7 179-9 198-3 1 209-6 287-7 179-9 198-3 1 209-6 287-7 179-9 198-3 1 209-6 287-7 179-9 198-3 1 209-6 287-7 1 200-6 283-7 1 209-6 283-7 1 200-6 283-7 1 200-6 283-7 1 200-6 283-7 1 200-6 283-7 1 200-6 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td>133-7</td> <td>151.6</td> <td>161.7</td> <td>1727</td> <td></td> <td></td> <td></td> <td></td> <td></td>								2	133-7	151.6	161.7	1727					
32 14 642-6 916-8 1081-5 1290-0 15 620 675 675 144 144 164 194-5 274-4 34 9 642-6 916-8 1081-5 1290-0 4 1718 209-7 252-5 258-5 1 188-9 273-5 40 16 642-6 916-8 1081-5 1290-0 3 167-7 179-9 197-3 179-9 197-3 179-9 197-3 179-9 197-3 179-9 198-3 109-6 283-7 40 16 642-6 916-8 1081-5 1290-0 3 169-8 210-1 234-7 262-8 11 209-6 283-7 50 11 642-6 916-8 1081-5 1290-0 3 166-8 104-3 104-3 199-4 179-0 198-3 209-6 291-1 209-6 291-1 209-6 291-1 209-6 291-1 209-6 291-1 209-6 291-1<				_				9 9	48.6	9.10	7.20	54.6					
32 14 642-6 916-8 1081-5 1290-0 15 050-0 714-1 16 194-0 274-4 144-1 <td>_</td> <td></td> <td>;</td> <td>0,0</td> <td></td> <td></td> <td>0.000</td> <td>6;</td> <td>14.0</td> <td>14.3</td> <td>7.71</td> <td>14.4</td> <td>:</td> <td></td> <td>į</td> <td></td> <td></td>	_		;	0,0			0.000	6;	14.0	14.3	7.71	14.4	:		į		
34 9 642-6 916-8 1081-5 1290-0 4 1714 206-6 227-5 25-1 2 2010 288-7 40 16 642-6 916-8 1081-5 1290-0 3 167-7 179-9 198-3 1 200-6 287-7 4 179-9 198-3 1 200-6 288-7 4 200-6 288-7 1 200-6 288-7 4 200-6 288-7 4 200-6 288-7 4 200-6 288-7 4 200-6 288-7 4 200-6 288-7 4 200-6 288-7 4 200-6 288-7 4 200-6 288-7 4 200-6 288-7 4 200-6 289-7 4 200-6 289-7 4 200-6 289-7 4 200-6 289-7 4 200-6 289-7 4 200-6 289-7 4 200-6 289-7 4 200-6 289-7 4 200-6 289-	 2	22	4	042.0	8.916	1081.5	0.0621	5	0.29	0.00	0.69	4.17	9	194.9	2/4.4	6.000	414.1
40 16 642.6 916.8 1081.5 1290.0 4 171.4 2087 227.5 252.0 252.7 252.0 275.5 275.5 275.5 275.7 <td></td> <td>-</td> <td>•</td> <td>9</td> <td>0,0</td> <td>4 , 00 ,</td> <td>0000.</td> <td>S.</td> <td>140</td> <td>14.5</td> <td>4.4.6</td> <td>4.4</td> <td></td> <td>900</td> <td>4 626</td> <td>0.10</td> <td>9.407</td>		-	•	9	0,0	4 , 00 ,	0000.	S.	140	14.5	4.4.6	4.4		900	4 626	0.10	9.407
40 16 642.6 916.8 1081.5 1290.0 3 146.8 167.7 179.9 198.3 1 200.6 283.7 40 16 642.6 916.8 1081.5 1290.0 3 169.8 210-1 234.7 202.8 11 200.6 283.7 42 12 642.6 916.8 1081.5 1290.0 14 76.0 82.6 86.1 89.7 194.5 291.1 50 11 642.6 916.8 1081.5 1290.0 14 76.0 82.6 86.1 89.7 1 194.5 291.1 50 11 642.6 916.8 1081.5 1290.0 12 106.1 116.8 82.6 86.1 89.7 16 194.5 274.4 40 5 643.8 915.6 1077.9 1282.2 10 133.7 151.6 151.7 172.7 172.7 44 6 643.8 915.6 1077.9 </td <td></td> <td>, ,</td> <td>20</td> <td>042.0</td> <td>8.016</td> <td>C.1901</td> <td>0.0621</td> <td>4 4</td> <td>171.0</td> <td>2.802</td> <td>997.5</td> <td>22000</td> <td>٦ ٥</td> <td>901.0</td> <td>0.077</td> <td>9.7.7.8</td> <td>448.8</td>		, ,	20	042.0	8.016	C.1901	0.0621	4 4	171.0	2.802	997.5	22000	٦ ٥	901.0	0.077	9.7.7.8	448.8
40 16 642·6 916·8 1081·5 1290·0 3 165·8 210·1 234·7 262·8 11 209·5 291·1 42 12 642·6 916·8 1081·5 1290·0 146·3 167·7 179·9 193·3 11 209·5 291·1 40 12 642·6 916·8 1081·5 1290·0 14 76·0 82·6 86·1 89·7 16 194·5 219·9 309·0 50 11 642·6 916·8 1081·5 1290·0 12 106·1 116·8 86·1 89·7 16 194·5 274·4 40 5 643·8 915·6 1077·9 1282·2 10 133·7 151·6 161·7 172·7 172·7 44 6 643·8 915·6 1077·9 1282·2 11 119·6 134·3 142·4 26·6 21 262·4 370·0 44 6 643·8 915·6 10		_						3 6	162.0	8.601	0.000	507.4		9.006	003.7	345.4	7.867
40 16 642·6 916·8 1081·5 1290·0 3 169·8 210·1 234·7 262·8 11 209·5 291·1 42 12 642·6 916·8 1081·5 1290·0 14 76·0 82·6 86·1 89·7 169·4 89·7 169·4 89·7 169·4 89·7 169·4 89·7 169·4 89·7 169·4 89·7 169·4 89·7 169·4 89·7 16 169·7	_							. 0	146.3	167.7	179-9	193.3	7		204	F 04 0	
42 12 642-6 916-8 1081-5 1290-0 146-3 167-7 179-9 198-3 50 11 642-6 916-8 1081-5 1290-0 12 16-1 16-8 180-1 189-7 169-4 189-7 40 5 643-8 916-8 1081-5 1290-0 12 106-1 116-8 180-0 5 219-9 309-0 40 5 643-8 916-6 1077-9 1282-2 10 133-7 151-6 167-7 172-7 370-0 44 6 643-8 916-6 1077-9 1282-2 11 119-6 134-3 142-4 26-6 26-1 262-4 370-0 44 6 643-8 916-6 1077-9 1282-2 11 119-6 134-3 142-4 157-7 10 13 13 13 13 13 13 13 13		9	16	642.6	916.8	1081.5	1290-0	9	169.8	210-1	234.7	262.8	=	209.2	291.1	351-8	434.3
42 12 642-6 916-8 1081-5 1290-0 14 760 82-6 86-1 89-7 109-4 50 11 642-6 916-8 1081-5 1290-0 12 106-1 116-8 128-2 180-0 5 219-9 309-0 60 11 642-6 916-8 1081-5 1290-0 12 166-1 116-8 128-2 166-1 189-7 16 194-5 274-4 40 5 643-8 915-6 1077-9 1282-2 10 133-7 151-6 161-7 172-7 44 6 643-8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 151-2 44 6 643-8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 151-2 44 6 643-8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 151-2								6	146.3	167-7	179-9	193.3					
42 12 642.6 916.8 1081.5 1290.0 12 106.1 116.8 123.2 130.0 5 219.9 309.0 50 11 642.6 916.8 1081.5 1290.0 12 106.1 116.8 123.2 130.0 5 219.9 309.0 40 5 643.8 915.6 1077.9 1282.2 10 133.7 151.6 58.2 54.6 20 262.4 370.0 44 6 643.8 915.6 1077.9 1282.2 11 119.6 134.3 142.4 157.7 10 5 643.8 915.6 1077.9 1282.2 11 119.6 134.3 142.4 157.9								13	9.06	7.66	104.3	109-4					
42 12 642-6 916-8 1081-5 1290-0 12 106-1 116-8 123-2 130-0 5 219-9 309-0 50 11 642-6 916-8 1081-5 1290-0 12 166-1 167-0 86-1 89-7 16 194-5 274-4 40 5 643-8 915-6 1077-9 1282-2 10 133-7 151-6 58-2 54-6 20-1 262-4 370-0 44 6 643-8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 152-7 44 6 643-8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 150-3 44 6 643-8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 150-3		:						7	16.0	85.6	86.1	89-7					
60 11 642-6 916-8 1081-6 1290-0 12 106-1 116-8 123-2 130-0 5 219-9 309-0 40 5 643-8 915-6 1077-9 1282-2 10 133-7 151-6 161-7 172-7 44 6 643-8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 156-6 21 262-4 370-0 44 6 643-8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 156-6 21 262-4 370-0 10 13 13 13 13 142-4 156-6 21 262-4 370-0		75	22	642.6	916.8	1081.5	1290-0										
40 5 643.8 915.6 1077.9 1282.2 10 13.7 151.6 161.7 152.7 16 18.9 16.0 25.4 25.4 25.2 370.0 40 5 643.8 915.6 1077.9 1282.2 10 133.7 151.6 161.7 172.7 44 6 643.8 915.6 1077.9 1282.2 11 119.6 134.3 142.4 151.2 13 10 13 13 13 13 13 150.3		 2	=	642-6	916-8	1081.5	1290-0	2	106.1	116.8	123-2	130.0	20 5	219.9	309.0	375.4	466.8
40 5 643.8 915.6 1077.9 1282.2 11 128.7 151.6 58.2 54.6 21 262.4 370.0 40 5 643.8 915.6 1077.9 1282.2 10 133.7 151.6 161.7 172.7 172.7 44 6 643.8 915.6 1077.9 1282.2 11 119.6 134.3 142.4 151.2 13 105.1 165.1 165.3 130.3 130.3 130.3						_		7	76.0	9.7.8	1.98	89.7	9	194.2	274.4	333.9	414.1
40 5 643.8 915.6 1077.9 1282.2 10 133.7 151.6 161.7 44 6 643.8 915.6 1077.9 1282.2 11 119.6 134.3 142.4 134.3 142.4 16 167.9 105.1 116.8 134.3 142.4		_				-		9[48.6	91.6	53.2	54.6	2	7.65.4	370-0	448.9	253.8
40 5 643.8 915-6 1077-9 1282-2 10 133.7 151-6 161.7 44 6 643.8 915-6 1077-9 1282-2 11 119-6 134-3 142-4 13 13 105-1 106-1 116-8 123-2	_							18	24.6	25.4	25.8	26.1	_				
6 643.8 915.6 1077.9 1282.2 11 119.6 134.3 142.4	- 19		20	643.8	918.6	1077-9	1282-2	2;	133.7	151.6	161.7	172.7	_				
12 105-1 116-8 123-2		- 77	ď	6.42.0	015.6	1077.0	1000-0	9 =	10.6	0.10	7.00	04.0					
		-	>		0 0 0	6 1 101	7 7091	12	106.1	116.8	123-2	130.3					

456·7 414·1 484·6 627·5	664·3 414·1 466·8 443·8 414·1	428.4 424.8 428.4 428.4 428.4	456·7 464·6 414·1 453·0	61123.6
364.9 333.9 391.6 511.2	33.30 33.30 33.30 33.30	345.4 376.6 343.8 345.4 345.4	364.9 375.3 333.9 365.5	49153-9
298-2 274-4 321-8 423-2	274.4 274.4 309.0 298.0 274.4	283.7 310.7 284.1 283.7 283.7	298·2 310·3 274·4 300·2	40396-2
209.3 194.5 227.4 302.0	322-6 194-5 219-9 214-9 194-5	200.6 222.4 204.0 200.6 200.6	209.3 223.1 194.5 212.1	28655-6
3 23 23	24 16 10	17 12 17 17	3 16 18	137
263.5 240.6 151.2 39.5	193-3 151-2 26-1	257.9 258.5 211.6 172.7 71.4 26.1 262.8 240.6	14.4	33697.5
233.6 219.5 142.4 38.8	179.9 142.4 25.8	227-0 232-5 195-7 161-7 69-0 25-8 234-7 219-5	14.4	30634·7
207.7 200.7 134.8 87.9	167.7 134.3 25.4	206-6 209-7 181-3 151-6 66-5 66-5 25-4 210-1 200-7	14:3 4:09 4:4	28001-1
165.6 168.8 119.6 36-2	146·3 119·6 24·6	157-7 171-8 156-4 133-7 62-0 24-6 169-8 169-8	14·0 90·5	23413·1
2 6 11 17	91181:	1 4 8 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	e .	175
1282-2	1282-2	1278·6	1287-9	124297-5
1077-9	1077.9	1077·6	10968	83359-2 100876-5 124297-5
915.6	915.6	917-7	94.0 6.3	83359-2
8.819	643.8	1.7.4.9	674.7	57367.7
10	7	8	44 3 For ha if-yearl y paymts.	36
45	48	37	44 lf-yearl	Totals
		55	For ha	To

g. New Rules (continued).—Widowers.

						•		•								
AGE	ı i	No. fr	VALUE OF	WIPE'S RE	Wife's Reversionary Bruzett.	BEKEPIT.		VALUE OF	VALUE OF SOMS' REVERSIONARY BENEFITS.	ERIONARY !	SENEPTIA.		VALUE OF I	VALUE OF DAUGHTERS' REVERSIONARY BEREFITS.	RVERSIONAR.	T BENETITS.
Ħ	₩.	List 6.	8 per Cent	6 per Cent.	6 per Cent. 5 per Cent. 4 per Cent.	4 per Cent.	Age.	8 per Cent.	per Cent. 6 per Cent. 5 per Cent. 4 per Cent	5 per Cent.	4 per Cent.	Age.	8 per Cent.	per Cent. 6 per Cent	5 per Cent.	4 per Cent.
ç		8	બ	લ	લ્ફ	બ		બ	બ	વર	વર		સ	£ 000.7	3,7	3.7
70	:	3	:	:	:	:	:	:	:	:	:	7 4 6	215.6	304.8	371.6 871.6 878.6	463.5
36 42	::	88	::	::	::	::	0.40	142.6	181.7	207-2	237.0	·	223-1	310-3	375.8	464.6
43	:	38	:	:	:	:	25.74	36.2 171.8	99.4 97.9 209.7	104:3 104:3 232:5	109-4 109-4 258-5 258-5	29 28	201-0	274.4 288.7 298.5	333.9 354.5	414·1 445·5 45·7
46	:	57	:	:	:	٠:	8 8	24.6	52.4	25.8	26.1	2 2 2 2 2 2	223·1 204·0 200·6	284·1	3753 3438 3454	404.6 424.8 428.4
46	:	8	:	:	:	:	12	171.4	206.6	227.5	251·1 130·0	. 9	222.4	310-7	\$76.6 \$76.6	590·3 467·1
49	;	2	:	:	:	:	118 20 8 118	24.6 4.5 90.5	255 25.4 25.4 3.4 4.5 4.5	25.8 4.5 104.3	71.4 26.1 4.5 109.4	4 14 18	215-6 194-8 212-1	304·8 272·4 300·2	371-6 330-6 366-5	463.5 409.4 453.0
	Total	7					72	1224-9	1422-1	1539-4	1670-2	16	3435.6	4836-2	5879-4	7301-9
				Member	Members who had resigned the Service but whose Families are entitled to Benefits.	resigned	the St	rrvice but	whose Fe	ımilies ar	e entitled	to Ber	nefits.			
48 44	52	::	648-6	928·8 955·8	1139-4	1317·0 1882·7	10	156·4 133·7	181.3	195.7	211.6 7.271	, 5 12	219.9	339-0 284-1	375.4 843.8 865.5	466.8 424.8
For hal	For half-yearly paymt.	paymt.	20-0	:	:	:	10 10 10 10 10 10 10 10 10 10 10 10 10 1	62.0 48.6 14.0	66.5 51.6 14.3	58.2 14.4	71.4 54.6 14.4	22	7.292	370-0	448.9	553-8
Tc	To tals	8	1333-7	1884-6	2238-9	2699.7	9	505-2	564.7	598-3	684-1	4	₽-868	1263.8	1588.6	1898-4

VALUATION, 1st MAT, 1863.

p. Old Rules.—Values of Members' Subscriptions.

		Unmarri	nd Mane	urs,		MARR	ed Mei	MBERS AND	WIDOWE	rs with C	HILDREN.
			LUES OF AL			Age of			LUES OF JO		
Age.	No.	8 per Cent. by Neison, XLIII.	6 per Cent.	5 per Cent.	4 per Cent. Neison, XLIII. (a).	Hus- band.	No.	8 per Cent. Grant, X.	6 per Cent.	5 per Cent.	4 per Cent. Grant, X. (a).
20 21 22 23 24 25 26 27 28 29 31 32 34 35	5 5 6 3 6 2 7 3 1 2 3 1 1 1	£ 41·165 15·950 38·530 44·508 21·318 40·590 12·792 41·923 16·635 5·057 7·874 9·879 1·806 ·947 298·974 =6·361	£ 47-085 18-128 43-510 49-932 23-748 44-898 14-042 45-675 17-979 5-421 8-296 10-311 1-858 -960 331-843 = 7-060	£ 50·100 19·236 46·015 52·632 24·948 47·004 14·646 47·467 18·612 5·590 8·484 10·503 1·867 ·965 348·069 =7·406	£ 52-960 20-270 48-325 55-086 26-022 48-852 15-172 48-986 19-137 5-726 8-620 10-626 1-873 -964 362-619 =7-715	22 23 24 25 26 27 28 29 30 31 32 33 34 35	1 2 2 2 1 4 4 2 3 1 3 } W.1 } 4 2 2 2	£ 7·492 14·434 13·832 13·180 6·210 23·400 21·704 9·918 13·338 3·880 13·012 10·240 3·590 1·890	£ 8·312 15·920 15·166 14·366 6·756 25·168 23·184 10·516 14·040 4·052 13·484 10·548 8·656 1·908	£ 8·779 16·762 15·916 15·024 7·040 26·140 23·988 10·840 14·415 4·144 13·728 10·668 3·690 1·918	£ 9·290 17·678 16·728 15·734 7·347 27·172 24·840 11·182 14·808 4·239 13·984 10·820 3·726 1·926
					ļ.	Aver.	46 	156·120 = 4·592	167·076 = 4·914	173·052 = 5·090	179·474 = 5·279
						Ма	RRIED I	dembers,	WHO ABID	E BY OLD	Rules.
								U	NDER 16 YE	ARS' SERVI	CB.
						28	1	5.426	5.796	5-997	6:210
								Do.	ABOVE 16	YEARS' SEE	VICE.
						43) 51 } 53 }	3				

VALUATION, 1st MAY, 1868.

p. New Rules.—Value of Members' Subscriptions to the end of 25 Years' Service.

		Unmarr	ED MENE	BERS.		Marr	ied Me	mbers and	WIDOWI	irs with]	Pamilies.
		TOTAL VA	LUBS OF AL	ENUITIES TO	D THE END					OINT LIFE . 5 YEARS' SI	
Age.	No.	8 per Cent. Grant, XIV.	6 per Cent.	5 per Cent.	4 per Cent. Grant, XIV (a).	Аде.	No.	8 per Cent. Grant, XII.	6 per Cent.	5 per Cent.	4 per Cent XII (6).
20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 42 43	5256362731 23 1122 212	£ 48.580 19.152 47.180 55.758 27.420 53.862 17.604 25.221 8.183 15.358 22.179 6.744 6.374 11.938 11.050 9.012 2.578 3.606	£ 56:850 22:324 54:775 64:464 31:566 61:728 20:080 68:432 28:482 9:193 17:062 24:495 7:356 6:907 12:848 11:808 9:490 2:649 3:672	£ 61-920 24-268 59-380 69-708 34-047 66-402 21-542 73-213 30-387 9-777 18-034 25-806 7-698 7-201 13-346 12-222 9-744 2-686 3-708	£ 67.780 26.486 64.655 75.696 36.864 71.682 23.186 78.554 32.499 10.425 19.100 27.237 8.065 7.517 13.880 12.660 10.114 2.724 3.744	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	1 2 2 2 1 4 4 2 3 1 3 1 4 2 2 4 1 4 5 3 7 2 7 4 1 1 7 4 2 1 1 3 2	£ 8:841 17:408 17:114 16:808 8:243 32:268 31:520 15:350 22:371 7:219 27:828 26:684 12:726 12:054 28:300 21:028 24:070 12:975 26:495 6:370 20:144 8:865	£ 10·194 19·998 19·590 19·150 9·351 36·444 35·428 17·170 24·897 7·990 30·632 29·204 13·846 13·034 30·405 22·436 25·500 27·657 6·596 20·696 9·030 ·948	£ 11-011 21-548 21-050 20-536 10-002 38-880 37-700 18-220 26-343 8-430 32-216 30-620 14-470 13-582 31-555 23-204 26-275 14-010 28-273 6-716 20-984 9-115	£ 11-940 23:308 22:710 22:096 10:733 41:600 40:220 19:380 27:933 8:910 33:936 32:152 15:142 14:154 32:780 24:020 27:090 14:388 28:917 6:840 21:280 9:205
						50 51 52 55	5 5 1 2				
Aver.	56	452·083 = 8·073	514·181 =9·182	551·081 = 9·840	592·868 = 10·587	Aver.	99	405·620 = 5·481	443·836 = 5·998	465·692 =6·293	489·691 =6·617

z. (Art. 192.) Members in the Service, 1st May, 1863.—Total Salaries and Emoluments receivable at each Age, and the Average at each Age, and at every Fifth Year of Age (From List No. 18).

	1	BACRELORS.				MARRIED.			,	WIDOWERS.		
Age.	No.	Total Incomes.	Average at each Age.	Age.	No.	Total Incomes.	Average.	Age.	No.	Total Incomes.	Ave	rage.
_		Rs.	Rs.			Rs.	Rs.	_		Rs.	- <u> </u>	Rs.
20	5	19.200	3.840	22	1	3,600	3,600	32	1	19,400	19.	400
21	2	7,200	3,600	23	2.	6,600	3,300	36	1	5,000		000
22	5	19,800	3,960	24	.2	6,700	3,350	1	1	"	'	
23	6	27,000	4,500	25	2	18,547	9,274					
24	3	22,100	7,367	26	1	8,800	8,800	l	2	24,400	12	200
25	6	46,000	7,667	27	3 }	27,400	9,467	1	-	,	,	
26	2	17,600	8,800		1 }	ł I		42	1	28,000	28.	000
27	6 }	46,800	7,800	28	4	52,160	13,040	43	l ī	10,000		000
	1 5	}	i i	29	2	29,600	14,800	46	2	61,600		800
28	3	39,800	13,267	30	2)	28,000	14,000	49	1	5,000		000
29	1	16,800	16,800		1 }				1	1	1 1	
31	2	32,400	16,200	31	1	16,800	16,800					
32	3	33,400	11,133	32	3	38,200	12,733	I	5	1,04,600	20.	920
34	1	5,000	5,000	33	4	50,000	12,500		1	-,,		
35	1	19,400	19,400	34	2	31,500	15,750			-		
36	1	10,500	10,500	35	2	64,200	34,100		7	1,29,000	18	429
37	2	56,000	28,000	36	4	65,700	16,425		•	1,20,000	10,	120
39	1	14,000	14,000	37 38	3 2	36,500	12,167					
				39	2	50,000 29,200	25,000 14,600					
1			1	39.	4	29,200	14,000	1				
	50 }	4,33,000	8,660			ļ		•				
	1 \$				42)	5,63,507	13,417	ł				
	,	0. 400	03.400			3,03,307	10,211	l				
36	1 1	21,460	21,460		2 }		l	1				
39	1	16,800	16,800	<u> </u>				1 4	Summar	y of all (Nasses.	
42 43	2	28,300	30,000	37	1	28,000	28,000			3 5		
10	-	38,000	20,000	38	3	66,000	22,000	 	,	,	T	
			 	39	ĭ	29,850	29,850	į .	į.			At
- 1	5	1,04,260	20,852	40	7	2,43,600	34,800	Ages.	No.	Total Incomes.	Average Income.	Mean
	9	1,04,200	20,002	41	2	34,300	17,150	1	i			Age.
[42	7	1,62,000	23,143					
- 1	EE 1	5,37,260	9,768	43	4	94,000	23,500	Į.	ł	Rs.	Rs.	ŀ
	\$5 }	0,31,200	9,100	44	1	28,000	28,000	20-23		49,800	3,831	20
	1,		j	45	2	38,000	19,000	23-28	33 (2,27,547	6,896	25
		L	L	46	1	28,000	28,000	ì	2 {			İ
				47	1	11,742	11,742	28-33	23	3,15,360	13,711	30
	Ord I	Rulm, Mabi	LIED.	48	3	92,200	30,733		15			۱
			,	49	2	56,000	28,000	33-38	23	3,93,260	17,098	
28	1	0 000	0000	50	5	1,70,964	34,193	38-43	28	7,01,750	25,062	
40	1	8,800	8800,	51	5	1,66,000	33,200	43-48	15	3,43,542	22,903	
				52	1	64,000	64,000	48-53		5,82,164	32,342	
43	1	34,200	24 000	55	1)	64,000	64,000	53–58	2 }	92,000	46,000	55
51	l	28,000	34,200 28,000		1 \$			l	l ',			1
53	ì	28,000	28,000									
"	•	20,000	20,000		47)	13,76,656	29,290	,	1551	Į.	}	
					1 {	1 0,1 0,000	43,430	(3	İ		
		00 000	30,067		.,			Total	Rete 1	27,05,423	17,460	
	3	90.200							1			
	3	90,200	00,007					i i]!	1	nearly.	
	3	90,200	00,007		89)	19,40,163	21,800	1 (159		nearly.	
	3	99,000	24,750		89 } 3 {	19,40,163	21,800	(159		nearly.	

INDEX TO APPENDIX IV.

VALUATION TABLES FOR GENERAL USE.

Old Rules.

- No. 1. Incumbent.—Widows' pensions, payable half-yearly in advance till marriage or death. Value of $\pounds 1$ annuity.
- No. 2. Do. Sons' benefits. Value of annuity, half-yearly in advance, of £30 per annum under age 6, £50 per annum above 6 and under 10, and £100 per annum from 10 to 19, with a donation of £300 at age 19. If both parents are dead the annuity increased to £50 per annum under age 6, and £80 per annum from 6 to 10 years of age.
- No. 3. Do. Daughters' benefits. Value of similar annuity and donation.
- No. 4. Contingent.—Reversionary pensions to wives of living members. Value of £300 per annum, payable half-yearly in advance, till marriage or death (the husband being assumed on the average 7 years older than the wife).
- No. 5. Do. Reversionary benefits to sons of living members. Value of the same benefits as in No. 2, if the father dies before the son attains 19 (the father being assumed on the average 35 years older than the son).
- No. 6. Do. Reversionary benefits to daughters of living members (not on the Subsidiary Fund). Value of the same benefits as in No. 3, if the father dies before the daughter attains 19 (the father being assumed on the average 35 years older than the daughter).
- No. 7. Do. Reversionary benefits to daughters of living members, if on the Subsidiary Fund.
 - a. Under age 19. Value of the same benefits as in No. 6, but in lieu of the donation of £300 at age 19, an annuity of £100 till marriage or death, if the father is then dead and the daughter living unmarried.
 - b. Above age 19. Value of annuity of £100 a year till marriage or death, after the father's death.
- No. 8. a. Unmarried members.—Value of temporary single life annuity till age 36.
 - b. Married members.—Value of temporary joint life annuity till age 36 of husband.

New Rules.

No. 9. Incumbent.—Widows' pensions. Value of life annuity £300, payable half-yearly in advance till marriage, and then reducible to one-half till death.

- No. 10. Incumbent.—Sons' benefits. Value of annuity, half-yearly in advance, of £40 per annum under age 6, £60 per annum from 6 to 10, and £125 per annum from 10 to 21, with a donation of £300 at age 21. If the mother be dead or have remarried, the annuity increased to £50 per annum under age 6, and to £70 per annum from 6 to 10 years of age.
- No. 11. Do. Daughters' benefits. Value of annuity, half-yearly in advance, of £40 per annum under age 6, £60 per annum from 6 to 10, and £100 per annum from 10 till marriage or death, with a donation of £300 on marriage. If the mother be dead or have remarried, the annuity increased to £50 per annum under age 6, £70 per annum from 6 to 10, and £125 per annum from 10 till marriage or death.
- No. 12. Contingent.—Reversionary pensions to wives of living members. Value of life annuity of £300 per annum, payable half-yearly in advance, till marriage, and then reducible to one-half till death (the husband being assumed on an average 7 years older than the wife).
- No. 13. Do. Reversionary benefits to the sons of living members. Value of the same benefits as in No. 10, if the father dies before the son obtains 21 (the father being assumed on an average 35 years older than the son).
- No. 14. Do. Reversionary benefits to the daughters of living members. Value of the same benefits as in No. 11, if the father dies before the daughter's marriage or death (the father being assumed on the average 35 years older than the daughter).
- No. 15. a. Unmarried Members on Service.—Value of temporary single-life annuity till age 45.
 b. Married Members on Service.—Value of joint-life temporary annuity till age 45 of husband.
- No. 16.—Value of annuity for the whole life of a member (from Neison, Table II.).

Valuation Tables (Old Rules).

No. 1. Incumbent.—Widows' Pensions payable Half-yearly in advance till Marriage or Death.

		VALUE OF	El Annuity.		Ì	Ì	VALUE OF	£1 Annuity.	
Age last Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Age last Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£		£	£	£	£
20	8-097	9.620	10.646	11.933	56	8.816	10.147	10.963	11.906
21	8.275	9.850	10.911	12.243	57	8.726	10.014	10.799	11.705
22	8.447	10.072	11.168	12.542	58	8.611	9.852	10.605	11.470
23	8-611	10-283	11.410	12.822	59	8.473	9.664	10.381	11-204
24	8.756	10.470	11.624	13-067	60	8.317	9.455	10.138	10.918
25	8.876	10.624	11.801	13.270	61	8.146	9.228	9.877	10-614
26	8.976	10.754	11.949	13.440	62	7.963	8.990	9.603	10.297
27	9.063	10.867	12.077	13.585	63	7.772	8.745	9.323	9.975
28	9.143	10.968	12-191	13.714	64	7.578	8.498	9-041	9.653
29	9-226	11.073	12:309	13.845	65	7:381	8-248	8.759	9.332
30	9.320	11.190	12.438	13.987	66	7.181	7-997	8.475	9.011
31	9.420	11.312	12.573	14.134	67	6.978	7.745	8.192	8.691
3 2	9.522	11.435	12.706	14-277	68	6.773	7.491	7.908	8.372
33	9.622	11.552	12.831	14.409	69	6.565	7.236	7.625	8.056
34	9.714	11.656	12.941	14.522	70	6.356	6.982	7:343	7.742
35	9.973	11.743	13.030	14.609	71	6-146	6.729	7.063	7.431
36	9.858	11.810	13-094	14.667	72	6.936	6.477	6.786	7.125
37	9.907	11.855	13-133	14.694	73	5.726	6-227	6.513	6.824
38	9.937	11.877	13.144	14.690	74	5.517	5.980	6-243	6.529
39	9.947	11.869	13.124	14-648	75	5.320	5.737	5.978	6.241
40	9-933	11.833	13.070	14.568	76	5.104	5.496	5719	5.959
41	9.899	11.773	12.988	14.457	77	4.902	5.262	5.466	5.685
42	9.849	11.693	12.884	14.320	78	4.704	5.034	5-220	5.420
43	9.786	11.596	12.761	14.163	79	4.511	4.812	4.983	5.162
44	9711	11.485	12.623	13.988	80	4.322	4.599	4.753	4.916
45	9.626	11.362	12.472	13.799	81	4.139	4:391	4.531	4.681
46	9.535	11.232	12.314	13.603	82	3.961	4.191	4.317	4.453
47	9.442	11.101	12.155	13.406	83	3.788	3.997	4:111	4.234
48	9.351	10.972	11.997	13.212	84	3.620	3.809	3.913	4.024
49	9-271	10.855	11.853	13.033	85	3.457	3.629	3.722	3-822
50	9-205	10.755	11.728	12.875	86	3.300	3.455	3.540	3.629
51	9.147	10.664	11.611	12.727	87	3.150	3.290	3.366	3.447
52	9-091	10.574	11.497	12.580	88	3.006	3.133	3-202	3-274
53	9.026	10.474	11.372	12.420	89	2.871	2.985	8.047	3.112
54	8-958	10.368	11-239	12.253	90	2.743	2.846	2.901	2.959
55	8-891	10.263	11-107	12.086		1	I		1



No. 2. Incumbent.—Sons' Benefits.'

Value of Annuity Half-yearly in advance of £30 per Annum under Age 6, £50 per Annum above 6 and under 10, and £100 per Annum from 10 to 19, with a Donation of £300 at Age 19. If both Parents are dead, the Annuity increased to £50 per Annum under Age 6, and £80 per Annum from 6 to 10 Years of Age.

Age	8 жж. Скит.	6 PE	R CRNT.	5 PK	R CENT.	4 PER CENT.
last Birth- day.	Neison, Table XVII.	If Mother living.	If both Parents dead.	If Mother living.	If both Parents dead.	Neison, Table XVII.(a.)
	£	£	£	£	£	£
0	499.0	611.7	748-8	676.8	819-6	744-1
1	565.7	686.8	827.9	756.4	902.8	828-8
	608.3	730-2	867.1	800-0	941-6	872-9
2 3	643.9	763.4	893-1	831.7	965-1	903-2
4	677:8	793.0	913.6	858.7	982-2	927.8
5	711.7	821.0	931-1	883.2	995-3	949-3
	735-7	838-2	931-2	896-2	992.2	958-4
6 7	749.5	844.1	913.1	897.6	964.9	9 5 5- 3
8	763.5	849.7	892.6	898-2	941.3	950-8
9	778-4	855.6	870-3	898-8	913.5	945.5
10	767-6	8:	30.5	8	73·1	913.7
11	728.6	78	87-2	8	19-4	828.9
12	685.8	7	35-2	7	62·1	765-7
13	689-0	6	79· 3	7	01.2	724-2
14	588∙1	6	19·6	6	36·6	654.4
15	532 ·6	54	55.9	5	68-5	581.5
16	472.5	41	88.3	4:	96·7	505.3
17	407-4	4	16.3	4	21.0	425.7
18	336 ·8	33	8 9·6	3-	41·1	342-6

No. 3. Incumbent,—Daughters' Benefits.

Value of Annuity Half-yearly in advance £30 per Annum under Age 6, £50 per Annum above 6 and under 10, and £100 per Annum from 10 to 19, with a Donation of £300 at Age 19. If both Parents are dead, the Annuity increased to £50 per Annum under Age 6, and £80 per Annum from 6 to 10.

Age	_	6 PE	B CENT.	5 PM	R CENT.	
last Birth- day.	8 PER CENT. Neison, XX.	If Mother living.	If both Parents dead.	If Mother living.	If both Parents dead.	4 PER CENT. Neison, XX. (a).
	£	£	£	£	£	£
0	493-9	611.7	748.8	676.8	819.6	784.5
ĭ	559.6	686.8	827.9	756-4	902.8	817.7
2	601.4	730.2	867-1	800.0	941.6	860.7
2 3	636-2	763-4	893-1	831.7	965-1	890.0
4	669.4	793.0	913-6	858.7	982-2	913-9
	702.3	821.0	931.1	883-2	995.3	934.6
5 6 7	725.5	838-2	931-2	896.2	992-2	942.9
7	738-3	844-1	913-1	897.6	964-9	939.0
8	751.3	849.7	892.6	898-2	941.3	933.7
9	765·1	855.6	870.3	898-8	913.5	927·6
10	753·1	8	30.5	8	73-1	895-0
11	712-9	7	87-2	8	19•4	834.2
12	668-8	7	35-2	70	62·1	770-1
13	620-5	6	79-3	70	01· 2	702-6
14	569·6	6	19.6	6	36·6	633·8
15	517·2	5	55.9		68.5	564.7
16	462·3		88-3		96·7	494.4
17	403-0	4	16.3	4:	21-0	421.1
18	336.0	3	39.6	3-	41-1	341.7

No. 4. Contingent.—Reversionary Pensions to Wives of Living Members.

Value of £300 per Annum payable Half-yearly in advance till Marriage or Death (the Husband being assumed, on the average, 7 Years older than the Wife).

Age of Hueband last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Age of Husband last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£	l	£	£	£	£
20	478.8	644.1	813.0	1051.8	55	674.7	926.4	1078-2	1266.3
21	489.3	657.6	829-2	1068-9	56	677.6	940.8	1091.4	1276.2
22	4980	670.5	843.0	1085.1	57	702.6	957.0	1106.4	1288.5
23	506.1	684·6	858.0	1101.9	58	718.2	974.1	1121.7	1301-1
24	514-2	699.0	873.9	1119.6	59	734.7	992.4	1138-2	1314.6
25	522.9	714.0	890.7	1137.9	60	751.5	1009-2	1154-1	1326-9
26	531.3	729.0	907.5	1156-2	61	768.0	1026.3	1168-8	1338-0
27	539.7	744.0	923.7	1173.6	62	783.6	1041.6	1181.7	1347.3
28	548.4	758-7	939.6	1190.6	63	798.0	1055-1	1192.5	1353-6
29	556.8	772.8	954.9	1206.6	64	811.5	1067-1	1201-2	1357-8
30	565.2	786.3	969.6	1221.6	65	823.5	1076.4	1207.5	1359-0
31	573.3	799.5	983-1	1235-1	66	834-6	1084-2	1211.4	1358-1
32	581.1	811.8	995.7	1247.7	67	844.2	1089-9	1213.8	13548
33	588.6	823.2	1007-1	1258.5	68	852-9	1094-1	1214-1	1349.7
34	596.1	834.9	1019-1	1269-6	69	860-1	1096-2	1210-2	1341-9
35	604-2	846.6	1030.8	1281-9	70	865.5	1096.5	1206.0	1332-3
36	612.6	857·1	1042.2	1291.5	71	869.7	1094.7	1200.0	1320.3
37	621.3	869-1	1053.9	1301.7	72	872-1	1091-1	1191.6	1306.2
38	630-3	881-1	1065-3	1311-9	73	8.727	1085.4	1180.8	1289.7
39	639-0	891.9	1075.8	1320.9	74	870-9	1076.7	1167-6	1270-5
40	647.7	903-0	1085.7	1329.0	75	866.7	1065.3	1151.4	12483
41	654.6	911 1	1092-9	1334-1	76	859.8	1050-9	1132.2	1223·1
42	660.0	917.4	1097.7	1336.2	77	852.0	1035.9	1112-1	1197.6
43	663.6	920.7	1098-9	1334.7	78	841.2	1017.6	1089.0	1168.8
44	665·1	921.3	1097-1	1329-9	79	828.9	997:8	1064.7	11388
45	664-2	918.6	1092.0	1321.5	80	814.5	975.6	1038.0	1106.7
46	661-2	913.2	108 3 ·9	1309.8	81	798.9	952.5	1010-4	1074.3
47	652·2	906.8	1075-2	1289.7	82	780.6	926.7	980-4	1039-2
48	648 [.] 6	901.8	1067·1	1277:7	83	762-0	900.6	950.4	1004-4
49	644·1	895.5	1058·1	1264.5	84	740.7	872-1	917:7	967-2
50	642.6	892.8	1053.3	1255.8	85	718.5	845.7	894-4	929-7
51	643·8	893-1	1051.5	1250.7	86	695.4	812.7	850-8	891-9
52	647.4	89 6·7	1053-3	1249.2	87	671.4	782-1	816.9	852-0
53	654.3	903.9	1059.0	1252.2	88	645.0	749-1	780.3	814-2
54	663.6	914.1	1067-4	1258.2	89	619.2	717:3	742.5	776.1

No. 5. Contingent.—Reversionary Benefits to Sons of Living Members.

Value of the same Benefits as in Table No. 2, if the Father dies before the Son attains 19 (the Father being assumed, on the average, 35 Years older than the Son).

Son's Age last Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Son's Age last Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£		£	£	£	£
0	100-9	133-9	151.6	171.3	10	87.7	102.0	107:9	113.2
1	112.5	147.3	165.5	185.9	11	75.8	88·1	92.5	97.0
2	117:8	152.0	169.7	189-2	12	63.6	74.2	77.4	81.3
3	120.4	153-1	169.7	187.8	13	51.9	60.5	62.7	65.9
4	121-1	151.9	167-2	183.7	14	40.4	47.3	48.9	51.1
5	120-2	148.6	162.4	177-2	15	29.3	34.9	36.4	37.5
6 7	117.3	143.2	155.3	168.3	16	18.8	23.5	25.0	25.2
7	112.7	135.7	146.3	157.4	17	9·1	13· 3	14.5	14.6
8	106.3	126.4	135.4	144.6	18	2.2	4-2	4.8	4.8
9	97.9	115.1	122.5	129.8					

No. 6. Contingent.—Reversionary Benefits to Daughters of Living Members (not on the Subsidiary Fund).

Value of the same Benefits as in Table No. 3, if the Father dies before the Daughter attains 19 (the Father's Age being assumed, on the average, 35 Years older than the Daughter).

Age last Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Age last Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£		£	£	£	£
0	98.9	133.9	151-6	167-9	10	84.4	102.0	107-9	110-0
1	110-2	147:3	165.5	182.0	11	72.6	88-1	92.5	93.4
2	115.3	152-0	169.7	185-2	12	60.5	74-2	77.4	77:3
3	117.7	153-1	169.7	183.7	13	48.9	60.5	62.7	61.8
4	118.3	151-9	167-2	179.5	14	37.8	47.3	48·9	47.6
5	117.2	148.6	162.4	172.9	15	27.4	34.9	36.4	34.8
6	114-2	143-2	155-3	164-2	16	17.7	23.5	25.0	23.6
7	109.5	135.7	146.3	153.3	17	8.7	13.3	14.5	13∙8
8	103.0	126.4	135.4	140.5	18	2.2	4.2	4.8	4.6
9	94.6	115·1	122.5	125.9					

VALUATION (OLD RULES).

No. 7 (a). Reversionary Benefits to Daughters of Living Members, if on the Subsidiary Fund and under Age 19.

Value of the same Benefits as in No. 6, but in lieu of the Donation of £300 at Age 19, an Annuity of £100 till Marriage or Death, if the Father is then dead and the Daughter living unmarried.

	INCREAS	E OF VALUE OF CIVIL I		IN THE	TOTAL '	VALUES OF PER UNDER	NSIONS FOR DA AGE 19.	UGH TRRS
Age last Birthday.	8 per Cent. Grant, Table VI. —Table IX.	6 per Cent.	5 per Cent.	4 per Cent. Grant, Table VL(s) -Table IX.(s).	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent
	£	£	£	£	£	£	£	£
0-1	42.1	80.7	113.6	160-4	141.0	214.6	265-2	328.3
1-2	50.0	94-2	131.4	183-8	160-2	241.5	296.9	365.8
2	55.8	103.6	143.2	198.5	171-1	255.6	312-9	383.7
3	61-0	111.7	153.0	210-0	178.7	264.8	322.7	393.7
4	66.3	119-4	162·1	220.4	184.6	271.3	329-3	399-9
5	71.5	126.7	170.6	229-9	188.7	275.3	333-0	402.8
5 6 7	76.8	134.0	178-9	238.7	191.0	277.2	334-2	402-9
	82·1	141.2	186.8	247.1	191.6	276-9	333-1	400-4
8	87:4	148.3	194.6	254-9	190.4	274.7	330-0	395.4
9	92-9	155.4	202.3	262.5	187.5	270.5	324.8	388.4
10	98.5	162.4	209-9	269-8	182.9	264.4	317.8	379.8
11	104.2	169.5	217:3	276.6	176.8	257.6	309.8	370-0
12	109-9	176.5	224.5	283.4	170-4	250.7	301-9	360.7
13	115.7	183.4	231.5	289.9	164.6	243.9	294-2	351.7
14	122.0	191.4	239.8	297.6	159.8	238.7	288.7	345-2
15	129.8	201-6	250.8	308-2	157-2	236.5	287.2	343.0
16	139.7	214-9	265.4	323.3	157.4	238.4	290.4	346-9
17	152.6	232.7	285·3	344-2	161.3	246-0	299.8	3580
18-19	172-0	256-2	312.0	376.5	174-2	260.4	316.8	381.1

No. 7 (b). Ditto, if Daughters Age above 19.

Value of £100 a Year till Marriage or Death, after Father's death.

Age last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Age last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent
	£	£	£	£		£	£	£	£
19	191.3	279.8	339.4	410.8	42	604.8	790-2	896·1	1004-9
20	206.0	300.8	364.4	440.1	43	614.8	799·1	903.5	1009-9
21	221.8	323-1	390.6	468.7	44	623.5	806.3	908-9	1012.7
22	238.7	346.4	417.9	502.3	45	631.0	811.2	912.5	1013-5
23	256.3	370.5	445.9	534.3	46	637.5	815.6	914.8	1012-9
24	274.1	394.7	473.7	565·8	47	643.5	819.8	916.4	1011.7
25	292-0	418.5	500.8	596.3	48	649-2	823-0	917.6	1009-9
26	309.8	442.0	527.4	625.9	49	655-2	826.7	919-2	1008-7
27	327.8	465.8	553.7	654.9	50	661.7	830.4	921.7	1008.5
28	3460	489.2	579.8	691.6	51	668.3	834.7	924.1	1008-2
29	364.9	512.9	606.6	720.8	52	674.7	839.2	926-1	1007-5
30	384.8	538-2	634.5	742.7	53	680.3	842.6	927·1	1005.7
31	405.6	564.1	663.0	773.3	54	685.7	845.4	927:3	1002-9
32	426-9	590.5	691.7	804.0	55	691.8	848.7	928-2	1000.8
33	448.5	616-9	720.3	834.2	56	699.8	853.7	930-7	1000-2
34	469.9	642.7	747.9	863.0	57	709.4	860.2	934.5	1000-9
35	490-9	667.5	774.2	889·1	58	717.8	865-1	936.3	999-2
36	511-2	691.0	799-0	914-1	59	721.3	863.9	931.3	991-1
37	530.6	713.1	821.7	937.7	60	722.7	860-2	923-1	980-3
38	548·8	733.3	842-1	957.6	61	723.6	856.1	911.9	969-1
39	565.4	751.1	859.8	974.3	62	710-1	835.5	872.3	939-9
40	580.2	766.4	874.5	987-5	63	685.9	802.4	752.6	896.7
41	593.3	779.4	886.5	997:6	64	673.8	812-1	770.4	

No. 8 (a). Unmarried Members.—Value of Temporary Single Life Annuity till Age 36.

Age.	8 per Cent. Neison, XLIII.		5 per Cent.	4 per Cent.	Age	8 per Cent. Neison, XLIII.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£		£	£	£	£
20	8.233	9.417	10.020	10.592	29	5.057	5.421	5.590	5.726
21	7.975	9.064	9-618	10.135	30	4.524	4.808	4.937	5.035
22	7.706	8.702	9.203	9.662	31	3.937	4.148	4.242	4.310
23	7.418	8.322	8.772	9.181	32	3.293	3.437	3.501	3.542
24	7.106	7.916	8.316	8.674	33	2.585	2.673	2.711	2.731
25	6.765	7.483	7.834	8.142	34	1.806	1.858	1.867	1.873
26	6.396	7.021	7:323	7.586	35	·947	·960	·962	•964
27	5.989	6.525	6.781	6.998	36				
28	5.545	5.993	6.204	6.379					i ·
	l					<u> </u>			

No. 8 (b). Married Members.—Value of Temporary Joint Life Annuity till Age 36 of Husband.

Hus- band's Age.	8 per Cent. Grant, X.	6 per Cent.	5 per Cent.	4 per Cent. Grant, X. (a).	Hus- band's Age.	8 per Cent. Grant, X.	6 per Cent.	5 per Cent.	4 per Cent. Grant, X. (ø).
	£	£	£	£		£	£	£	£
20	8.000	8-972	9.535	10.156	29	4.959	5.258	5.420	5.591
21	7.753	8.649	9.163	9.729	30	4.446	4.680	4.805	4.936
22	7.492	8.312	8.779	9-290	31	3.880	4.052	4.144	4.239
23	7-217	7.960	8.381	8.839	32	3-253	3 371	3.432	3.496
24	6.916	7.583	7-958	8.364	33	2.560	2.637	2.667	2.705
25	6.590	7.183	7.512	7.867	34	1.795	1.828	1.845	1.863
26	6.210	6.756	7.040	7:347	35	•945	·95 4	959	•963
27	5.850	6.292	6.535	6.793	3 6	l		1	l
28	5.426	5.796	5.997	6.210					

No. 9. Incumbent.—Widows' Pensions.

Value of Life Annuity of £800 per Annum, payable Half-yearly in Advance till Marriage, and then reducible to one-half till Death.

		6 per Cent.	5 per Cent.	4 per Cent.	Age last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£		£	£	£	£
20	2954.4	3604.5	4052-4	4624.2	60	2496.6	2838.3	3042-9	3277.5
21	2976.3	3630.6	4080.6	4653.9	61	2444.1	2769-0	2963·1	3184.5
22	2997.0	3655.5	4107.0	4681.5	62	2388.9	2697-0	2880-6	3089-1
23	3016.8	3678.5	4131.3	4706.1	63	2330.1	2623.5	2796.6	2992.8
24	3033.3	3697.4	4150.8	4725.3	64	2273.4	2549.4	2712.3	2896-2
25 26	3046 -2 3056-1	3711·3 3721·4	4164·6 4173·6	4737·6 4744·5	65 66	2214.0	2474·5 2399·1	2627·4 2542·2	2799·6 2703·3
27	3063.6	37214 3728·9	4179.6	4747.8	67	2154·3 2093·4	2323.5	2542-2	2607.3
28	3069.9	3734.4	4183.2	4747.5	68	2031.9	2323.3	2372.4	2511-6
29	3077·1	3740.0	4187-1	4747.8	69	1969.2	2170.8	2287.5	24168
30	3084-9	3746.9	4192.2	4749.0	70	1906.8	2094.6	2202.9	2322.6
31	3094-2	3754.1	4197.9	4750.2	71	1843.8	2018.7	2118-9	2229.6
32	3102.9	3761.4	4202.4	4750.5	72	1780-8	1943-1	2035-8	2137.8
33	3111.3	3767.7	4205.4	4748.7	73	1717.8	1868-1	1953.6	2047-8
34	3118-2	3771-2	4205.7	4743.3	74	1655.4	1794.0	1872-6	1959.0
35	3123.0	3771.8	4202-1	4733.4	75	1593.0	1721-1	1793-1	1872-3
36	3126.6	3769.2	4194.3	4718-1	76	1531-2	1648.8	1715-1	1787:7
37	3124.2	3762-2	4181.7	4697.1	77	1470.6	1578.6	1639-2	1705.5
38	3120.0	3750.6	4164.3	4670.7	78	1411-2	1510-2	1565.7	1626.0
39	3114.0	3734.3	4141-2	4637.7	79	1353-3	1443.6	1494.3	1548-9
40	3102.3	3711.9	4112-1	4598.1	80	1296.6	1379.7	1425.6	1475.1
41	3084.6	3686.1	4077.9	4552.5	81	1241.4	1317-3	1359-3	1404.0
42 43	3066·3 3044·7	3657·0 3623·7	4039·2 3996·9	4501·8 4447·5	82 83	1188·0 1136·4	1257·3 1199·1	1295·1 1233·3	1335·9 1270·2
44	3021.0	3587.4	3953.1	4389.0	84	1085.4	1142.7	1173.6	1207.2
45	2994.6	3548.4	3904.5	4327.5	85	1037-1	1088-7	1116.3	1146.6
46	2967.0	3507.3	3852.0	4263.9	86	989.7	1036.5	1062.0	1089-0
47	2938-2	3465.0	3799.8	4198.8	87	944.7	987.0	1009-8	1034-1
48	2908.8	3422-1	3747.0	4133.1	88	9.018	939-9	960.3	982.2
49	2880.0	3380.1	3695-1	4068-9	89	861.3	895.5	914.1	933.6
50	2852.7	3339.6	3645.0	4006.5	90		853.8	870.3	888-0
51	2825.7	3299.4	3595.2	3944.4	91		814.2	828.6	844-2
52	2797.5	3258.3	3544.8	3881.4	92		775.8	788.7	802.8
53	2767:5	3214.7	3491.4	3815.4	93	j	738.3	749.4	761.4
54	2736.0	3169.2	3436-2	3747.9	94		699-9	709.2	720-0
55	2704.2	3122.9	3380.1	3679-2	95		657.9	666.0	675.0
56	2670.3	3074.4	3321.6	3608.1	96	• • •	609-0	615.3	622-2
57	2633.1	3022.5	3257.4	3533.4	97		545.7	550.2	555-6
58 59	2592.0	2965·5 2903·9	3190·2 3119·4	3452.7	98		454.8	457.5	460-2
28	2546·1	2903.9	3119.4	3367.2		1	l		

No. 10. Incumbent.—Sons' Benefits.

Value of Annuity Half-yearly in advance of £40 per Annum under Age 6, £60 per Annum from 6 to 10, and £125 per Annum from 10 to 21, with a Donation of £300 at Age 21.

If the Mother be dead, or have re-married, the Annuity increased to £50 per Annum under Age 6, and £70 per Annum from 6 to 10 years of Age.

Age	8 PER	CENT.	6 PER	CENT.	5 PER	CENT.	4 230	CENT.
last Birth- day.	If Mother living.	If both Parents are dead.	If Mother living.	If both Parents are dead.	If Mother living.	If both Parents are dead.	If Mother living.	If both Parents are dead.
	£	£	£	£	£	£	£	£
0	657.5	706-2	801.7	853.7	890.8	944.6	994.2	1049-9
1	742.4	791.9	898.8	951.5	994.4	1048-9	1105-2	1161.0
2	795·3	842.9	954.4	1004.8	1050.6	1102.5	1160.9	1214.3
3	138-9	883-2	996.6	1043.3	1091.1	1138.9	1198.7	1247.8
4	880.3	920.4	1034.2	1076-1	1125.8	1168-6	1229-2	1272.9
5	921-2	956-2	1069.8	1106-1	1157.4	1194.3	1255.6	1293-1
6	952.8	981.7	1094.6	1124.3	1177-2	1207.4	1269·2	1299-8
7	974.9	996.8	1108-2	1130.5	1185.2	1207.8	1270.5	1293.3
8	997:9	1001.8	11217	1135.7	1192.6	1206.7	1270.6	1284.8
9	1022.7	1027.5	11 3 5·8	1140.6	1200.1	1204.9	1270.5	1275.4
10	1014.7	1014.7	1116.5	1116.5	117 3 ·8	117 3 ·8	1236-2	1236.2
11	971.7	971.7	1061-2	1061.2	1111.2	1111.5	1165.9	1165.9
12	923.6	923.6	1001.4	1001.4	1044.8	1044.8	1091.5	1091.5
13	869.9	869.9	937·1	937.1	973:9	973.9	1013.2	1013.2
14	812-2	812-2	868.3	868-3	898· 7	898.7	932.0	931.0
15	749.8	749.8	795·0	795∙0	819.4	819.4	845.0	845.0
16	682-1	682-1	717-1	717-1	735.9	735.9	755.4	755.4
17	608.7	608.7	634.4	634.4	647.9	647.9	661.9	661.9
18	529-2	529-2	5 46 ·0	546-0	555·0	655.0	560·1	560-1
19	442.8	442.8	452.0	452.0	456.9	456.9	462.0	462-0
20	34 8·9	348.9	351.9	351.9	3 53 ·3	353.3	354.9	354.9

No. 11. Incumbent.—Daughters' Benefits.

Value of Annuities Half-yearly in advance of £40 per Annum under Age 6, £60 per Annum from 6 to 10, and £100 per Annum from 10 till Marriage or Death, with a Donation of £300 on Marriage. If the Mother be Dead, or have Remarried, the Annuity increased to £50 per Annum under Age 6, £70 per Annum from 6 to 10, and £125 per Annum from 10 till Marriage or Death.

	8 PER	Свит.	6 PER	Свит.	5 PER	CENT.	4 753	Свит.
	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.
	£	£	£	£	£	£	£	£
0	684.3	780.8	877-9	994.9	1011.0	1141.8	1181-4	1328.3
1	771.7	881.6	985-1	1118-2	1130.7	1279-3	1316.6	1483.4
2	825.1	944.4	1046.0	1190.4	1195.9	1356.4	1386.4	1566-2
3	868.3	996.2	1091.8	1245.8	1242.6	1413.4	1433.9	1624.6
4	908.4	1044.9	1132.1	1295.5	1282-3	1463.0	1472-2	1673.1
5	947.5	1092-9	1169-6	1342.5	1317.9	1508-3	1505-1	1715.9
6	976.4	1131.3	1195.4	1378.0	1341-1	1541.3	1524.6	1765-2
7	995·1	1159.8	1209.8	1402.3	1352-2	1562-1	1531-1	17613
8	1014-1	1189:3	1223.8	1426.5	1362.3	1582-1	1536-4	1776-0
9	1034.5	1221-0	1238.3	1451-6	1372.7	1602-6	1541.5	1790-6
10	1035.0	1225.4	1232.5	1448.8	1362.3	1594.7	1525.5	1776-3
11	1014.0	1200-2	1205.0	1415.9	1330.3	1556.7	1488-0	1732-0
12	991-2	1172.0	1175.6	1380-0	1296.5	1515.6	1448-3	1684.3
13	966.5	1140.9	1144.2	1341-1	1260.8	1471-4	1407.0	1633-7
14	943-1	1110.9	1115-1	1304.3	1227.9	1430.2	1369-4	1587-0
15	924.5	1086.5	1092.4	1274.9	1202.₽	1397.6	1341.0	1550-8
16	912-4	1070.0	1078-7	1256-2	1187.6	1377-3	1324-9	1528-9
17	909.3	1064.4	1076.5	1251-2	1186.3	1373-2	1324.6	1525-6
18	912.2	1067-5	1088-6	1263-6	1201.4	1388-6	1343.6	1544.9
19	932-2	1089-0	1109.4	1286.4	1226.6	1415.9	1374-1	1577-9
20	947.4	1106.0	1130.5	1309.5	1256.9	1448.5	1404.8	1610-9
21	962.4	1122.8	1151-1	1332.4	1281.7	1475.6	1434.8	1643.5
22	976.7	1139-1	1170.9	1354.4	1300.3	1496.7	1463-1	1674.4
23	990.2	1154.6	1189.5	1375.2	1322.5	1521.3	1489-6	1703.4
24	1002-0	1168-1	1205.8	1393.4	1341.9	1542.7	1512.7	1728.6
25	1012-0	1179.2	1219.5	1408.2	1358.1	1560.0	1532-1	1749.0
26	10120	1188-1	1231.2	1406.2	1371.8	1574.3	1548.4	1765.8
27	1020 4	1195.9	1241.3	1420-6	1383.8	1586.5	1562.2	1779.7
28	1034.6	1203.2	1250.4	1431.0	1394.4	1596.9	1574.6	1791.9
29	1041.9	1210.4	1260.2	1440.2	1405.8	1607.9	1587.6	1804·1
30	1050.5	1218.8	1271.4	14497	1418.7	1620.0	1602.1	1817:5
31	1060.0	1227.6	1283.7	1400'3	1432.5	1632.4	1617.5	1831·1
32	1070-1	1236.7	1296.3		1452.5	1644.7	1633.0	1844.4
33	10701	12307	1308.7	1482.6	1440.0	1655.9	1647.6	1856-3
34	1090-0	1253.3	1320.3	1493.0			1660.8	1866-2
35	1090-0	1259.7	1330.3	1502.2	1472.6	16655	1671.4	1872-9
36	1106.4	1264.9		1509-2	1483.1	1672.7		1876.6
37			1338.5	1514.1	1491.3	1677-2	1679.3	
	1112.7	1268.3	1344.8	1516.7	1497.1	1678.8	1684.0	1876-7
38	1117.4	1269.8	1348.9	1516-9	1500.2	1677.5	1685.7	1873-2
39	1120.3	1268-9	1350.3	1513.9	1500.5	1672.9	1683.6	1865-6
40	1121.2	1265.9	1349.0	1507.8	1497.5	1664.5	1677.8	1854.0
41	1120.4	1260.8	1345.6	1499-3	1491.6	1653.1	1668.7	1838-7
42	1118.0	1254-0	1340-2	1488-6	1483.6	1639.1	1657.1	1820-6
43	1114.5	1245.8	1333.1	1476.3	1473.6	1623-2	1643-2	1800-2
44	1109.8	1236.3	1324.5	1461.8	1461.9	1605.4	1627-3	1777-8
45	1104.2	1225.8	1314.6	1446.2	1448.8	1586.2	1609-9	1753.7
46	1097-9	1214.5	1303.8	1429.8	1434.9	1566.2	1591.5	1728-7
47	1091-2	1202.9	1292.8	1413.1	1420.6	1545.8	1572.7	1703.4
48	1084.3	1191-1	1281.6	1396.4	1406.0	1525.4	1553.8	1678:3

No. 11 (continued).

	8 PER	Свит.	6 PER	CENT.	5 PER	CENT.	4 PEB	CENT.
	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.	If Mother Living.	If both Parents Dead.
	£	£	£	£	£	£	£	£
49	1078-1	1180-2	1271.0	1380-6	1392.5	1506-2	1535-9	1654.4
50	1072.8	1170-6	1261.8	1366.4	1380-2	1488.7	1519.7	1632-6
51	1066-9	1161-4	1252.9	1352.8	1368-2	1471.6	1504.1	1611.6
52	1062.7	1152-1	1243.6	1339.0	1355.0	1454.7	1488.0	1590.4
53	1056.0	1141.7	1232.9	1323.9	1342-2	1436.3	1470.0	1567.5
54	1048-8	1130.7	1221-2	1307-9	1327· 3	1416-9	1451-1	1543.7
55	1331.8	1119.6	1209-2	1291.5	1312-1	1397.4	1431.6	1519.8
56	1033.5	1107:9	1195.9	1274.7	1295.3	1376.6	1410.3	1494.5
57	1023-4	1094.3	1180.4	1255.5	1276.3	1353.8	1386.6	1466.9
58	1010.8	1078:3	1162-1	1233.6	1254.0	1327.7	1359.5	1435.3
59	995.7	1060.0	1141.0	1208-9	1228.5	1298-6	1329.0	1401.4
60	978.7	1040.0	1117.5	1182.2	1200.7	1267.5	1296.2	1365-1
61	959-9	1018.3	1091.9	1153.6	1170-9	1234.6	1261-1	1326.8
62	939.3	995.2	1064.5	1423.8	1139-2	1200.2	1224.0	1287.1
63	917:4	971.5	1035.7	1092.9	1106·1	1165-2	1185.6	1246.8
64	894-6	947-2	1005· 3	1061-9	1082.3	1130-1	1146.7	1206.6
65	870-6	922.6	975.4	1031.0	1037-2	1094.6	1106.6	1166.4
66	844.5	897.6	942.4	999.6	1000.0	1059-2	1064-4	1126-2
67	815.9	872-2	906.7	968-1	960-1	1023-8	1019.4	1086-2
68	782·6	846.5	866.1	936.3	915.4	988.4	969.5	1046.4
69	742-1	820.7	817.4	904.5	862.5	953.1	911.5	1006.8
70	687.5	794.5	754.8	872.7	724.5	917.8	837.7	967.6
71	629.8	692.8	689.6	758.6	723.8	796.3	761-6	837.9

No. 12. Contingent.—Reversionary Pensions to Wives of Living Members.

Value of Life Annuity £300 per Annum, payable Half-yearly in advance till Marriage, and then reducible to One-half till Death (the Husband being assumed on an average 7 Years older than the Wife).

Age of Husband last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Age of Husband last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	l _{&}	£	£	£		£	l e	£	£
20	478.8	758·1	961·5	1247.4	55	674·7	942:3	1096.8	1287.9
21	489.3	771.3	975.9	1261.8	56	687.6	955-2	1107.3	1295.4
22	498.0	782.4	987.6	1273.2	57	702.6	969.9	1120-2	1305.0
23	506.1	793.5	997.8	1283.4	58	718·2	984.9	1133.1	1314.9
24	514.2	803.7	1008.6	1293.3	59	734.7	1001.4	1147.5	1325.7
25	522.9	814.2	1019.4	1303.8	60	751.5	1016.4	1161.0	1335.9
26	531.3	824.7	1013 4	1313.4	61	768.0	1032.0	1173.9	1344-9
27	539.7	834.6	1029 3	1323.0	62	783·6	1045.5	11850	1351-8
28	548.4	844.8	1050.6	1332.0	63	798.0	10433	1194-0	1356.9
29	556.8	855.0	1060.5	1340.7	64	811.5	1068-3	1201.5	13596
30	565.2	864·3	1068.3	1348.5	65	823.5	1077-0	1206.9	1359-9
31	573.3	873.3	1076.7	1355-1	66	834.6	1084.5	1210.5	1358.4
32	581.1	882.0	1084.5	1361.4	67	844.2	1090-2	1212.3	1355-1
33	588.6	889.2	1091.1	1365.6	68	852.9	1094-1	1212.3	1349-7
34	596.1	897.3	1098.0	1370.7	69	860-1	1096-2	1210-2	1341.9
35	604-2	905.7	1105.5	1375.8	70	865.5	1096.2	1206-0	1332-3
36	612.6	914-1	1112.4	1380.6	71 T	869.7	1094.7	1199.7	1320.3
37	621.3	922.5	1119.9	1385.4	72	872-1	1091-1	1191.6	1306-2
38	630.3	931-2	1127-1	1390.5	73	872.7	1085.4	1180.8	1289-7
39	639-0	939.3	1133-7	1394.4	74	870.9	1076-7	1167.6	1270.5
40	647.7	947.7	1140.3	1398.0	75	866.7	1065:3	1151.4	1248.3
41	654.6	953-1	1144.2	1398-6	76	859-8	1050.9	1131-9	1223.1
42	660.0	956.7	1145.7	1396.5	77	852.0	1035-9	1112-1	1197-6
43	663-6	957.6	1143.9	1391-1	78	841.2	1007-6	1089.0	1168-8
44	665-1	955.8	1139.4	1382-7	79	828-9	997.8	1064-4	1138-8
45	664-2	951.3	1131.6	1370.7	80	814.5	975.6	1037.7	1106.7
46	661.2	943.8	1121-1	1355.7	81	798.9	952.5	1010-4	1074-3
47	652-2	936.0	1110.0	1332.0	82	780-6	926.7	980-1	1038-9
48	648.6	928.8	1099.5	1317.0	83	762.0	900.6	950-1	1004.4
49	644-1	921.0	1088-4	1301-1	84	740.7	872-1	917.4	967-2
50	642.6	916.8	1081.5	1290.0	85	718.5	845.7	894.4	929.4
51	643.8	915-6	1077-9	1282.2	86	695.4	812.7	850.5	891.6
52	647.4	917.7	1077-6	1278-6	87	671.4	782.1	816-6	854-1
53	654.3	923.7	1081.5	1279-2	88	645.0	749-1	780-3	814.2
54	663.6	932-1	1088-1	1282.5	89	619-2	717.3	745.5	776-1
		<u> </u>							

No. 13. Contingent.—Reversionary Benefits to Sons of Living Members.

Value of the same Benefits as in No. 10, if the Father Dies before the Son attains Age 21 (the Father being assumed, on an average, 35 years older than the Son).

Son's Age last Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Son's Age last Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent
	£	£	£	£		£	£	£	£
0	142.6	181.7	207.2	237.0	11	119.6	134.3	142.4	151.2
1	157-7	206.6	227.0	257.9	12	105-1	116.8	123.2	130.0
2	165.6	207.7	233.6	263.5	13	90.5	99.4	104.3	109.4
3	169.8	210.1	234.7	262.8	14	76-0	82.6	86.1	89.7
4	171.8	2097	232.5	258.5	15	62-0	66·5	69-0	71.4
5	171.4	206.6	227.5	251.1	16	48.6	51.6	53.2	54.6
6	168-8	200.7	219.5	240.6	17	36-2	37.9	38.8	39.5
6 7	163.8	192.3	208.9	227.4	18	24.6	25.4	25.8	26.1
8	156.4	181.3	195.7	211.6	19	14.0	14.3	14.4	14.4
9	146.3	167.7	179-9	193.3	20	4.5	4.5	4.5	4.5
10	133.7	151.6	161.7	172.7			l	1	

No. 14. Contingent.—Reversionary Benefits to Daughters of Living Members.

Value of the same Benefits as in No. 11, if the Father dies before the Daughter's Death or Marriage (the Father being assumed, on the average, 35 Years older than the Daughter).

Daughter's Age last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Daughter's Age last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£		£	£	£	£
0	167·1	243.9	302.0	382.6	32	501.4	673.8	793-2	945.3
1	188.9	273.5	337:3	425.6	33	527.2	704.4	826.6	981.5
2	201.0	288.7	354.5	445.5	34	552·9	734.6	859-2	1016.5
3	209.3	298-2	369.4	456.7	35	578.3	763.9	890-5	1049-6
4	215.6	304.8	371.6	463.5	36	603.0	792.0	920.0	1080-4
5	219-9	309.0	375.4	466.8	37	626.9	818.6	947.6	1108.7
6	222.4	310.7	376.6	467-1	38	649.7	843.2	972.9	1134.0
7	223.1	310.3	375.3	464.6	39	670.8	865· 3	995-2	1155.7
8	222.1	308·1	372 ·0	459.5	40	689.9	884.8	1014-1	1173.4
9	219.4	304.0	3 66·8	452.3	41	607.2	901.8	10 30 ·1	1187.5
10	214.9	298.0	3 59 -7	443.8	42	722.7	916.4	1043.4	1198.5
11	209.5	291·1	3 51⋅8	434.3	43	736.6	928.8	1054.2	1206.7
12	204.0	284.1	343·8	424.8	44	749.0	939-2	1062-7	1212-3
13	198.5	277:3	336.0	415.7	45	760.0	947:7	1069.0	1215.4
14	194.3	272.4	330 ·6	409.4	46	769 ·8	954.8	1073.7	1216.8
15	192.6	271.1	329.4	408.3	47	778.6	960-9	1077:4	1217.0
16	194.5	274.4	333 ·9	414.1	48	786·8	966•2	1080-2	1216.4
17	200.6	283.7	345.4	428-4	49	795·1	971.7	1083.2	1216.2
18	212-1	300-2	365.5	453.0	50	803.8	977:8	1087.0	1216.8
19	227.4	321.8	391.6	484.6	51	812-4	98 3 ·7	1090.5	1217-2
20	244-2	345·1	419.5	518.4	52	820.5	98 9·1	1093.5	1216.9
21	262.4	37 0·0	448-9	553.8	53	827.5	993.3	1095 ·3	1215.0
22	281.7	396·2	479.6	590∙3	54	833.6	996·6	1095.9	1212.0
23	302-0	423-2	511.2	627.5	55	842.5	1000.7	1097:3	1209.7
24	322.6	450.4	542.7	664.3	56	854.3	1007-0	1100.6	1209-4
25	343.3	477:3	573.5	699.8	57	866.7	1015.4	1105.6	1210-8
26	364.0	503.9	603.7	734.4	58	877.9	1021.9	1108-2	1209.7
27	384.8	530.9	633.7	768-4	59	883.0	1021.3	1104.0	1200-3
28	406-1	557.5	663.7	811.6	60	885.7	1017.8	1097:2	1187.8
29	428.3	584·5	694.5	846.0	61	887.5	101 3 ·6	1089· 3	1174.8
30	451.7	613.4	72 6·5	872-1	62	871.5	989-4	1060-9	1139.4
31	476-2	643.3	759.6	908.6	63	842.0	949.6	1019.8	1086-7
	<u> </u>	<u> </u>							

Valuation Tables (New Rules).

No. 15 (a). Unmarried Members on Service.—Value of Temporary Single Life Annuity till Age 45.

1 1		6 per Cent.	5 per Cent.	4 per Cent.	Birth- day.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£		£	£	£	£
20	9.716	11.370	12.384	13.556	33	7:083	7:775	8.164	8.583
21	9.576	11.162	12.130	13-243	34	6.744	7:356	7.698	8-065
22	9.436	10.955	11.876	12.931	35	6.374	6.907	7.201	7.517
23	9.293	10.744	11.618	12.616	36	5.969	6.424	6.673	6-940
24	9.140	10.522	11.349	12-288	37	5.525	5.904	6.111	6.330
25	8-977	10.288	11.067	11.947	38	5.039	5:345	5.211	5.686
26	8.802	10.040	10.771	11.593	39	4.506	4.745	4.872	5-057
27	8.612	9.776	10.459	11-222	40	3.922	4-097	4.190	4-287
28	8.407	9.494	10.129	10.833	41	3-281	3.400	3.462	3.527
29	8.183	9.193	9.777	10.425	42	2.578	2.649	2.686	2.724
30	7.942	8.873	9.409	9-987	43	1.803	1.836	1.854	1.872
31	7.679	8.531	9.017	9.550	44	•947	•956	·961	-966
32	7.393	8.165	8.602	9.079				ļ	1

No. 15 (b). Married Members on Service.—Value of Joint Life Temporary Annuity till Age 45 of Husband.

Husband's Age last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Husband's Age last Birthday.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
	£	£	£	£		£	£	£	£
20	9.114	10.586	11.484	12.505	33	6.671	7:301	7.655	8.038
21	8.978	10.390	11.247	12-228	34	6.363	6.923	7-235	7.571
22	8.841	10.194	11-011	11-940	35	6-027	6.517	6.791	7.077
23	8.704	9.998	10.774	11.654	36	5.660	6.081	6:311	6.556
24	8.557	9.790	10.525	11.355	37	5 -257	5.609	5.801	6.002
25	8.404	9.575	10.268	11.048	38	4.814	5.100	5.255	5.418
26	8-243	9 ·3 51	10.002	10·73 3	39	4.325	4.550	4.670	4.796
27	8.067	9.111	9.720	10.400	40	3.785	3 ·951	4-039	4.131
28	7.880	8.857	9.425	10-055	41	3.185	3-298	3.358	3.420
29	7.675	8.585	9.110	9.690	42	2.518	2.587	2.623	2.660
30	7.457	8-299	8.781	9.311	43	1.773	1.806	1.823	1.841
31	7:219	7.990	8.430	8.910	44	·9 3 9	·948	•952	·957
32	6.957	7.658	8-054	8.484	ł		l		

No. 16.—Value of Annuity for the Whole Life of a Member (from Neison, Table II.).

Age.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.	Age.	8 per Cent.	6 per Cent.	5 per Cent.	4 per Cent.
		£	£	£		£			£
20	10.103	12.503	14.138	16-201	61	6.781	7.692	8-231	8.838
21	10.042	12:411	14.022	16-049	62	6.590	7.450	7.957	8.525
22	9.989	12.331	13.919	15.913	63	6.396	7-207	7.682	8.214
23	9.942	12-257	13.824	15.787	64	6-200	6.963	7.407	7.903
24	9.895	12:184	13.728	15.659	65	6.001	6.717	7.132	7.595
25	9.849	12:111	13.633	15.532	66	5.801	6.471	6.857	7-288
26	9.803	12.038	13.538	15.407	67	5.597	6.223	6.582	6.981
27	9.755	11.963	13.440	15 277	68	5.392	5.975	6.308	6.677
28	9.706	11.884	13.340	15.143	69	5.186	5.728	6.036	6.376
29	9.654	11.804	13.236	15.007	70	4.979	5.481	5.766	6.079
30	9.602	11.723	13.132	14.871	71	4.773	5.237	5.498	5.787
30 31	9.548	11.640	13.026	14.731	72	4.773	4.994	5.236	5.499
32	9.492	11.554	12.916	14.588	73	4.361	4.755	4.977	5.218
32 33	9.492	11.468	12.806	14.988		4.159		4.724	4·943
	9.378	11.380	12.693		74		4·521 4·292	4.477	4.677
34 35	9.317	11.287		14.298	75	3.960		4.238	
	9.255		12.577	14.148	76	3.766	4.070	4.008	4·420 4·173
36		11.193	12.457	13.994	77	3.577	3.854		
37	9.189	11.094	12.333	13.836	78	3.393	3.646	3.786	3.936
38	9.120	10.993	12-207	13.674	79	3.215	3.446	3.573	3.708
39	9.052	10.891	12.080	13.512	80	3.043	3-258	3.368	3.490
40	8-980	10.785	11.949	13.347	81	2.877	3-067	3.171	3.282
41	8.912	10.684	11.823	13.187	82	2.716	2.888	2.982	3.082
42	8.848	10.588	11.701	13.032	83	2.560	2.716	2.801	2.890
43	8.788	10.495	11.584	12.881	84	2.410	2.551	2.627	2.708
44	8.732	10.408	11.473	12.737	85	2.266	2.393	2.461	2.533
45	8.681	10.325	11.366	12.598	86	2.127	2.241	2.302	2.366
46	8.635	10.247	11-264	12.464	87	1-994	2.095	2.149	2.206
47	8.585	10.164	11.157	12.324	88	1.862	1.952	2.000	2.050
48	8.530	10.074	11.041	12-173	89	1.730	1.809	1.851	1.895
49	8.467	9.974	10.913	12.010	90	1.592	1.660	1.695	1.733
50	8.394	9.861	10.771	11.832	91	1.438	1.495	1.525	1.556
51	8.308	9.732	10.613	11.634	92	1.254	1.299	1.323	1.348
52	8-207	9.585	10.434	11.415	93	1.056	1.090	1.109	1.127
53	8.091	9.421	10.237	11.177	94	·857	·88 2	∙895	-909
54	7.962	9-242	10.024	10.921	95	·665	.683	•693	.702
55	7.821	9.049	9.796	10.651	96	·490	.502	·508	·5]4
56	7.667	8 843	9.553	10.367	97	·339	•347	· 3 51	.355
57	7.504	8.627	9.302	10.073	98	-210	-214	·217	·219
58	7.333	8.402	9.042	9.770	99	·102	·104	·105	·106
59	7.154	8.170	8.776	9.462		1			
60	6.970	7.933	8.505	9.151	l	I			

INDEX TO APPENDIX V.

PRELIMINARY TABLES FOR VALUATION.

In order to distinguish the New Tables from those in the Reports of Mr. Neison and Mr. Grant, they are referred to by numerals in a different type; and if similar Tables at 8 and 4 per Cent. are to be found in those Reports they are quoted under the proper heading. The same number is given to the similar Tables at 8, 6, 5, and 4 per Cent., so that they may be smore readily turned to and compared.

		,	8 per Cent.			5 per Cent.		4 per Cent.
				In	this A	ppend	ix.	
No. 1. Old	Rules	-Widows-Annuity till marriage or death,		Page	Page	Page	Page	
11 010	2003	Dand N Columns (from Neison, Table V.)	Neison, VIII.		16	47		Neison, VIII.(a).
No. 2.	n	Ditto—Value of annuity, payable half- yearly in advance till marriage or death	Grant, I.	1	17	48	78	Grant, I.(a).
No. 3.	"	Widows and Children — Value of life annuity (mortality only), D and N Columns (from Neison, Table VI.)	Neison, XIV.		18	49		Neison, XIV.(a).
No. 4.	"	Ditto—Value of life annuity, payable half-yearly in advance (from Neison, Tables VI. and XIV.)		2	19	50	79	
No. 5.	"	Sons and Daughters—Values of temporary		1		.,		Wainen WWI
Y. C		annuity till age 6, 10, and 19	Neison, XVI	· · ·	20	51		Neison, XVI.(a).
No. 6. No. 7.	"	Ditto—Value of £300 at age 19	Neison, XV.		20	51		Neison, $XV_{\cdot(a)}$.
No. 7.	"	Ditto—Value of increase of pension, £20 till age 6, and £30 from 6 till 10, after mother's death			21	52		
No. 8.	"	Ditto—Value of total benefits if mother is living	Neison, XVII.		22	53		Neison, $XVII_{\cdot(a)}$., $XX_{\cdot(a)}$.
No. 9.	"	Ditto—Value of total benefits if both parents are dead			22	53		
No. 10.	"	Husband and Wife—D and N Columns and joint life annuity (from Neison, Tables II. and III.)	Neison, X.		23	54		Neison, X.(a). ,, XI.(a).
No. 11.	"	Wives' Reversionary Benefits—Value of annuity after husband's death to wife, till remarriage or death	Neison, XI. "XII.		25	56	80	
No. 12.	"	Sons' and Daughters' Benefits—Value of reversionary benefits till age 19, after father's death	Neison, XXI. to XXIV.		26	57	82	
No. 13.	"	Daughters only—Ditto till marriage or death before age 19	Neison, XXV. to XXVII.		••		82	
No. 14.	n	Daughters on Subsidiary Fund under age 19—Value of increased benefits over donation at age 19, after father's death	Grant, IX. and VI.		27	58		Grant, IX.(a) and VI.(a).
No. 15.	"	Ditto above age 19—Value of survivorship annuity after father's death	Grant, V.		28	59		Grant, V.(a).

INDEX TO APPENDIX V.

			8 per Cent.	,	6 per Cent	5 per Cent.		4 per Cent.
				Ir	this A	ppend	ix.	
No 16	New Rules -	-Widows' Pensions-Value of life annuity		Page	Page	Page	Page	1
10.	21011 212300.	payable half-yearly in advance, but reducible to one-half on remarriage		3	29	60	83	
No. 17.	**	Sons' Benefits—Value of temporary annuity till age 6, 10, and 21		4	30	61	84	
No. 18.	"	Ditto-Value of £300 at age 21		4	30	61	84	
No. 19.	,,	Ditto-Value of £10 annuity till age 10		5	31	62	85	
No. 20.	"	Ditto-Value of total benefits if both parents are dead or mother remarried		5	31	62	85	
Vo. 21.	"	Ditto—Value of total benefits if mother living and not remarried		6	32	63	86	
No. 22.	37	Daughters' Benefits—Value of temporary annuity till age 6 and 10 (same as No. 17)		6		63		
To. 23 .	"	Ditto—Value of £300 donation on marriage	Grant, XVII.		33	64	87	
0. 24.	"	Ditto—Value of increased pension, £10 till age 10, and £25 from age 10 till marriage or death after mother's mar-	Í			•		
		riage or death		7	34	65	88	
o. 25.	>>	Ditto—Value of total benefits if mother living and not remarried	••	9	35	66	89	
o. 26.	27	Ditto—Value of total benefits if both parents are dead or mother remarried		11	37	6 8	91	
o. 27.	"	Wives' Reversionary Benefits—Value of reversionary annuity (by No. 16) to wife after husband's death	Neison, XI.		3 8	69	92	
o. 28.	"	Sons' Reversionary Benefits—Value of reversionary benefits (by No. 21) to sons after father's death	.,	12	40	71	94	
o. 29.	••	Daughters' Reversionary Benefits— Value of reversionary benefits (by No. 25) to daughters after father's death		13	41	72	95	
o. 3 0.	"	Husband and Wife—Value of joint life annuity to end of 16th and 25th years of service	Grant, X. and XII.		43	74		Grant, X.,a and XII.,a
o. 3 1.	"	Member's Single Life—Value of annuity to end of 16th and 25th years of service	Neison,XLIII. & Grant,XIV.		44	75		Neison, XLIII & Grant, XIV
o. 32.	"	Ditto-Value of life annuity (from Neison, Table II.)	Neison, IX.	15	45	76	97	Neison, IX-

No. 2.—Old Rules. Widows. Value of Annuity, payable Half-yearly, in advance, till Marriage or Death.

Ago m.	Value of Annuity $a_m + .750$.	Age m.	Value of Annuity $a_m + \cdot 750$.	Ago m + t.	Value of Annuity, half- yearly, in advance.	Age m + t.	Value of Annuity, half yearly, in advance.
0	8.660	46	9.581	0-1	9.209	46-4 7	9.535
ĭ	9.757	47	9.488	1 1 <u>-2</u>	9.938	47-48	9.442
2	10.117	48	9.396	2–3	10.170	48-49	9.351
3	10.221	49	9.306	3-4	10.226	49-50	9.271
4	10.230	50	9.235	4-5	10.202	50-51	9.205
5	10.173	51	9.174	5-6	10.123	51-52	9.147
6	10.072	52	9.129	6–7	10.003	52-53	9-091
7	9.934	53	9.062	7-8	9.848	535 4	9.026
8	9.762	54	8-990	8-9	9.666	54-55	8.958
9	9.571	55	8.926	9–10	9.464	55-56	8-891
10	9.357	56	8.856	10-11	9.238	56-57	8.816
îĭ	9.119	57	8.776	11-12	8.987	57-58	8.726
12	8.854	58	8.676	12-13	8.708	58-59	8-611
13	8-561	59	8.546	13-14	8.401	59-60	8.473
14	8.240	60	8.399	14-15	8.106	6061	8.317
15	7.972	61	8.235	15-16	7.867	61-62	8.146
16	7.763	62	8.057	16–17	7.709	6263	7.963
17	7.655	63	7.868	17-18	7.659	63 -64	7.772
18	7.662	64	7.676	18-19	7.748	64–6 5	7.578
19	7.832	65	7.480	19-20	7.920	65-66	7.381
20	8.009	66	7.282	20-21	8.098	66-67	7.181
21	8.187	67	7.080	21-22	8.275	67–68	6.978
22	8.362	68	6.876	22-23	8.447	68-69	6.773
23	8.531	69	6-669	23-2 4	8.611	69-70	6.565
24	8.690	70	6.461	24-25	8.756	70-71	6.356
25	8.821	71	6.251	25-26	8.876	71-72	6.146
26	8.930	72	6.041	26-27	8.976	72-73	5.936
27	9.022	73	5.831	27-28	9.063	73-74	5.726
28	9·10 4	74	5.621	28-29	9.143	74-75	5.517
29	9.181	75	5.412	29-30	9.227	75-76	5.309
30	9.270	76	5.206	30-31	9.320	76–77	5.104
31	9.369	77	5.002	31–32	9.420	77-78	4.902
32	9.471	78	4.802	32–33	9.522	78–79	4.704
33	9.573	79	4.606	33-34	9.622	79-80	4.511
34	9.671	80	4.415	84–35	9.714	8081	4.322
35	9.757	81	4.229	35–36	9.793	81–82	4.139
36	9.829	82	4.049	36-37	9.858	82-83	3.961
37	9.887	83	3.873	37-38	9.907	83–84	3.788
38	9.927	84	3.702	38–39	9.938	84-85	3.614
39	9.948	85	3.536	39-40	9.947	85-86	3.457
40	9.945	86	3.377	40-41	9.933	86-87	3.300
41	9.920	87	3.223	41-42	9.899	87–88	3.150
42	9.877	88	3.076	42-43	9.849	88-89	3.006
43	9.820	89	2.936	43-44	9.786	89-90	2.871
44	9.751	90	2.805	44-45	9.711		1
45	9-670			45-46	9.626		

8 PER CENT.

No. 4.—O'd Rules. Widows and Children. Value of Life Annuity, payable Half-yearly, in Advance. (From Neison, Tables VI. and XIV.)

0 1 2 3	·94180			$\begin{array}{c} \text{mean Age} \\ m+t. \end{array}$	Age m.	$\log \left(\frac{Nm}{Dm}\right)$	Annuity $= a_m$.	a = + .750.	mean Age m + i.
2		8.746	9.496	10.148	50	-96008	9.121	9.871	9-812
	00278	10.053	10.800	11.065	51	•95433	9.002	9.752	9.689
	.02466	10.583	11.333	11.457	52	94822	8.876	9-626	9.560
	.03467	10.831	11.581	11.657	53	-94169	8.743	9.493	9.424
4	·04079	10.984	11.734	11.781	54	.93476	8.605	9.355	9.283
5	·01141	11.078	11.828	11.857	55	.92742	8.461	9.211	9.136
6	-04663	11.135	11.885	11.900	56	-91969	8.311	9.061	8.985
7	-04783	11.165	11.915	11.918	57	-91159	8.158	8.908	8-829
8	-04808	11.171	11.921	11.922	58	-90308	8.000	8.750	8-668
9	-04816	11.173	11.923	11.922	59	-89406	7.835	8.585	8.500
10	·04800	11.170	11.920	11.915	60	88456	7.665	8.415	8-327
11	·04761	11.159	11.909	11.898	61	·87445	7.489	8.239	8-148
12	-04682	11.138	11.888	11.874	62	-86371	7.306	8-051	7.962
13	-04569	11.110	11.860	11.843	63	-85238	7.118	7.868	7-762
14	-04433	11.075	11.825	11.806	64	-84049	6.926	7.676	7.578
15	-04281	11.036	11.786	11.767	65	-82802	6.730	7.480	7.381
16	-04127	10.997	11.747	11.729	66	-81501	6.532	7.282	7.181
17	∙03982	10.960	11.710	11.693	67	-80139	6.329	7.079	6.977
18	03846	10.926	11.676	11.660	68	·78716	6.125	6.875	6.772
19	-03716	10.894	11.644	11.628	69	.77226	5.919	6-669	6.565
20	-03591	10.862	11.612	11.597	70	.75671	5.711	6.461	6.356
21	•03466	10.831	11.581	11.565	1 71	·74046	5.501	6.251	6.146
22	.03337	10.799	11.549	11.533	72	•72355	5.291	6-041	5.936
23	·03206	10.766	11.516	11.500	73	·70592	5.080	5.830	5.726
24	03071	10.733	11.483	11.466	74	⋅68765	4.871	5.621	5.517
25	·02934	10-699	11.449	11.432	75	•66863	4.662	5.412	5.309
26	.02792	10.664	11.414	11.397	76	·64898	4.456	5.206	5.104
27	02648	10.629	11.379	11.361	77	-62862	4.252	5.002	4.902
28	·02 1 99	10.592	11.342	11.324	78	⋅60772	4.052	4.802	4.704
29	02345	10.555	11.305	11.286	79	•58616	3.856	4.606	4.511
30	-02186	10.516	11.266	11.247	80	.56412	3 .665	4.415	4.322
31	02021	10.478	11.228	11.207	81	-54147	3.479	4.229	4.139
32	·01848	10.435	11.185	11.164	82	•51832	8.298	4.048	3.960
33	·01669	10.392	11.142	11.120	83	· 494 53	3.122	3.872	3.787
34	·01480	10.347	11.097	11.073	84	·47018	2.952	3.702	3.619
35	.01281	10.299	11.049	11.027	85	·44506	2.786	3.536	3.456
36	.01172	10.274	11.024	10.986	86	·41941	2.626	3.376	3.299
37	·00848	10.197	10.947	10.920	87	•39316	2.472	3.222	3.149
38	•00611	10.142	10.892	10.862	88	·36661	2.326	3.076	3.006
39	00355	10.082	10.832	10.812	89	·33973	2.186	2.936	2.871
40	•00081	10.042	10.792	10.747	90	-31281	2.055	2.805	2.743
41	-99788	9.951	10.701	10.665	91	-28568	1.930	2.680	2.621
42	•99472	9.879	10.629	10.591	92	-25810	1.812	2.562	2.504
43	•99134	9.803	10.553	10.512	93	-22924	1.695	2.445	2.387
44	.98771	9.721	10.471	10.428	94	19830	1.578	2.328	2.268
45	•98382	9.634	10.384	10.338	95	16365	1.457	2.207	2.139
46	97968	9.542	10.292	10.244	86	·12112	1.322	2.072	1.988
47	97525	9.446	10.196	10.145	97	-06211	1.154	1.904	1.789
48 49	.97052 .96547	9·343 9·236	10.093 9.986	10.040 9.929	98 99	T·96547 T·75918	·9235 ·5743	1.6735 1.3243	1.499

8 PER CENT.

No. 16.—New Rules. Widows. Value of Annuity till Death, payable Half-yearly, in Advance, but Reduced to One-half on Re-marriage.

Age.	(i) Value of Half Annulty till Marriage or Death, at Age m + 1.	(2) Value of Half Annuity till Death, at Age m + 1.	(3) Sum of Col. (1) and (2).	Age.	Value of Half Annuity till Marriage or Death, at Age m + 1.	(2) Value of Half Annuity till Death, at Age m + ½.	(3) Sum of Col. (1) and (2)
15		••		53	4.513	4.712	9.225
16				54	4.479	4.641	9.120
17		• •	· i	55	4.446	4.568	9.014
18				56	4.408	4.493	8.901
19	3.960	5.814	9.774	57	4.863	4.414	8.777
20	4.049	5.799	9.848	58	4.396	4.334	8.640
21	4.139	5.783	9.921	59	4.237	4.250	8.487
22	3.224	5.766	9.990	60	4.158	4.164	8.322
23	4.306	5.750	10.056	61	4.073	4.074	8.147
24	4.378	5.733	10.111	62	3.982	3.981	7.963
25	4.438	5.716	10.154	63	3.886	3.881	7.767
26	4.488	5.699	10.187	64	3.789	3.789	7.578
27	4.532	5·680	10.212	65	3.690	3.690	7.380
28	4.571	5.662	10.233	66	3.591	3.590	7 181
29	4.614	5·643	10.257	67	3.489	3.489	6.978
30	4.660	5.623	10.283	68	3.387	3.386	6.773
31	4.710	5·604	10.314	69	3.282	3.282	6.564
32	4.761	5.582	10.343	70	3.178	3.178	6.356
33	4.811	5.560	10.371	71	3.073	3.073	6.146
34	4-857	5.537	10.394	72	2.968	2.968	5.936
35	4.896	5.514	10.410	73	2.863	2.863	5.726
36	4.929	5.493	10.422	74	2.759	2.759	5.518
37	4.954	5.460	10.414	75	2.655	2.655	5.310
38	4.969	5.431	10.400	76	2.552	2.552	5.104
39	4.974	5.406	10.380	77	2.451	2.451	4.902
40	4.967	5.374	10-341	78	2.352	2.352	4.704
41	4.949	5.333	10.282	79	2.256	2.255	4.511
42	4.925	5.296	10.221	80	2.161	2.161	4.322
43	4.893	5.256	10.149	81	2.069	2.069	4.138
44	4.856	5.214	10.070	82	1.980	1.980	3.960
45	4.813	5-169	9.982	83	1.894	1.894	3.788
46	4.768	5.122	9.890	84	1.809	1.809	3.618
47	4.721	5.073	9.794	85	1.729	1.728	3.457
48	4.676	5.020	9.696	86	1.650	1.649	3.299
49	4.636	5.020 4.964	9.600	87	1.575	1.574	3·149
50	4.603	4.906	9.509	88	1.503	1.503	3.006
50 51	4.574	4.845	9.419	89	1.436	1.435	2·871
52	4.545	4.780	9.325	09	1.490	POLIT	4.011
JZ	4.040	2.780	y∙525				

8 PER CENT.

No. 17.—New Rules. Sons' Benefits. Value of Temporary Annuity till Age 6, 10, and 21.

Age m.	Value of Temporary Annuity till Age 21.	Value of Temporary Annuity till Age 6.	Value of Temporary Annuity till Age 10.	Value of Temporary Annuity from Age 6 till 21.	Value of Temporary Annuity from Age 10 till 21.
0	8.001	4.017	5-609	3.984	2.392
1	8.922	3.883	5.896	5.039	3.026
2	9 156	3.356	5.674	5.800	3.482
2 3 4 5 6	9.147	2.663	5.254	6.484	3.893
4	9.041	1.866	4.733	7.175	4.308
5	8.866	.977	4.129	7-889	4.737
6	8.641	• •	3.453	• •	5.188
7 8	8.370		2.702	• •	5-668
8	8.058		1.878	• •	6.180
9	7.713		-980	• •	6.733
10	7.334			• •	
11	6.917		• •	••	
12	6.471	• • •	• •	• •	
13	5.957	• •	••	• •	• •
14	5.409	••	• •	• •	• •
15	4.813	••	• •	••	
16	4.167			••	••
17	3.466		• •	• •	• •
18	2.706	• •	• •	• •	••
19	1.879	••	• •	••	••
20	.979	• •	• •	••	••

8 PER CENT.

No. 18.—New Rules. Sons' Benefits. Value of £300 at Age 21.

Age m.	Log. D ₂₁ - Log. D _m = 4·11100 - Log. D _m .	Value of Endowment at Age 21.	Value of £300 at Age 21.
0	T-11100	-129	38-7
1	-21312	·163	48.9
2	27421	·188	56.4
3	-32258	·210	63.0
3 4	-36652	·233	69.9
5	·40771	·256	76.8
6	·44730	·280	84.0
7	·48571	-306	91.8
8	-52321	·334	100.2
9	-56051	·364	109.2
10	-59759	·396	118-8
11	·63446	·431	129.3
12	-67102	·469	140.7
13	·70733	·510	153.0
14	·74351	·55 4	166-2
15	·77966	·602	180.6
16	-81591	·655	196.5
17	-85238	·712	213.6
18	-88905	·775	232.5
19	•92590	·8 4 3	252.9
20	·96290	·918	275.4
21		• •	300.0

8 PER CENT.

No. 19.—New Rules. Sons' Benefits. Value of £10 Annuity till Age 10.

Age.	Value of £10 Annuity till Age 10.	Ditto at Mean Age. m+t. pm+t.	Log. of Ditto.
0	56-1	57.6	1.76042
1	59.0	57.8	·76193
2	56.7	54.6	.73719
3	52.5	49.9	-69810
4	47.3	44.3	·64640
5	41.3	37.9	·57864
6	34.5	30.7	·48714
7	27.0	22.9	-35984
8	18.8	14.3	·15534
9	9.8	4.9	0.69020

8 PER CENT.

No. 20.—New Rules. Sons' Benefits. Value of Total Benefits if both Parents are Dead or Mother Re-married.

Age m.	(1) Value of £125 Annuity till Age 21.	(2) Value of £65 Annulty till Age 10.	(3) Value of £20 Annuity till Age 6.	(1) (2 +3)	Value of £300 at Age 21.	Total Value of Benefits.	Value at Mean Age m + ½.	Value of £10 a Year in- creased Pen- sion till Age 10 after Mother's Death.	Benefits if both Parents are Dead or
0	1000-1	364.6	80.3	555-2	38.7	593.9	648-6	57.6	706.2
1	1115.2	383.2	77.7	654.3	48.9	703.2	734.1	57.8	791.9
2	1144.5	368.8	67.1	708-6	56.4	765.0	788-3	54.6	842.9
3	1143.4	341.5	53.3	748.6	63.0	811.6	833.3	49.9	883.2
4	1130-1	307.7	37.3	785-1	69.9	855.0	876-1	44.3	920.4
5	1108-3	268.4	19.5	820-4	76.8	897.2	918-3	37.9	956-2
6	1080-1	224.5	• •	855-6	84.0	939-6	951.0	30.7	981.7
7	1046-2	175-6	• •	870-6	91.8	962.4	973.9	22.9	996.8
8	1007-2	122-1	• •	885-1	100.2	985-3	997.5	14.3	1001.8
9	964-1	63.7	• •	900-4	$109 \cdot 2$	1009-6	$1022 \cdot 6$	4.9	1027.5
10	916.7	••	• •	916.7	118-8	1035.5	101 4 ·7	••	1014.7
11	864-6	••	• •	864.6	129.3	993.9	971.7	••	971-7
12	808-9	••	• •	808.9	1 4 0·7	949.6	923.6		923.6
13	744-6	••	••	744.6	153.0	897-6	869.9		869.9
14	676-1	••	••	676-1	166.2	842.3	812 ·2	••	812.2
15	601.6	••	••	601.6	180⋅6	782 ⋅2	74 9.8		749 .8
16	520.9	••	••	52 0.9	196.5	717.4	682·1	••	682-1
17	433.2	••	••	433-2	213·6	646.8	608.7	••	608.7
18	338-2	• •	••	338-2	232.5	570.7	$529 \cdot 2$	••	529·2
19	234.9	• •	••	234.9	252.9	487.8	442.8	••	442.8
20	122.4	••	••]	122· 4	275.4	397.8	348 .9	••	34 8·9
21		••	•• }	• •	300.0	300.0	• •	••	• •

8 PER CENT.

No. 21.—New Rules. Sons' Benefits. Value of Total Benefits, if Mother Living and not Re-married.

Ages m. m+28	Log. sm. (d+\(\mu\))m+28. vm+28.	Ditto + Log. Pm+1.	P *** ÷ 10,000.	K _m . =P _m +P _{m+1}	Log. K m.	Log. D _{m,m+28} .	Log, (Nm, 128)	Value of Peusion.	Ditto at Mean Age	Total Value of Benefits if Mother Living and not Re- married.
0 28	7.16595	8-92637	84405.	329363	9.51767	8.56310	0.95457	9.007	8.932	657.5
1 29	.06799	-82992	67596	244958-	-38910	.44177	·94733	8.858	8.288	742.4
2 30	6.99043	.72762	53410.	177362	·24886	-36133	·88753	7.718	7.010	795.3
3 31	·91663	-61473	41184.	123952-	-09325	.29372	· 7 9953	6.303	5.583	838-9
4 32	·84178	·48818	30774.	82768-	8.91786	-23092	68694	4.863	4.183	880-3
5 33	·76479	-34343	22051.	51994.	.71595	.17148	·5 444 7	3.503	2.902	921.2
6 34	·68248	·16962	14778.	29943.	·47630	-11439	-36191	2.301	1.811	952-8
7 35	·60067	7.96051	9130.8	15165	·18084	-05951	-12133	1.322	-958	974.9
8 36	-51861	-67395	4720-1	6034	7.78061	-00656	T.77405	·59 4	-370	997-9
9 37	· 42839	·11859	1314.0	1314.	-11859	7.95486	.16373	.146	-073	1022-7

8 PER CENT.

No. 22.—New Rules. Daughters' Benefits. Value of Temporary Annuity till Age 6, 10, and 21.

Age sa.	Log. D ₆ + Log. a ₆ + ·750	Value of Life Annuity	$Log. D_{10} + Log. a_{10} + \cdot 750$	Value of Life Annuity	$egin{array}{c} { m Log.} \ { m D}_{21} \ + { m Log.} \ a_{21} + `750 \end{array}$	Value of Life Annuity	Value of	Temporary A Age m.	annuity at
TRe m	=5.73870 - Log. Dm.	after Age 6.	= 5.58965 - Log. D _m .	aiter Age 10.	= 5.17475 - Log. Dm.	after Age 21.	Till Age 6.	Till Age 10.	Till Age 21.
0	0.73870	5.479	0.58965	3.887	0.17475	1.495	4.017	5.609	8-001
li	-84082	6.931	·69177	4.918	.27687	1.892	3.883	5.896	8.922
2	·90191	7.978	·75286	5.660	-33796	2.178	3.356	5.674	9.156
3	-95028	8-918	-80123	6.327	-38633	2.434	2.663	5.254	9.147
4	.99422	9-868	-84517	7.001	·43027	2.693	1.866	4.733	9.041
5	1.03541	10.850	·88636	7.698	·47146	2.961	-977	4.129	8.866
6	••		92595	8.432	-51105	3.244	• •	3.453	8.641
7			·96436	9.212	·54946	3.544		2.702	8.370
8	۱	••	1.00186	10.043	∙58696	3.863		1.878	8.058
9		••	.03915	10.943	·62 1 25	4.210	•••	·980	7.713
10	••		• •		·66134	4.585	•••	••	7.334
11	••		• •		.69821	4.991	••	••	6.917
12	••		• •	••	·73477	5.417	••	• •	6.471
13	• •	••	• •		·77108	5.903	• •	• •	5.957
14	••	••	• •	•••	·80726	6.416	••	• •	5.409
15	• •	••	• •		·84341	6.973	••	• •	4.813
16			• •		·87966	7.580	••	••	4.167
17	• •		• •		-91613	8.244	••	• •	3.466
18	• •	••	• •	•••	-95280	8.970	••	• •	2.706
19	• •		• •	••	·98965	9.765	• •	• •	1.879
20	• •		• •	••	1.02665	10.633	••	• •	-979

8 PER CENT.

No. 24.—New Rules. Daughters' Benefits. Value of Increased Pension, £10 till Age 10, and £25 from Age 10 till Marriage or Death, after Mother's Marriage or Death.

Ages == + 28.	(1) Log. 8 m. (d+\mu) m+28. 7 m + 28.	(2) Log. Pm+4·	(1) + (2) = Log. P _{sn.}	P _m + 10,000.	K _m =P m+Pm+1.	Log. Km.	Log. Dm.m + 28-	$\begin{pmatrix} Log. \\ K_{m.} \\ D_{m. m+28} \end{pmatrix}$	Value of Increase of Pension to Daughter after Mother's Death or Marriage.	Ditto at mean Age m + 1.
0 28	6.16595	2.15836	8-32431	21101.	1614 4 0-	10-20801	8-56310	1.64491	44.2	47.5
1 29	-06799	·20871	·27670	18910-	140339.	·14718	·44177	70541	50.8	51.8
2 30	5.90043	•23629	•22672	16855	121429	·08433	-36133	·72300	52.8	53.0
3 31 4 32	·91663 ·84178	·25720 ·27554	·17383 ·11732	14922. 13102.	104574. 89652.	·01941 9·95256	·29372 ·23092	·72569 ·72164	53·2 52·7	52·9 52·1
5 33	.76479	29270	.05749	11415.	76550	-88395	.17148	.71247	51.6	50.8
6 34	-68248	-30963	7.99211	9820-1	65135.	-81381	11439	-69942	50.1	49.1
7 35	·60067	-32613	·92680	8118.9	55315.	·74284	.05951	∙68333	48.2	47.2
8 36	-51863	-34282	·86145	7268-6	46866	·67086	•00656	·66430	46.2	45.0
9 37	·42839 ·35326	·36040 ·36342	·78879 ·71668	6148·8 5208·1	39597 · 33448 ·	·59766 ·52437	7.95486 .90439	·64280 ·61998	43.9 41.7	42.8 40.5
11 39	-26174	35160	61334	4105.3	28240	·45086	85509	-59577	39.4	38.5
12 40	·17754	-33786	·51540	3276.4	24135.	-38265	-80727	-57538	37.6	36.9
13 41	10393	-32222	· 1 2615	2667.8	20859	·31929	·76061	-55868	86.2	35.6
11 42	-03554	·30664	·34218	2198.8	18191	•25986	.71474	-54512	35.1	34.8
15 43	4.97188 -90263	·29380 ·28488	·26568 ·18751	1843.7 1540.0	15992. 14148.	·20390 ·15070	⋅66493 ⋅61082	·53897 ·53988	34.6 34.7	34.7 35.1
17 45	-83999	28217	12216	1324.8	12608	10065	-55000	-55065	35.5	36.4
18 4 6	·78023	-28713	-06736	1167.8	11283.	·05242	·48208	·57034	37.2	38.4
19 47	.72344	·29667	·02011	1047-4	10115.	•00497	·40510	∙59987	89.8	41.2
20 48 21 49	·67339	-30643	6.97982	954-60	9067-1	8.95747	-32886	·62861	42·5 45·3	43.9
22 50	·64840 ·60639	·31576 ·32469	·96416 ·93108	920·79 853·26	8112.5 7191.7	•90915 •85683	·25348 ·17845	·65567 ·67838	45·5 47·7	46-5 48-8
23 51	-55197	-33304	-88501	767.38	6338-4	-80198	10423	-69775	49.9	50.9
24 52	·48708	-34025	·82733	671.94	5571.0	·74593	∙03119	·71474	51.9	52.8
25 53	·40416	·34616	·75032	562.76	4899-1	· 6 9012	6.96041	·72971	53.7	54.7
26 54 27 55	·36017	-35064	·71081	513.82	4336.3	•63712	-89195	.74517	55.6	56.5
28 56	·29605 ·22520	·35488 ·35908	·65093 ·58428	447·64 383·95	3822·5 8374·9	·58235 ·52826	·82422 ·75747	·75813 ·77079	57·3 59·0	58⋅2 60⋅0
29 57	-14368	-36286	-50654	321.03	2990.9	·47581	69160	78421	60.9	62.1
30 58	-04663	-36736	·41369	259-23	2 669·9	·42650	-62607	·80043	63.2	64.7
31 59	3.97572	•37199	·34771	222.70	2410.7	⋅38214	-56158	-82056	66.2	67.9
32 60 33 61	91028	•37676	•28704	193.66	2188.0	34005	49763	·84242	69.6	71.5
34 62	·85348 ·80992	·38130 ·38543	·23478 ·19535	171.70 156.80	1994·3 1822·6	·29979 ·26069	·43433 ·37162	⋅86546 ⋅88907	73·4 77·5	75·5 79·6
35 63	·78049	-38881	16930	147·67	1665-8	•22162	30939	91223	81.7	83.8
36 64	.74997	-39182	-14179	138-61	1518-1	·18130	.24726	·93404	85.9	88.0
37 65	·72096	•39393	·11489	130.28	1379.5	·13972	·18516	95456	90.1	92.1
38 66 39 67	·69221 ·66382	-39533	08754	122·33 114·64	1249-2 1126-9	·09663 ·05189	·12291 ·06041	.97372 .99148	94·1 98·1	96·1 100·0
40 68	·63479	·39550 ·39498	05932	107.10	1012.3	·00531	5.99770	2.00761	101.8	103.6
41 69	-60499	-39340	5.99839	99.630	905.23	7.95676	93146	02230	105.3	107.0
42 70	-57633	-39129	·96762	92.815	805-60	·90612	-87023	∙03589	108-6	110.2
43 71	•54462	⋅38846	-93308	85.720	712.78	·85296	⋅80470	·04826	111.8	113.3
41 72 45 73	-51290	-38507	·89797	79.062	627.06	·79731 ·73878	•73740	·05991 ·07055	114.8	116-2
46 74	·48012 ·44240	·38130 ·37712	-86142 -81952	72·681 65·996	548-00 475-32	67699	·66823 ·59661	·08038	117·6 120·3	119.0 121.7
47 75	-40428	•27291	.77719	59.867	409.32	-61206	.52219	-08987	123.0	124.3
48 76	-36199	·36866	·73065	53.784	349.45	•54339	·44441	-09898	125-6	126-9
49 77	-31699	-36493	-68192	48.075		·47081	·36299	110782	128.2	129.6
50 78	-26538	-36192	·62730	42.394		-39373 -31218	·27879 ·18602	-11694 -12616	130.9	132.3
51 79 52 80	·21015 ·14946	⋅35908 ⋅35641	·56923 ·50587	37.088 32.053		·22559	·18602 ·09056	·12010	133·7 136·5	134·1 137·8
53 81	-08429	-35334	·43763	27.392	136.06	13373	4.99053	14320	139.1	139.9
54 82	·01269	35005	36274	23.054	108-67	∙03611	⋅88812	·14799	140.6	142.0
55 83	2.93567	·34674	-28241	19-161	85-611	6.93253	-77599	15652	143-4	134.4
. 56 84	-85265	·84321	-19586	15.699	66.450	·82250	·66027 `	-16223	145.3	146 .0

No. 24 (continued).

Ages m. m + 28.	(1) Log. fm.(d+\mu)m+28. vm+28.	(2) Log. Pm++	(1) + (2) = Log. Pm.	P _{em} + 10,000.	K _m =Pm+Pm+1.	Log. Kes.	Log. Dm.u. + 28.	Log. Km. Dm. m + 38	Value of Increase of Pension to Daughter after Mother's Death or Marriage.	Ditto at mean Age
57 85	·76382	·33866	.10248	12.661	50-751	·70544	-53897	·16647	146-7	147-2
58 86	66797	-33284	-00081	10.019	38.090	·58081	•41177	·16904	147.6	147.7
59 87	-56791	-32593	4.89384	7.8314	28.071	·44826	.27869	-16957	147.8	147-5
60 88	·45795	-31785	.77580	5.9676	20.240	-30621	.13827	·16794	147.2	146-6
61 89	-33897	∙30878	64775	4.4438	14.272	.15448	3.98996	·16452	146-1	145-2
62 90	·21335	-29885	-51220	3.2524	9.8287	5.99250	-83288	-15962	144-4	143-1
63 91	-07231	·28847	-36078	2.2950	6.5762	-81798	·66632	·15166	141.8	140-2
64 92	1.91804	·27738	·19542	1.5683	4.2813	·63158	·48976	-14182	138-6	136-8
65 98	·75865	·26600	·02465	1.0560	2.7130	·43445	·30297	·13048	135-1	132.5
66 94	-58425	·25406	3.83831	-6892	1.657	·21932	·10538	·11394	130.0	126-4
67 95	-39219	·24155	-63374	· 4 303	·7680	4.98588	2.89650	-08938	122.9	118-1
68 96	-19613	·22866	·42479	·2659	∙5377	·73054	·67634	.05420	113.3	105-4
69 97	0.97402	·21537	·18939	·1547	•2718	·43 4 25	-44481	1.98944	97.6	85-6
70 98	·75382	·20140	2.95522	.0902	-1171	-06856	-20170	-86686	73.6	52.0
71 99	∙53689	1.89321	·43010	·0269	-0269	3.43 010	1.94722	·48288	30.4	15-2
	į į		1 1		1 .	ľ	ł	1	1	

8 PER CENT.

No. 25.—New Rules. Daughters' Benefits. Value of Total Benefits if Mother Living and not Re-married.

Age	Value of £100 per Annum till Marriage or Death.	#100 per Annum per Annum ill Marriage till #20 #20 #21 #20 #20 #21 #20 #21 #20 #21 #20 #20 #20 #20 #20 #20 #20 #20 #20 #20		±20 Value of Annum (1)−(2)+(3) till Value of £300 on Marriage		Total Value of Benefits.	Ditto at Mean Age m+t.	Total Value if Mother Liv- ing, and not Re-married, including Value of increase £10 till Age 10, and £25 after at Mother's Death.	Log of Ditto.	
	(1)	(2)	(3)	(4)	(5)					
0	866-0	224.4	80.3	561.3	22.1	583.4	636-8	684.3	2.83525	
ĭ	975.7	235.8	77.7	652.2	27.9	690-1	719-9	771.7	·88745	
2	1011.7	227.0	67.1	717.6	32.1	749.7	772-1	825-1	•91651	
3	1022-1	210.2	53.3	758-6	35.9	794.5	815·4	868·3 908·4	·93867 ·95828	
Ŧ	1023.0	189.3	37·3 19·5	796. 1 832.6	39·8 43·7	836-2 876-3	856·3 896·7	947.5	•97658	
5 6	1017·3 1007·2	165·2 138·1	19.9	869.1	47.9	917.0	927.3	976.4	•98963	
7	993.4	108-1		885.3	52.3	937.6	947.9	995-1	·99787	
8	976-2	75.1		901.1	57.0	958-1	969-1	1014-1	3.00608	
9	957-1	39.2	••	917.9	62.1	980-0	991.7	1034.5	·01473	
10		••	••	935.7	67.7	1003.4	994.5	1035·0 1014·0	·01494 ·00602	
11		••	••	911.9 885.4	73·7 80·1	985·6 965·5	975∙5 954∙3	991.2	2.99616	
12 13		• •	• • • • • • • • • • • • • • • • • • • •	856-1	87.1	943.2	930.9	966.5	-98520	
14				824.0	94.7	918.7	908-3	943.1	.97456	
15				797.2	100.8	898-0	889.8	924.5	·96591	
16			• •	776.3	105.4	881.7	877.3	912.4	·96019	
17	••	••	••	765.5	107.5	873.0	872.9	909·3 912·2	·95871 ·96009	
18		••	••	$766.2 \\ 783.2$	106.6	872.8 884.7	873.8 891.0	932.2	·96951	
19		• • •		800.9	101·5 96·3	897.2	903.5	947.4	97653	
20 21				818.7	91.1	909.8	915.9	962.4	·98336	
22		• •		836-2	85.8	922.0	927.9	976.7	·98976	
23		• •	• •	853⋅1	80.7	933.8	939.3	990.2	•99572	
24	••	• •	••	869-0	75.7	944.7	949.2	1002·0 1012·0	3.00087 .00518	
25		• •	••	882·1 893·0	71.6 67.9	953.7 960.9	957·3 963·9	1020-4	·00313	
26		• •		902.2	64.7	966.9	969.5	1027.7	.01187	
27 28				910.4	61.7	972.1	974.6	1034-6	·01477	
29				918-1	58.9	977-0	979.8	1041.9	.01783	
30		• •	• •	927.0	55.6	982.6	985-8	1050-5	·02140	
31	••	• •	••	936.9	52.0	988-9	992.1	1060·0 1070·1	·02531 ·02942	
32		• •	••	947·1 957·3	48·2 44·5	995.3 1001.8	998-6 1004-8	1080-3	.03354	
33		• •		967.1	40.7	1007-8	1010-4	1090.0	.03743	
34 35	::		::	975.7	37.2	1012.9	1014.9	1098-7	· 04 088	
36		• •		982.9	34.0	1016-9	1018-4	1106.4	·04391	
37		••	••	988.7	31.1	1019-8	1020-6	1112.7	04638	
38	••	• •	• •	992.7	28.6	1021-3	1021.3	1117·4 1120·3	·04821 ·04933	
39	•••	• •	• •	994.8	26·5 24·9	1021·3 1019·4	1020·3 1017·6	1120.3	-04968	
40	•••	••	••	994·5 992·0	23.9	1015.4	1017.0	1120-4	-04937	
41 42		• • •	• • • • • • • • • • • • • • • • • • • •	987.7	23.2	1010-9	1007.8	1118-0	.04844	
42 43		• •		982.0	22.8	1004-8	$1001 \cdot 2$	1114.5	•04708	
44			••	975.1	22.6	997.7	993.6	1109-8	04524	
45		• •	•••	967.0	22.6	989.6	985.2	1104·2 1097·9	·04305 ·04056	
46	1	• •	••	958-1	22.7	980·8	976·2 966·9	1097.9	•03790	
47		• •	••	948·8 939·6	22·9 22·5	971·7 962·1	957.4	1084-3	03515	
48			::	930.6	22.3	952.7	948.5	1078-1	.03266	
49 50		::		923.5	20.9	944-4	940.5	1072-8	·03052	
50 51				917.4	19.2	936-6	932.8	1066-9	-02812	
52				911.9	17.1	929-0	924.9	1062.7	.02641	
53		• •	• • •	906.2	14.7	920.9	916-1	1056-0	·02266	

No. 25 (continued).

Age	Value of £100 per Annum till Marriage or Death.		Value of £20 per Annum till Age 6.	(1)-(2)+(3)	Value of £300 on Marriage.	Total Value of Benefits.	Ditto at Mean Age m+t.	Total Value if Mother Living, and not Re-married, including Value of increase £10 till Age 10, and £25 after, at Mother's Death.	Log. of Ditto.
	(1)	(2)	(3)	(4)	(5)				
54				899.0	12.4	911.4	906-8	1048-8	-02069
55				892.6	9.6	902.2	897.4	1031.8	·01360
56			• •	885-6	7.1	892.7	887.5	1033-5	-01431
57	• •			877-6	4.7	882.3	876-2	1023-4	-01005
58	• •		••	867.6	2.6	870-2	863-1	1010-8	-00467
59	••	• •		854.6	1.4	856-0	848.2	995.7	2.99813
60		• •	••	839.9	-6	840.5	832.1	978-7	-99065
61		• •	••	823.5	.2	823.7	814.7	959-9	-98223
62		• •		805.7		805.7	796.2	939-3	·97280
63		• •	••	786-8	٠.	786-8	777-2	917-4	-9625 6
64		• •	••	767-6	••	767-6	757.8	894-6	·95163
65		••	••	748-0	••	748.0	738-1	. 870-6	-93982
66		• •	• •	728-2	••	728-2	718-1	844.5	·92660
67	••			708-0	••	708-0	697.8	815.9	•911 64
68	• • •		• •	687-6	• •	687.6	677.2	782-6	-89354
69		••	• •	666-9	••	666-9	656.5	242.1	-87046
70	••		• • •	646·1	••	646.1	635.5	687.5	·83727
71			• •	625-1	••	625-1	614-6	629-8	-7992 0

8 PER CENT.

No. 26.—New Rules. Daughters' Benefits. Value of Total Benefits if both Parents are Dead, or Mother Re-married.

Daughter's Age	Value of ±25 a Year uill Marriage or Death.	Value of £15 a year till Age 10.	Value of Increased Pension.	Ditto at Mean Age m+t.	Log. of Ditto.	Total Value of Daughter's Pension and Marriage Donation if both Parents are Dead, or Mother Re- married, at Age m+‡.	Daugh- ter's Age m	Value of £25 a Year till Marriage or Death.	Value of £15 a year till Age 10.	Value of Increased Pension.	Ditto at Mean Age m+1.	Log. of Ditto.	Total Value of Daughter's Pension and Marriage Donation if both Parents are Dead, or Mother Re- married, at Age m+i.
i	(1)	(2)	(1)-(2)					(1)	(2)	(1)-(2)			
0	216-5	84.1	132.4	144.0	0 15000	700.0	96	245.7		1, , , ,	040 5	90100	1004.0
1	243.9	88.4	155.5	144.0 161.7	2.15836	780-8 881-6	36 37	245.7	::	245·7 247·2	246·5 247·7	·39182 ·39393	1264.9 1268.3
2	252.9	85.1	167.8	172.3	·20871 ·23629	944.4	38	248.2		248.2	248.5	•39533	1269.8
3	255.5	78.8	176.7	180.8	-25720	996.2	39	248.7	::	248.7	248.6	39550	1268-9
4	255.8	71.0	184.8	188.6	27554	1044.9	40	248.6		248.6	248.3	-39498	1265.9
5	254.3	62.0	192.3	196.2	29270	1092.9	41	248.0		248.0	247.4	-39340	1260.8
6	251.8	51.8	200.0	204.0	-30963	1131.3	42	246.9		246.9	246.2	38129	1254.0
7	248-4	40.5	207.9	211.9	-32613	1159-8	43	245.5	• •	245.5	244.6	·38846	1245.8
8	244.0	28.2	215.8	220.2	-34282	1189-3	44	243.8	• •	243.8	242.7	-38507	1236-3
9	239-3	14.7	224.6	229.3	·36040	1221.0	45	241.7	• •	241.7	240.6	-38130	1225.8
10	233.9	• •	233.9	230.9	·36342	1225.4	46	239.5	• •	239.5	238.3	·37712	1214.5
, 11	228.0	••	228.0	224.7	·35160	1200-2	47	237-2	••	237.2	236.0	37291	1202.9
12	221.4	• •	221.4	217.7	33786	1172-0	48	234.9	• •	234.9	233.7	·36866	1191.1
13	214.0	••	214.0	210.0	⋅32222	1140.9	49	232.6	• •	232.6	231.7	·36493	1180-2
14	206-0	• •	206.0	202.6	·30664	1110.9	50	230.9	••	230.9	$230 \cdot 1$	·36192	1170.6
15	199.3	• •	199.3	196.7	•29380	1086.5	51	229.3	• •	229.3	228.6	·35908	1161.4
16	194.1	• •	194.1	192.7	·28488	1070.0	52	228.0	• •	228.0	227.2	•35641	1152-1
17	191.4	• •	191.4	191.5	⋅28217	1064-4	53	226.5	• •	226.5	225.6	·35334	1141.7
18	191.6	••	191.6	193.7	-28713	1067.5	54	224.7	•••	224.7	223.9	⋅35005	1130.7
19	195.8	••	195.8	198.0	•29667	1089.0	55	223.1	•••	223.1	222.2	•34674	1119.6
21	200·2 204·7		200.2	202·5 206·9	·30643	1106.0	56	221.4	::	221·4 219·4	220.4	•34321	1107·9 1094·3
22	204.7	l ::	204·7 209·1	211-2	·31576 ·32469	1122·8 1139·1	57 58	219·4 216·9		216.9	$218 \cdot 1 \\ 215 \cdot 2$	·33866 ·33284	1078.3
23	213.3		213.3	211-2	·32409 ·33304	1154·6	59	213.6		213.6	211.8	-32593	1060.0
24	217.2		217.2	218.9	·34025	1168-1	60	210.0		210.0	207.9	-31785	1040.0
25	220.5		220-5	221.9	·34616	1179.2	61	205.9		205.9	203.6	30878	1018-3
26	223.2		223.2	224.2	-35064	1188.1	62	201.4		201.4	199.0	•29885	995.2
27	225.1		225.1	226.4	-35488	1195.9	63	196.7		196.7	194.3	28847	971.5
28	227.6		227.6	228.6	-35908	1203.2	64	191.9		191.9	189.4	27738	947.2
29	229.5		229.5	230.6	-36286	1210.4	65	187.0		187.0	184.5	-26600	922.6
30	231.7		231.7	233.0	-36736	1218-8	66	182.0		182.0	179.5	•25406	897.6
31	234.2		234.2	235.5	-37199	1227.6	67	177.0		177.0	174.4	-24155	872.2
32	236.8		236.8	238.1	-37676	1236.7	68	171.9		171.9	169.3	-22866	846.5
33	239.3		239.3	240.6	·38130	1245-4	69	166-7		166-7	$164 \cdot 2$	·21537	820.7
34	241.8	• •	241.8	242·9	·38543	1253.3	70	161.7		161.7	159.0	·20140	794.5
35	243.9	• •	243.9	244.8	-38881	1259.7	71	156.3	••	156.3	78.2	1.89321	692.8
		' 				'	ı	!	1	1			

8 PER CENT.

No. 28.—New Rules. Sons' Reversionary Benefits. Value of Total Benefits contingent on Father's Death.

Son's Age	(1) Log. d _{m+35} , s _m v _{m+35} .	(2) Log. Pm+1.	Sum of (1) + (2).	P _m .	K _m . =Pm+Pm+1	Log. K _m .	Log. D _m . m + 85.	$\left(\frac{\frac{\text{Log.}}{\text{Km.}}}{\text{D}_{m,m+36}}\right)$	Value of Reversion- ary Benefits to Son after Father.	Ditto at Mean Age m + ‡.
0	6.96538	2.81790	9-88328	76433	707021	10.84943	8.72681	2.12262	132-6	142-6
ĭ	88263	87064	.75327	56659	630588	.79975	.61649	·18326	152.5	157.7
2	-82805	•90053	·72858	53528	573929	·75886	-54706	·21180	162.9	165-6
3	.78714	.92371	·71085	51387	520401	·71634	·49018	-22616	168.3	169-8
4	·74513	.94463	-68976	48951	371981.	·67118	.43742	.23376	171.3	171.8
5	.71763	-96435	-68198	48082	325281	·62331	-38725	·23606	172-2	171.4
6	-69032	•97900	-66932	46700	280500-	·57052	-33820	·23232	170.7	168-8
7	-66213	-98896	-65109	44781	325281	·51226	-28985	·22241	166-9	163.8
8	-63404	-99909	-63313	42967	280500	·44793	•24194	·20599	160.7	156-4
9	-60415	3.00975	-61390	41106-	237533.	·37572	.19375	·18197	152-1	146.3
10	-57384	-00634	-58018	38035	196427	29321	.14530	.14791	140.6	133.7
11	.52761	2.98753	-51514	32745.	158392-	·19973	∙09657	·10316	126.8	119-6
12	·47930	·96548	44478	27847	125647	·09916	.04809	-05107	112.5	105-1
13	·42837	·93947	36784	23326-	97800-	9.99034	7.99986	1.99048	97.8	90.5
14	-37500	•90966	·28466	19260-	74474.	-87200	-95184	·92016	83.2	76.0
15	-31907	87495	·19402	15632.	55214.	·74205	·90398	·83807	68.9	62.0
16	·25983	83385	-09368	12407	39582.	.59750	·85625	·74125	55-1	48.6
17	·20542	-78440	8.98982	9768-3		·43417	-80859	.62558	42.2	36.2
18	·15626	·72362	·87988	7583.7		·24072	·76091	·47981	30.2	24.6
19	·11109	·64621	· 7 5730	5718.7		8.99224	.71310	·27914	19.0	14.0
20	∙07055	-54270	61325	4104.4	4104.	·6132 1	-66506	0.94815	8.9	4.5

8 PER CENT.

No. 29.—New Rules. Daughters' Reversionary Benefits. Value of Total Benefits contingent on Father's Death.

	ges. +35	Log. (Sm. dm+35)	Log. (s _m . d _{m+35} . y ^{m+35}).	Ditto + Log. Pm+t.	P _m .	K m. = P m + P ss+1.	Log. K m.	Log. (Km (Dm.m+35)	Value of Reversion- ary Benefits to Daughter, after Father's Death.	Ditto at Mean Age m + 1.
0	35	8-13526	6.96538	9.80063	63187	813575	10-91040	2.18359	152.6	167-1
1		-08589	-88263	.77008	58895	750388-	87529	25880	181.5	188-9
2	37	·06473	-82805	·74456	55534.	691493	·83979	29273	196.2	201.0
3	38	·05724	·78714	·72581	53188-	635959.	·803 1 3	·31325	205.7	209.3
4	39	·04866	·74513	·70341	50514.	582771.	·76550	-32808	212.9	215.6
5	40	∙05458	·71763	·69421	49455	532257	·72612	·63887	218.2	219.9
6 7	41	·06069	-69032	67995	47857	482802	-68377	-34557	221.6	222.4
8	42 43	·06593	·66213	·66000	45709	434945	·63844	·34859	223.2	223-1
9	44	·07126 ·07480	·63404 ·60415	·64012	43664	389236	•59022	-34828	223.0	222.1
10	45	.07791	•57384	·61888 ·58878	41580 38795	345572. 303992.	·53854 ·48286	·34479 ·33756	221·2 217·6	219·4 214·9
īì	46	-06510	•52761	•53363	34169	265197	·42357	-32700	217.6	209.5
12	47	05022	·47930	·47546	29885	231028	-36367	-31558	206.8	201.0
13	48	.03271	·42837	·41357	25916-	201143-	30350	.30364	201.2	198.5
14	49	∙01057	·37281	·34737	22252.	175227	·24361	-29177	195.8	194.3
15	50	7.98148	-31029	·27620	18889-	152975.	·18463	-28505	192.8	192.6
16	51	•94352	·23891	·19910	15816.	134086	·12740	-28438	192.5	194.5
17 18	52 53	·90361	·16557	·12428	13313.	118270-	-07287	·29309	196.4	200.6
19	54	-86127	08981	04990	11218.	104957	.02102	31136	204.8	212-1
20	55	·81909 ·78302	·01421 5·94471	8.98372 .92124	9632·1 8341·4	93739	9.97192	-34114	219.4	227.4
2Ĭ	56	•75294	88121	·86457	7321.0	84107· 75766·	·92483 ·87947	-37184	235.4	244.2
22	57	.72965	82450	81426	6520·2	68445	·83534	·40304 ·43419	253.0 271.8	262·4 281·7
23	58	·71141	.77283	·76855	5868-8	61925	·79187	•46481	291.6	302.0
24	59	-69899	·72699	·72786	5343.9	56056-	·74862	•49454	312.3	322.6
25	60	·69059	-68516	-69034	4901.6	50712	-70511	-52233	332.9	343.3
26	61	68582	-64697	·65574	4526.3	45810·	·66096	·54849	353.6	364.0
27	62	·68165	-60938	-62125	4180.7	41284.	-61578	·57326	374.3	384.8
28 29	63	.67671	·57101	-58578	3852.8	37103-	-56941	·59697	395.3	406-1
30	64 65	·67131	-53219	•55002	3548.3	33250	-52179	-61997	416.8	428.3
31	66	-66413 -65509	·49159 ·44912	·51299 ·47443	3258.3	29702	•47279	-64313	439.7	451.7
32	67	-64628	·40689	·43631	2981·5 2730·9	26444· 23462·	•42233	•66621	463.7	476.2
33	68	63744	36462	•39316	2501.3	20731	→37037 →31662	·68897 ·71115	488.6 514.2	501·4 527·2
34	69	-62784	-32160	-35903	2285.8	18230	26079	.73245	540·1	552.9
35	70	-61723	·27757	-31845	2081-9	15944	20260	.75256	565.7	578.3
36	71	·60543	·23234	·27625	1889-1	13862	-14183	.77144	590.8	603.0
37	72	-59294	·18643	·23281	1709-3	11973.	-07820	·78901	615.2	626-9
38	73	-57933	·13940	-18761	1540.3	10264	-01132	-80523	638-6	649.7
39	74	-56385	∙09049	⋅13982	1379.8	87241	8.94072	⋅82000	660.7	670.8
40 41	75 70	-54575	-03897	-08865	1226-5	73443.	·86595	⋅83301	680.8	689.9
42	76 77	·52401 ·49861	4.98380 92498	03317	1079-4	61178	·78660	-84445	699-0	607.2
43	78	·46773	·92198 ·86068	7-97312 -90776	940-63	5038-4	·70229	·85453	715.4	722.7
44	79	·43159	·79111	·83635	808-65 686-04	4097·8 3289·1	·61255 ·51708	·86332 ·87109	730·0 743·2	736-6 749-0
45	80	-38996	·71606	.75811	572.94	2603.1	·41549	.87776	754.7	760.0
46	81	-34104	.63372	-67428	472.37	2030.2	30754	-88375	765.2	769.8
47	82	.28537	·54462	-58252	382.40	1557.8	19251	-88893	774.3	778.6
48	83	·22281	·44864	·48379	304.64	1175.4	-07019	-89371	782.9	786-8
49	84	-15103	·34343	·37609	237.73	870.79	7.93991	-89802	790.7	795.1
50	85	07108	⋅23006	26058	182-21	633-06	·80144	-90282	799.5	803.8
51 52	86	6.98121	.10677	13489	136.43	450.85	-65403	.90748	608-1	812-4
٠Z	87	·88099	3.97312	6.99953	99.892	314.42	·49751	-91206	816.7	820.5

No. 29 (continued).

Aş m m	ges. +35.	Log. (s _{m.} d _{m+35}).	Log. (sm. dm+35.	+ Log.	Pm.	K m. == P m + P m + 1.	Log. Km.	Log. (K ss (D ss. m + 35)	Value of Reversion- ary Benefits to Daughter, after Father's Death.	Ditto at Mean Age ms + i.
54	89	-65136	-67665	-69734	49-813	143-24	.15606	-91937	830-6	833-6
55	90	.51899	-51085	-52445	33.454	93.423	6.97045	.92252	836-6	842.5
56	91	·37654	·33488	·34919	22.345	59.969	·77793	·92862	848.4	854.3
57	92	-24102	·16593	-17598	14.996	37.624	·57547	·93454	860-1	866.7
58	93	·10269	2.99418	5.99885	9.9736	22.628	·35465	·94114	873.3	877.9
59	94	5.94394	·80201	-80014	6.3116	12.6547	·10226	·94567	882-4	883-0
60	95	-73772	·56236	-55301	3.5728	6.3431	5.80230	·94624	883-6	885.7
61	96	·47823	·26945	·25168	1.7852	2.7703	·44253	·94826	887-7	887.5
62	97	·13041	1.88821	4.86101	·72612	·98513	4.99349	·94805	887-3	871.5
63	98	4.64048	36485	·32741	·21253	•25901	-41332	.93235	855-8	842-0
64	99	.02465	0.71560	3.66723	·046476	·04648	3.66723	·91816	828-3	••

8 PER CENT.

No. 32.—New Rules. Members. Single Life. Value of Life Annuity. (From Neison, Tables II. and IX.)

Age.	$Log.\left(\frac{N_m}{\overline{D_m}}\right)$	Value of Life Annuity.	Age.	$\text{Log.}\left(\frac{N_m}{D_m}\right)$	Value of Life Annuity.	Age.	Log. $\left(\frac{N_m}{D_m}\right)$	Value of Life Annuity.
20	1.00446	10-103	47	·93374	8-585	74	-61899	4-159
21	-00180	10.042	48	·9309 4	8.530	75	· 5 9771	3.960
22	0.99952	9.989	49	.92774	8.467	76	·57588	8.766
23	-99749	9.942	50	•92397	8.394	77	-55351	3.577
24	•995 44	9-895	51	•91952	8.308	78	·53062	3.393
25	·99340	9.849	52	-91419	9.207	79	-50723	3.215
26	•99139	9.803	53	•90802	8.091	80	·48332	3.043
27	-98925	9.755	54	·90102	7.962	81	·45887	2.877
28	·98704	9.706	55	0.89324	7.821	82	·43387	2.716
29	•98469	9.654	56	·88465	7.667	83	·40826	2.560
30	•98235	9.602	57	-87531	7·504	84	-38209	2.410
31	•97991	9.548	58	-86528	7.333	85	-35527	· 2·266
32	·97735	9.492	59	-85455	7·154	86	-32782	2.127
33	·97478	9.436	60	·84323	`6⋅970	87	·29963	1.994
34	·97211	9.378	61	-83132	6.781	88	•27008	1.862
35	·96939	9.317	62	-81888	6.590	89	·23813	1.730
36	·96636	9.255	63	-80592	6.396	90	·20194	1.592
37	·96326	9.189	64	.79241	6-200	91	·15781	1.438
38	•96001	9.120	65	·77826	-6-001	92	-09828	1.254
39	•95674	9.052	66	-76350	5.801	93	-02353	1.056
40	•95329	8.980	67	·74797	5.597	94	T-93259	-856
41	•94999	8.912	68	•73177	5.392	95	-82291	·665
42	·94686	8-848	69	·71483	5.186	96	-68987	· 4 90
43	·94388	8.788	70	-69718	4.979	97	-53070	.339
44	-94111	8.732	71	-67877	4.773	98	-32285	•210
45	•93856	8.681	72	·65956	4.566	99	-00685	.102
46	-93625	8-635	73	-63962	4.361	100	1	I

6 PER CENT.

No. 1.—Old Rules. Widows. Annuity till Marriage or Death. D and N Columns. (From Neison, Table V.)

Age m.	Log. Dm.	D _m .	N m = Dm+1+Dm+2.	Log. Nm.	Age m.	Log. Dm.	D m.	N_{m} = $D_{m+1}+D_{m+2}$	Log. N
0	5.00000	100000-	961958-	5.98315	51	.90453	802-66	7992-68	·9026
1	4.90599	80536-	881422-	.94518	52	-86650	735-36	7257.32	-8607
2	-85303	71290.	810132	90855	53	-82823	673.33	6583.99	-8184
3	-81278	64980-	745152-	·87224	54	.79037	617-12	5966-87	.7757
4	·71695	59834.	685318	83589	55	·75179	564.66	5402.21	.7325
5	-74388	55447.	629871	.79925	56	.71311	516.55	4885-66	-6889
6	.71240	51570-	578301	.76215	57	-67456	472-67	4412.99	-6147
7	68212	48097	530204	.72111	58	·63650	433.01	3979.98	-5998
8	65273	44950-	485254	68597	59	•59937	397.53	3582.45	-5541
9	62356	42030-	443224	64662	60	-56239	365.08	3217.37	.5075
10	·59459	39318-	403906	60628	61	52546	335.32	2882.05	·4597
11	-56583	36799	367107	56479	62	·48836	307.86	3564.19	·4106
12	-53740	34467	332640	52197	63	45074	282.32	2291.87	3601
13	·50920	32300	300340-	.47761	64	41217	258·33	2033-54	-3082
14	·30920 ·48114	30279	270061	·43146	65	37259	235.83	1797.71	.2547
15	·41872	28101.		38374	66	-33185	214.70	1583-01	1994
16		25808	241960	33475	67	-28989	194·94	1388-07	1424
17	·41175		216152	28517	68	·24656	176-43	1211-64	-0833
18	-36781	23324· 20740·	192828	.23575	69	20179	159.15	1052-49	.0222
	-31681		172088-					909-468	2.9587
19	·25701	18072	154016-	·18755 ·14059	70	15538	143.02	781.468	8929
20	⋅19839	15790-	138226-		71	·10722	128.00	667-428	-8244
21	-14119	13842	124384	·09476	72	.05706	114.04	566-318	.7530
22	∙08559	12178-	112206-	-05001	73	-00478	101.11		-6786
23	.03167	10756-	101449-8	00625	74	1.95008	89.142	477-176	-6010
	3.97949	9538.7	91911.1	4.96336	75	·89284	78.134	399-042	
25	-92978	8507-1	83404.0	.92118	76	·83268	68.027	331.015	-5198
26	⋅88200	7620-8	75783.2	·87957	77	·76943	58.807	272-208	4346
27	·83567	6849.7	68933.5	-83843	78	·70267	50.428	221.780	3459
28	·79040	6171.6	62761.9	.79769	79	·63220	42.875	178-995	-2522
29	·7 4 589	5570.4	57191.5	.75733	80	-55759	36.107	142.798	1547
30	·70122	5026	52165.5	.71738	81	·47864	30.105	112-693	0518
31	·65668	4536-1	47629.4	-67787	82	-39490	24.825	87-868	1.9138
32	·61252	4097.5	43531.9	-63880	83	30616	20.238	67.630	-8301
33	∙56895	3706-4	39825.5	60016	84	·21194	16.291	51.339	-7104
34	·52616	3358-6	36466.9	•56190	, 25	-11200	12.942	38-397	-5843
35	·48438	3050-6	33416.3	•52395	86	∙00567	10.131	28-2669	4512
36	·44363	2777.3	30639 0	·48627	87	0.89252	7.8077	20.4592	.3108
37	·40392	2534.7	28104.3	·44877	88	·77189	5.9142	14.5450	-1627
38	·36522	2318-6	25785.7	•41137	89	•64332	4.3987	10.1436	-006
39	·32749	2125-6	23660-1	·37 4 05	90	50616	3.2075	6.9388	0.8112
40	· 2 9092	1954.0	21706-1	·33658	91	∙36013	2.2916	4.6172	6671
41	·25526	1799-9	19906-2	·29898	92	∙2049ն	1.6031	3.0111	4834
42	·22026	1660-6	18245-6	·26115	93	·04057	1.0979	1.94621	-2891
43	·18569	1533.5	16712-1	·22303	94	I-86653	·785 4 1	1.21080	0837
44	·15137	1417-0	15295-1	·18455	95	-68242	· 4 8131	·729 1 9	I-8630
45	·11730	1310-1	13985.	-14566	96	·48839	·30789	·42160	-6249
46	∙08316	1211.0	12774.0	-10633	97	-28111	-19250	-22910	-3600
47	-04881	1118-9	11655-1	-06651	98	-07056	·11764	·11146	-0471
48	·01401	1032.7	10622.39	.02622	99	2.84705	.07031		2 .6143
49	2 97865	952.03	9670-36	3.98544	100	-61434	-04115		
					2.70				
50	·94202	875.02	8795·34	.94425	100	-0.101	7110		I

No. 2.—Old Rules. Widows. Value of Annuity, payable Half-yearly in Advance, till Marriage or Death.

Age m.	Log. $\left(\frac{N}{D}\right)$	Value of Annuity, a _m .	Value of Annuity, payable Half-yearly, in advance, am + .750.	Ditto at Mean Age, am+i.	Age m.	Log. $\binom{N_m}{D_m}$	Value of Annuity,	Value of Annuity, payable Half-yearly, in advance, $a_m + .750$.	Ditto at Mean Age, am+i.
	(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)
0	0.98315	9.619	10-369	11.032	51	0.99816	9.958	10.708	10.664
1	1.03919	10.944	11.694	11.904	52	-99427	9.869	10.619	10.574
2	-05552	11.364	12.114	12.166	53	·99025	9.778	10.528	10.474
3	-05946	11.467	12.217	12.211	54	·98537	9.669	10.419	10.368
4 5	.05894	11.454	12.204	12.157	55 50	·98078	9.567	10.317	10.263
6 6	·05537 ·04975	11.360 11.214	12·110 11·964	12·037 11·869	56 57	·97581 ·97017	9·458 9·336	10·208 10·086	10.147 10.014
7	01973	11.024	11.774	11.660	58	·96338	9.191	9.941	9.852
8	-03324	10.795	11.545	11.420	59	95481	9.012	9.762	9.664
9	-02306	10.545	11.295	11.159	60	·94521	8.815	9.565	9.455
10	∙01169	10.273	11.023	10.875	61	.93424	8.595	9.345	9.228
11	0.99896	9.976	10.726	10.564	62	·92228	8.361	9-111	8.990
12	∙98457	9.651	10-401	10.225	63	·90944	8-118	8-868	8.745
13	·96841	9.298	10.048	9.859	64	·89608	7.872	8.622	8.498
14 15	-95032	8.919	9.669	9.515	65	·88213	7.623	8.373	8.248
16	·93502 ·92300	8·610 8·375	9.360 9.125	9·243 9·071	66 67	·86763 ·85255	7∙373 7∙121	8·123 7·871	7.997 7.745
17	·91736	8.267	9.017	9.032	68	·83682	6.868	7.618	7.491
18	91894	8.297	9.047	9.160	69	-82043	6.613	7.363	7.236
19	-93054	8.522	9.272	9.388	70	-80340	6.359	7.109	6.982
20	·9·1220	8.754	9.504	9.620	71	·78569	6.105	6.855	6.729
21	-95357	8.986	9.736	9.850	72	·76734	5.852	6.602	6.477
22	·96442	9.213	9.963	10.072	73	·74828	5.601	6.351	6.227
23	.97458	9 431	10.181	10.283	74	·72858	5.353	6.103	5.980
24 25	•98387	9.635 9.804	10.385	10.470	75 76	·70817	5.107	5.857	5.737 5.496
26	·99140 ·99757	9·80 4 9·914	10.554 10.694	10·624 10·754	77	·68717 ·66518	4·866 4·626	5.616 5.376	5.262
27	1.00276	10.064	10.814	10.754	78	-64325	4.398	5.148	5.034
28	-00729	10.169	10.919	10.968	79	·62002	4.169	4.919	4.812
29	·01144	10.267	11.017	11.073	80	-59713	3.955	4.705	4.599
30	-01616	10.379	11.129	11.190	81	·57324	3.743	4.493	4.391
31	·02119	10.500	11.250	11.312	82	·54893	3.539	4.289	4.191
32	-02628	10.624	11.374	11.435	83	•52398	3.342	4.092	3.997
33 34	-03121	10.745	11.495	11.552	84	·49850	3.151	3.901	3.809
3 1 35	·03574 ·03957	10·858 10·954	11.608 11.704	11.656 11.743	85 86	·47230 ·44561	2·967 2·790	3.717 3.540	3.629 3.455
36	.04264	11.031	11.704	11.745	87	·41837	2.790	3.370	3.290
37	-01485	11.088	11.838	11.855	88	39082	2.459	3.209	3.133
38	-04615	11.121	11.871	11.877	89	-36298	2.307	3.057	2.985
39	-04656	11.132	11.882	11.869	90	-33512	2.163	2.913	2.846
40	-04556	11.106	11.856	11.833	91	-30706	2.028	2.778	2.714
41	.04372	11.059	11.809	11.773	92	·27850	1.899	2.649	2.586
42	•04089	10.987	11.737	11.693	93	·24862	1.773	2.523	2.461
43	.03734	10.898	11.648	11.596	94	.21719	1.649	2.399	2.333
44 45	·03318	10.794	11.544	11.485	95 96	·18060	1.516	2·266 2·119	2.193
40 46	·02836 ·02317	10·675 10·548	11·425 11·298	$11.362 \\ 11.232$	96	·13651 ·07558	1.369 1.190	2.119 1.940	2.030 1.819
47	-01770	10.416	11.166	11.232	98	I.97656	·9 4 7	1.697	1.516
48	.01221	10.410	11.035	10.972	99	.76732	-585	1.335	1.043
49	-00679	10.158	10.908	10.855	100		• •	1.000	••
50	-00223	10.051	10.801	10.755		l		1	

6 PER CENT.

No. 3.—Old Rules. Widows and Children. Value of Life Annuity (Mortality only), D and N Columns. (From Neison, Table VI.)

Age m.	Log. D _M .	D _m .	N m = Dm+1+Dm+2	Log, N m.	Age m.	Log. Dm.	D _m .	N m = Dm+1+Dm+2	Log. N =
0	5.00000	100000-	1111187-	6.04813	51	·37327	2361.9	25205.4	-40149
1	4.90599	80536.	1036651	-01563	52	·34115	2193.6	23011.8	-36195
2	-85303	71290.	965361	5.98469	53	-30876	2035-9	20975-9	-32172
3	-81278	64980.	900381	.95453	54	·27605	1888-2	19087.7	-28076
4	·77694	5 9833·	840548	·92456	55	·24300	1749-8	17337.9	·23900
5	·74388	554 4 7·	785101	·89493	56	·20951	1620.0	15717-9	·19640
6	.71240	51570-	733531	-86542	57	·17551	1498-0	14219-9	·15290
7	·68212	48097	685434	-83597	58	·14099	1383.5	12836-4	·10843
8	·65274	44951·	740483	-80651	59	·10596	1276.3	11560-1	·06296
9	·62356	42030	598453	.77703	60	∙07033	1175.8	10384.3	·01636
10	·59459	39318-	559135-	.74752	61	.03412	1081.7	6302-6	3.96860
11	·56583	36798	522337	.71795	62	2.99726	993.71	8308.9	19954
12	•53740	34467	487870	.68839	63	•95964	911.26	7397-6	-86909
13	•50920	32300	455570-	.65856	64	-92107	833.82	6563.8	-81716
14	·48114	30279	425291	.62869	65	·88149	761.18	5802.6	·76462
15	·45311	28386-	396905-	.59869	66	-84075	693.03	5109.6	·79839
16	·42497	26605	370300	.56855	67	·79879	629.20	4480-4	·65132
17	•39662	24924	345376	.53839	68	•75546	569.46	3910.9	-59228
18	·36807	23338-	322038•	.50791	69	·71067	513.65	3397.2	.53112
19	·33934	21843.	300195	.47741	70	2.66428	461.62		3.46770
20	·31046	20439	279756	.44679	71	-61612	413.16	2522.39	-40181
21	•28147	19119-	260637	.41604	72	•56596	368.10	2154.29	•33331
22	·25241	17882	242755	.38518	73	·51368	326.35	1827.94	·26195
23	•22327	16721	226034	.35417	74	·45898	287.73	1540.21	·18758
24	19405	15633.	210401	.32305	75	40174	252.20	1288-01	-10992
25	16473	14613-	195788	.29170	76	•34158	219.57	1068:44	.02873
26	13534	13657	182131	.26038	77	·27833 ·21156	189.81	878-63	2.94381
27	10585	12760	169371	.22884	78	14110	162.77	715.86	-85483
28	07628	11920- 11133-	157451· 146318·	.19714 .16530	79 80	.06649	138·39 116·54	577:47	·76153
29 30	·04662 ·01688	10396-	135922	.13328	81	1.98754	97.172	460·930 363·758	·66364 ·56081
31	3.98706	9706.4	126216-	.10113	82	•90380	80.139	283.619	•45274
32	95715	9060-5	117155.	.06863	83	-81507	65.324	218.295	·43904
33	92716	8455.9	108699	.03623	84	-72084	52.582	165.713	•21936
34	89710	7890-4	19080-9	.00350	85	-62090	41.778	123.940	.09321
35	-86696	7361.4	93447.9	4.97057	86	-51457	32.702	91.538	1.96018
36	·83675	6866.7	86581.2	.93742	87	·40142	25.201	66.037	-81479
37	-80627	6401.3	80179.9	.90407	88	.28079	19.089	46-948	-67162
38	.77613	5972.1	74207-8	87045	89	.15222	14.198	32.750	•51521
39	•74573	5568-4	68639-4	-83657	90	-01506	10.353	22:3966	•35018
40	·71526	5191.1	63448.3	80242	91	0.86903	7.3966	15.0000	·17609
41	·68474	4838-8	58609.5	.76797	92	.71386	5.1744	9.8256	0.99236
42	-65414	4509.6	54099.9	-73329	93	-54945	3.5438	6.2818	·79858
43	•62345	4201.9	49898.0	-69808	94	.37543	2.3737	3.9081	.59197
44	•59267	3914-4	45983.6	-66261	95	.19132	1.5535	2.35463	
45	.56178	3645.7	42337.9	.62673	96	1.99729	.99378		
46	.53076	3395.4	38942.5	-59043	97	·79334	-62136		1.86893
47	·49961	3159-4	35783.1	-55368	98	.57946	-37972		.55602
48	·46830	2939.7	32843.4	-51644	99	-35595	-22696		
49	·43683	2734.2	30109.2	·47870	100	.12324	-13281		
50	·40515	2541.9	27567.3	44039	1.	I			

6 PER CENT.

No. 4.—Old Rules. Widows and Children. Value of Life Annuity, payable Half-yearly, in Advance. (From Neison, Tables VI. and XIV.)

Age.	$\text{Log.}\left(\frac{\text{N}_{\text{ss}}}{\text{D}_{\text{ss}}}\right)$	Value of Annuity. Gm.	Value of Annuity, Half-Yearly, in Advance.	Age.	Log. $\left(\frac{Nm}{Dm}\right)$	Value of Annuity.	Value of Annuity, Half-Yearly, in Advance.
0	1.04813	11.172	11.922	50	·03524	10.845	11.595
l i l	·10964	12.872	13.622	51	∙02822	10.671	11.421
2	·13166	13.541	14.291	52	∙02080	10.491	11.241
3	·14175	13.860	14.610	53	-01296	10.303	11.058
4	·14762	14.048	14.798	54	.00471	10.109	10.859
5	·15105	14.160	14.910	55	0.99600	9.908	10.658
6	·15302	14.224	14.974	56	•98689	9.703	10.453
7	·15385	14.251	15.001	57	.97739	9.493	10.243
8	-15377	14.249	14.999	58	-96744	9.278	10.028 9.807
9	·153 4 7	14.239	14.989	59	-95700	9.057	9.582
10	·15293	14.221	14.971	60	-94603	8.832 8.600	9.350
11	.15212	14.195	14.945	61	.93448 .92228	8.362	9.112
12	·15090	14.155	14.905	62	.92228 .90945	8.118	8.868
13	·14936	14.105	14.855	63	·89609	7.872	8.622
14	·14755	14.046	14.796	64	-88213	7.623	8.373
15	-14558	13.982	14.732	65 66	-8676 4	7.373	8.123
16	·14358	13.918	14.668	67	85253	7.121	7.871
17	·14168	13.857	14.607	68	-83682	6.868	7.618
18	·13984	13.799	14.549	69	-82045	6.614	7.364
19	·13810 ·13633	13.7 14 13.688	14·490 14·438	70	-80342	6.360	7.110
20	·13655 ·13457	13.632	14.382	71	78569	6.105	6.855
21	·13277	13.576	14.326	72	·76735	5.853	6.603
22 23	·13277 ·13090	13.518	14.268	73	.74827	5.601	6.351
23	·12900	13.458	14.208	74	.72860	5.353	6.103
25	·12706	13.399	14-149	75	-70818	5.107	5.857
26	12504	13.336	14.086	76	-68715	4.866	5.616
27	12299	13.274	14.024	77	-66548	4.629	5.379
28	·12086	13.209	13.959	78	-64326	4.398	5-148
29	-11868	13.143	13.893	79	·620 4 3	4.173	4.923
30	·11640	13.074	13.824	80	-59715	3.955	4.705
31	·11407	13.004	13.754	81	·57327	3·743	4.493
32	·111 4 8	12.926	13-676	82	·5489 4	3.539	4.289
33	·10907	12.855	13.605	83	·52397	3.342	4.092
34	·10640	12.776	13.526	84	·49852	3.152	3.902 3.717
35	1.10361	12.694	13.444	85	•47231	2·967 2·790	3.540
36	-10067	12.609	13.359	86	·44561	2·790 2·620	3.370
37	-09780	12.526	13.276	87	·41837	2·459	3.209
38	09432	12.426	13.176	88	-39083	2.439	3.057
39	·0908 4	12.327	13.077	89	·36299 ·33512	2·163	2.913
40	∙08716	12.223	12.973	90	30706	2.028	2.778
41	-08323	12-112	12.852	91 92	·30700 ·27850	1.899	2.649
42	·07906	11.997	12.747	93	·24861	1.773	2.523
43	·07463	11.875 11.747	12.625 12.497	94	·21654	1.646	2.396
44	-06994 -06495	11.747	12.497	95	·18060	1.516	2.266
45		11.613	12.223	96	13652	1.369	2.119
46	.05967 .05407	11.326	12.223	97	.07569	1.190	1.940
47 48	·03407 ·04814	11.172	11.922	98	I-97656	·947	1.697
49	04187	11.012	11.762	99	·76728	.585	1.335
10	.02107			1			1

6 PER CENT.

No. 5.—Old Rule. Sons and Daughters. Values of Temporary Annuity till Age 6, 10, and 19.

	+ 750	Annuity	y + 750 L	Value of Life Annuity		Value of Life Annuity	Value of Temporary Annuity at Age m.			
	= 88774 - Log. D _m .	after Age 6.	= '76984 - Log. D m.	after Age 10.	= 50050 - Log. D _m .	after Age 19.	Till Age 6.	Till Age 10.	Till Age 19.	
0	0.88774	7.722	0.76984	5-886	0.50050	3-166	4.200	6-036	8.756	
1	·98175	9.588	·86385	7.309	-59451	3.931	4.034	6.313	9-691	
2	1.03471	10.832	·91681	8.257	·64747	4.441	3.459	6.034	9.850	
8	·07496	11.884	·95706	9.059	·68772	4.872	2.726	5.551	9.738	
4	·11080	12.906	·99290	9.838	·72356	5.291	1.892	4.960	9.507	
5	·14386	13-927	1.02596	10.616	·75662	5.710	∙983	4.294	9.200	
6	• •	• •	·05744	11-414	·78810	6.139	••	3.560	8-835	
7	• •	••	.08772	12.238	·81838	6.582		2.763	8-419	
8	• •	• •	·11710	13.095	·84776	7.043	• • •	1.904	7.956	
9		••	·14628	14.005	·87694	7.533		·984	7.456	
10	• •	••	• •	• •	-90591	8.052	••		6.919	
11	• •	••	• •	• •	·93467	8.603	••		6.342	
12	• •	•••	• •		96310	9.185			5.720	
13	• •		• •		-99130	9.802			5-053	
14	• •	• • •	• •		1.01936	10.456			4.340	
15	• •		• •		-04739	11.153	1		3.579	
16	• •		• •		-07553	11.900			2.768	
17	• •	l		٠.	-10388	12.702			1.905	
18	••		• •	1	·13243	13.565			-984	

6 PER CENT.

No. 6.—Old Rules. Sons' and Daughters' Benefits. Value of £300 at Age 19.

Age m.	Log. D ₁₉ - Log. D _m .	Value of Endow- ment of £1 at Age 19.	Value of Endow- ment of £300 at Age 19.
0	T-33931	·218 4 3	65-529
1	.43332	.27122	81.366
2	.48628	·30640	91.920
3	.52653	·33615	100-845
4	56237	·36507	109.521
5	59543	·3939 4	118-182
6	62691	·42356	127.068
7	65719	·45414	136-242
8	68657	·48593	145.779
9	71565	-51958	155.874
10	.7 44 72	-55555	166-665
11	77348	-59358	178.074
12	80191	·6337 4	190-122
13	'83011	-67626	202-878
14	`85817	-72139	216-417
15	88620	·76948	230.844
16	91434	·82099	246-297
17	'94269	·87638	262.914
18	·97124	-93592	280-776

6 PER CENT.

No. 8.—Old Rules. Sons and Daughters. Value of Total Benefits if Mother is Living.

Age sa.	(1) Value of £100 Annuity till Age 19.	(2) Value of £50 Annuity till Age 10.	(3) Value of £20 Annuity till Age 6.	(1) (2) + (3)	Value of £300 at Age 19.	Total Value of Benefits, if Mother Living.	Ditto at Mean Age m + t.	Total with Increase £20 to Age 6, and £30 Age 6 to 10, after Mother's Death.	Log. ditto.
	(1)	(2)	(3)	(4)					
0	875-6	301.8	84.0	489-8	65.5	555-3	604.7	611.7	2.78654
1	969-1	315.7	80.7	572.7	81.4	654-1	680-1	686-8	-83683
2	985.0	301.7	69.2	614-1	91.9	706-0	724.3	730.2	·86344
3	973-8	277-6	54.5	641.7	100.8	742.5	758-5	763-4	·88275
4	950.7	248.0	37.8	664.9	109.5	774-4	789-1	793.0	89927
5	920.0	214.7	19.7	685-6	118-2	803-8	818-2	821.0	·91434
6	883-5	178-0	• •	705.5	127-1	832-6	836-3	838-2	·92335
7	841.9	138-2	• •	703.7	$136 \cdot 2$	839-9	843-1	844-1	·92639
8	795-6	95.2	• •	700-4	145.8	846.2	849-3	849.7	-92927
9	745-6	49-2	••	696-4	155.9	852-3	855.5	855-6	·93227
10	691.9	••	• •	691.9	166.7	858-6	830.5		·9193 4
11	634.2	••	• •	634.2	178-1	812-3	787.2	••	·89609
12	572.0	••	••	572.0	190-1	762-1	735-2	1	·86641
13	505-3	••	• •	505.3	$202 \cdot 9$	708-2	679-3	••	-83206
14	434.0	••	••	434.0	216.4	650-4	619-6	••	·79211
15	357.9	••	••	357.9	23 0·8	588-7	555-9		·74500
16	276.8		• •	276.8	2 4 6·3	523-1	488-3	••	·688 69
17	190.5		• •	190.5	$262 \cdot 9$	453-4	416.3	••	·61941
18	98.4	••	• •	98.4	280.8	379-2	339.6	••	-53097
19		••	• •		300-	300-	• •	••	• •

6 PER CENT.

No. 9.—Old Rules. Sons and Daughters. Value of Total Benefits if both Parents are Dead.

Age	Value of £30 Annuity on Age 0 to 10.	Value of £10 Annuity on Age 0 to 6.	Total Value of Increased Pension. (1) (2)	Value of Ditto at Mean Age $m + \frac{1}{2}$ = $p_{m+\frac{1}{2}}$	Log. of $p_{m+\frac{1}{2}}$	Value of Total Benefits if both Parents are Dead.
	(1)	(2)	(3)	(4)	(5)	(6)
0	181-1	42.0	139.1	144-1	2.15866	748-8
1	189-4	40.3	149-1	147.8	·16967	827.9
1 2 3	181-0	34.6	146-4	142.8	·15473	867-1
3	166-5	27.3	139-2	13 4 ·6	·12905	893-1
4 5	148.8	18-9	129.9	124.5	•09517	913-6
5	128.8	9.8	119.0	112.9	·05269	931-1
6	106-8	••	106.8	94.9	1.97727	931· 2
7	82.9	••	82.9	70.0	·84510	913-1
8 9	57.1	• •	57.1	43.3	-63649	892.6
9	29.5	••	29.5	14.8	·17026	870-3

6 PER CENT.

No. 7.—Old Rules. Sons and Daughters. Value of Increase of Pension £20 till Age 6, and £30 from Age 6 till 10, after Mother's Death. (From Neison, Table VI.)

	ge. + 28	Log. d _{m+28} . s _m . v ^{m+28} .	Ditto + Log. pm + 1.	Nat. No of Ditto. = Pm	K m Sum of Ditto.	Log. of Km.	Log. Dm. m + 28.	Log. K m D m. m + 28	Value of Increase on Pension.	Ditto at Mean Age. m+t
0	28	7.04164	9-20030	158599-	824029-	9.91594	9-07628	0.83966	6.913	6-957
i	29	6.97057	·14024	138115.	665430.	·82310	8.97792	-84518	7.001	6.667
2	30	92804	∙08277	120996	527315.	·72207	.92052	-80155	6.332	5.871
3	31	-89348	.02253	105325.	406319	·60887	-87576	•73311	5.409	4.904
4	32	-86179	8.95696	190565	300994	·47856	83532	·64324	4.398	3.876
5	33	·83159	-88428	76609	210429.	-32311	·79757	.52554	3.354	2.836
6	34	-80276	·78003	60260	133820-	·12652	·76134	-36518	2.318	1.850
7	35	•77497	-62007	41674	73560	·86664	·72622	.14042	1.382	1-015
8	36	·74638	-38287	24147.	31866-	•50333	-69193	-81140	·648	·40 9
	37	•71731	7.88757	7719-	7719.	·88756	-65758	-22998	·170	-085

6 PER CENT.

No. 10.—Husband and Wife. D and N Columns and Joint Life Annuity. (From Neison, Tables II. and III.)

m. A	ge. 26 – 7.	Log. Dm. m - 7 = Log. lm. lm - 7.	Dm.m-7.	Log. N m . m - 7.	Log. N m . m - 7.	$\log \left(\frac{N_{m+m-7}}{D_{m+m-7}}\right)$	Value of Joint Lift Annuity.
20	13	7.84141	69408-	771723.	8-88746	1.04605	11.119
21	14	80822	64301	707422	-84968	-04146	11.002
22	15	.77441	59485	647937	-81153	-03712	10.892
23	16	-73996	54949	592988	•77305	•03309	10.792
24	17	·70532	50736	542252	.73420	-02882	10.686
25	18	-67026	46802	495450	69500	-02474	10.586
26	19	-63479	43131.	452319	65544	-02065	10.487
27	20	-59918	39736-	412583	.61551	-01633	10.383
28	21	-56323	36579	376004	.57519	-01196	10.279
29	22	-52713	33661.	342343	·53446	∙00733	10.170
30	23	·49057	30944.	311399-	·49332	-00275	10.064
31	24	·45386	28435.	282964	· 4 5173	0.99787	9.951
32	25	·41698	26120.	256844.	·40967	•99269	9.833
33	26	·37982	23978.	232866	-36711	∙98729	9.712
34	27	·3420 4	21981.	210885	.32405	-98201	9.594
35	28	·30385	20130.	190755	.28048	·97663	9.476
36	29	·26524	18418.	172337	.23638	.97114	9.357
37	30	·22618	16834.	155503-	.19174	∙96556	9.238
38	31	·18665	15369.	140134.	.14654	·95989	9.118
39	32	·14653	14013.	126121.	.10079	·95 42 6	9.000
40	33	·10591	12762.	113359.	.05446	94855	8.883
41	34	·06471	11607.	101752.	.00754	·94283	8.767
42	35	•02269	10536.	91215.9	7.96007	93738	8.657
43	36	6.98011	9552.3	81663.6	.91203	.93192	8.549
44	37	·93667	8643.1	73020.5	.86344	.92677	8.448
45	38	89264	7809.8	65210.7	.81432	92168	8.350
46	39	·84773	7042.6	58168-1	.76468	91695	8.259
47	40	-80261	6347.6	51820.5	.71450	.91189	8.164
48	41	•75709	5716.0	46104.5	.66374	-90665	8.066
49	42	•71118	5142.6	40961.9	.61238	•90120	7.965
50	43	•66526	4626.6	36335.3	.56033	·89507 ·88844	7.854 7.735
51 52	44	•61908	4159.9	32175.4	.50752 .45384	·880×5	7.601
52 53	45	57299	3741.0	28434.4	.39920	87264	7.458
54	46	·52656 ·47991	3361.7 3019.3	25072.7 22053.4	.34348	86357	7.304
55	47 48	6.43296	2709.9	19343.5	.28654	·85358	7.138
56	49	38552	2429.5	16914.0	.22825	84273	6.962
57	50	33716	2173.5	14740.5	.16851	83135	6.782
58	51	28799	1940.8	12799.7	.10720	.81921	6.595
59	52	23751	1727.9	11071.8	.04422	80671	6.408
60	53	18589	1534.2	9537.6	6.97944	79355	6.217
61	54	13292	1358-1	8179.5	.91273	.77981	5.023
62	55	07845	1198.0	6981.5	84395	.76550	5.828
63	56	02233	1052.8	5928.7	.77296	-75063	5.632
64	57	5.96444	921.38	5007.3	.69960	.73516	5.435
65	58	90467	802.92	4204.4	.62370	.71903	5.236
66	59	·84285	696.39	3508.0	•54506	.70221	5.037
67	60	•77888	601.01	2907.0	·46345	-68457	4.837
68	61	·71248	515.80	2391.2	·37862	.6661 4	4.636
69	62	64343	439-98	1951-2	·29030	-64687	4.435
70	63	·57145	372.78	1578-4	.19822	-62677	4.234
71	64	· 4 9629	313.54	1264.9	·10206	-60577	4.034
72	65	·41768	261.63	1003.28	-00143	-58375	3.835
73	66	·33517	216.36	786-92	5.89593	·56076	3.637
74	67	·2 4 839	$177 \cdot 17$	609.75	.78515	-58676	3.442
75	68	15686	143.50	466-25	-66862	-51176	3.249
76	69	.06010	114.84	351.41	-54581	-48571	3.060
77	70	4.95690	90.553	260.86	·41641	-45951	2.881
78	71	*84735	70·364	190.50	.27990	43255	2.707
79	72	·73090	53.815	136.68	.13571	-40481	2.540

No. 10 (continued).

m.	Age. m — 7.	Log. D_{m} $\cdot m - 7$ = Log. b_{m} $\cdot b_{m} - 7$ v^{m} .	D _m , _m = 7.	Log. N 7.	Log. N m . m - 7.	$\log \left(\frac{N_{m \cdot m - 7}}{D_{m \cdot m - 7}} \right)$	Value of Total Life Annuity.
80	73	-60688	40-446	96-235	4.98333	·376 1 5	2.379
81	74	·47 4 56	29.824	66.411	·8222 4	·34768	$2 \cdot 227$
82	75	-33420	21.587	44.824	·65151	-31731	2-076
83	76	-18386	15.271	29.553	·47060	·28674	1.935
84	77	-02367	10.560	18-993	-27859	25492	1.799
85	78	3.85261	7.1221	11.870	.07487	-22226	1.668
86	79	-66952	4.6722	7.1990	3.85727	-18775	1.541
87	80	•47292	2.9711	4.2279	•62612	·15320	1.423
88	81	-26352	1.8345	2.3934	·37901	-11549	1.305
89	82	-03783	1.0910	1.3024	·11474	-07691	1-194
90	83	2.79630	-62561	-67682	2.83047	-03417	1.082
91	84	-53709	·34442	33240	·52166	T-98457	-965
92	85	-25766	·18099	15141	·18015	-92249	-837
93	86	1.95082	-089294	06212	1.79323	-84241	-696
94	87	-60550	·040318	.02180	-33846	·73296	-541
95	88	-20937	·016195	-00561	·74863	-53926	·346
96	89	0.74863	-0056057		. 1000	-5020	210

6 PER CENT.

No. 11.—Old Rules. Wives' Reversionary Benefits. Value of Annuity after Husband's Death to Wife till Re-marriage or Death.

Ag	-	Log. d _{m.} s _{m-7.v} m.	Log. P = -7.	(1) + (2).	Natural No. of Ditto P m ÷ 100.	Km. = Pm + Pm + 1	Log. Km.	Log. (Km. 1/m.m-7)	Value of lieversion- ary Annuity to Wife after
		F 01174		C 00557		1400107	0 17990	0.33181	Husband's Death. 2.147
20 21	13 14	5.91174 -92493	0.99383 -97841	6.90557 .90334	80495· 80046·	1490107- 1409612-	8·17322 ·14910	34088	2.192
22	15	91233	•96581	-87814	75528-	1329566-	.12371	·34930	2.235
23	16	-89958	·95766	·85734	72001	1254038-	∙09831	∙35835	2.282
24	17	∙87787	·95578	·83365	68179	1182037	•07263	36731	2.330 2.380
25	18	·85522 ·82637	·96190	·81712 ·79894	65633	1113858	7·02046	→37657 →38567	2.430
26 27	19 20	•79737	•97257 •98318	·78055	629 1 2·	1048225 985283	99356	39438	2.480
28	21	·76834	•99344	.76178	57780-	924951	-96612	·40289	2.529
29	22	·74508	1.00312	·74820	56002	867171	·93810	·41097	2.576
30	23	-71598	·01212	·72810	53469	811169-	•90911	·41854	1.621 2.665
31 32	24 25	·68614 ·66349	.01995	·70609 ·68978	50826· 48953·	757700- 706874-	·87950 ·84934	·42564 ·43236	2.706
33	25 26	·63335	·02629 ·03157	-66492	46230	657921	-81817	43835	2.744
34	27	-60286	-03611	-63897	43548	611691	·78653	44449	2.783
35	28	-57297	-04013	•62210	41889-	568143-	·75446	·45061	2.822
36	29	•54230	·04427	•58657	38598	526254	•72120	·45596 ·46193	2.857 2.897
37	30 31	·51162 ·48585	·04883 ·05354	·56045 ·53939	36345· 34625·	487656. 451311.	·68811 ·65448	46783	2.937
39	32	·45506	-05824	-51330	32606-	416686-	-61981	•47328	2.973
40	33	-43603	-06266	·49869	31528-	384080.	-58442	·47851	3.010
41	34	•41594	·06655	•48249	30373	352552	•54722	·48251	3.037
42	35	·39359 ·37066	•06978	·46337 ·44291	29065· 27727·	322179. 293114.	·50810 ·46704	·48541 ·48693	3.058
43	36 37	34510	·07225 ·07390	•41900	26242.	265387	•42388	·48721	3.071
45	38	-31905	-07471	∙39376	24761.	239145	·37866	·48602	3.062
46	39	.27640	.07441	•35081	22429.	214384	·33119	•48346	3.044
47	40	-23126	·07309	·30435	20153-	191955	28320	·48059 ·47794	3.024
48	41 42	·19162 ·13127	•07089	·26251 ·19920	18302· 15820·	171802. 153500.	·23503 ·18611	47493	2.985
50	43	07695	·06793 ·46431	14126	13844	137680	13890	·47364	2.976
51	44	-01955	-06013	-07968	12014.	123836-	∙09285	·47377	2.977
52	45	4.96641	-05545	.02186	10516.	111822.	•04858	·47554	2.989
53	46	91845	-05046	5.96891	9309-1	101306	·00564 6·96377	·47906 ·48386	3.013 3.047
54 55	47 48	·87441 ·83488	·04536 ·04029	·91977 ·87517	8313·2 7501·9	91996-5 83683-3	92264	48968	3.088
56	49	-79927	-03563	-83490	6837.5	76181-4	-88185	·49633	3.136
57	50	-76889	.03161	·80050	6316-8	69343.9	-84101	•50385	3.190
58	51	·74079	.02792	•76871	5871.0	63027.1	75700	·51154 ·51955	3·247 3·308
59	52	·71906 ·69278	·02424	·74330 ·71289	5537·3 5162·9	57156·1 51618·8	·75706 ·71281	•52692	3.364
60	53 54	-67102	·02011 ·01570	68672	4860.9	46455.9	•66703	-53411	3.421
62	55	·64816	01127	-65943	4564.9	41595.0	•61904	• 54 059	3.472
63	56	•62316	·00634	•62950	4260-9	37030-1	•56855	-54622	3.517
64	57	-59690	-00061	59751	3958-3	32769-2	·51547 ·45956	·55103 ·55489	3.557 3.588
65	58 59	·56837 ·53713	0.99352 -98516	·56189 ·52229	3646·6 3328·8	28810·9 25164·3	•40078	.55793	3.614
66	60	•50506	98516	·48072	3025.0	21835.5	·33916	56028	3.633
68	61	·47160	96511	·43671	2733.4	18810-5	•27440	·56192	3.647
69	62	·43581	·95376	-38957	2452.3	16077-1	20621	•55278	3.654
70	63	39719	•94176	-33895	2182.5	13624-8 11442-3	·13433 ·05851	·56288 ·56222	3.655 3.649
71	64 65	·35552 ·31123	.92932 .91635	·28484 ·22758	1926·8 1688·8	9518-5	5.97843	•56075	3.637
72 73	66	26379	90293	16672	1468-0	7826-7	·89358	-55841	3.618
74	67	·21235	-88902	-10137	1262.9	6358.7	·80337	•55498	3.589
75	68	15597	-87454	-03051	1072-8	5095-8	·70721 ·60455	-55035 -54445	3.551 3.503
76	6 9	∙09310	·8 5 950	4.95260	896-60	4023.0	.00200		9.009
		1	1	1	1	1	•	E	ı

No. 11 (continued).

A.	ge m – 7.	Log. d _{m.} s _{m-7.v} m.	Log. P = -7.	(1) + (2).	Natural N°. of Ditto P m + 100.	Km. = P m + P m + 1	Log. Km.	Log. (Km Dm.m-7)	Value of Reversion ary Annuity to Wife after Husband's Death.
77	70	.02514	·84398	-86912	739-81	3126-40	-49504	-53814	3-453
78	71	3.94798	-82795	·77593	596-94	2386-59	-37778	-53043	3.392
79	72	-86482	·81137	·67619	474-45	1789-65	·25277	-52187	3.326
80	73	·77184	·79428	·56612	368-23	1315-20	-11899	-51211	3.252
81	74	-67073	-77670	·44743	280.18	946. 97	4.97634	-50178	3.175
82	75	·56004	·75868	⋅31872	208-31	666.79	-82399	·48979	3.089
83	76	·44032	·74005	·18037	151.49	458-48	·661 32	·47746	3-002
84	77	·30787	·7211 5	∙02902	106.91	306-99	-48712	·46345	2.907
85	78	·16442	·70191	3.86633	73.507	200.076	-30268	·45007	2.819
86	79	-00879	·6823 3	-69112	49-104	126.569	·10233	-43281	2.709
87	80	3.83785	⋅66266	· 5 0051	31.660		3 ·88911	-4 1619	2.607
88	81	-65238	$\cdot 64256$	·29494	19.722	45.805	-66091	39739	2.497
89	82	·44750	$\cdot 62232$	-06982	11.744	26-083	· 4 1636	·37853	2.391
90	83	·22834	· 6 01 73	2.83007	6.7619	14.3390	·15652	·36022	2.292
91	84	1.98339	·58081	-56420	3-6661		2.87950	·34241	2.200
92	85	·74171	·559 7 9	-30150	2.0022	3.9110	59229	·33463	2.161
93	86	· 4 8972	·538 4 5	-02817	1.0670	1.9088	·28076	·32994	2.138
94	87	·20286	·51720	1.72006	-524 88	•8 4 177	1.92519	-31969	2.088
95	88	0.86077	· 4 9596	·35673	.22737	·31689	•50091	·29154	1.957
96	89	·47697	·47 491	0.95191	-08952	-08952	0.95192	·20329	1-597

6 PER CENT.

No. 12.—Old Rules. Sons' and Daughters' Reversionary Benefits. Value of Reversionary Benefits till Age 19, after Father's Death.

	n + 35.	Log. d_{m+35}	Ditto $+ \log$. $p_m + \frac{1}{4}$.	= P m. + 100,000.	K m = Pm + Pm+1	Log. of Ditto.	Log. Dm.m+85.	Log. Km Dm.m+35	Value of Reversion- ary Benefits to Sons and Daughters.	Ditto at Mean Ages m + 1.
0	35	7.24950	10.03604	108653	1272961	11-10481	9.01093	2.09388	124-1	133-9
1	36	·17488	-01171	102733.	1164308.	-06607	8.90874	·15733	143.7	147-3
2	37	-12841	9.99185	98141.	1061575-	-02595	.84742	·17853	150.8	152-0
3	38	-09562	·97837	95142.	963434	10.98382	·79866	-18516	153-2	153-1
4	3 9	-06173	·96100	91411.	868292	·93867	.75402	·18465	153.0	151-9
5	40	-04235	·95669	90509.	776881	·89035	71197	-17838	150.8	148-6
6	41	-02315	·94650	88410.	686372	-83656	-67103	·16553	146.4	143-2
7	42	· 0 0308	•92947	85010.	597962	.77667	·63080	·14587	139.9	135.7
8	43	6.98311	·91238	81730.	512952.	·71008	-59101	·11907	131.5	126-4
9	44	·96134	·89 3 61	78273.	431222	·63470	·55094	∙08376	121.3	115-1
10	45	·93915	·858 1 9	72 192.	352949	-54771	·51061	-03710	108.9	102-0
11	46	·90103	·79712	$62679 \cdot$	280757	·44833	·46999	1.97834	95.1	88-1
12	47	·86084	·72 72 5	53364.	218078	·33861	·42963	·90898	81-1	74.2
13	48	·81803	·65009	44678•	164714.	.21673	-38952	·82721	67.2	60.5
14	49	·77277	-56488	36718.	120036	-07931	·34961	·72970	53.7	47-3
15	50	·72 1 97	·46997	29510.	83318.	9.92074	-30988	·61086	40⋅8	34.9
16	51	·67384	·36253	23043.	53808.	·73085	·27026	·46059	28.9	23.5
17	52	-62755	·24696	17659-	30765.	-48806	.23072	·25734	18-1	13.3
18	53	·58651	·11748	13106.	18106-	-11747	·19116	0.92631	8-4	4.2

6 PER CENT.

No. 14.—Old Rules. Daughters on the Subsidiary Fund under Age 19. Value of Increased Benefits over Donation at Age 19 after Father's Death.

A; PL N	ges s + 35.	Log. + Dm.m + 35. by Tables V, and II.	Log. D 19.54 + Log. 269.6 11.33557. less Col. (1).	Value of Subsidiary An- nuity of £100 a Year if laughter Un- married at 19, and Father then Living.	Value of Excess over £300 Donation if Daughter Un- married at 19, and Father then Dead.	Total Increase of Value under the Subsidiary Rules.	Ditto at Mean Age
0	35	9.89664	1.48893	30.8	41.6	72.4	80.7
ĭ	36	·79444	•59113	39.0	50.0	89.0	94.2
2	37	·73313	·652 14	44.9	54.5	99-4	103.6
3	38	·68 1 36	·70121	50.3	57.5	107⋅8	111.7
4	39	-63973	·74584	55.7	59.9	115.6	119.4
5	40	-59767	·78790	61.4	61.7	123-1	126.7
6	41	·55673	-82884	67.4	62.9	130-3	134.0
7	42	·51651	·86906	74.0	63-6	137.6	141.2
8	43	·47671	·90886	81-1	63-6	144.7	148-3
9	44	·43665	·94892	88-9	62.9	151.8	155-4
10	45	-39631	·98 92 6	97.6	61.3	158.9	162.4
11	46	-35570	2.02987	107-1	58.8	165.9	169.5
12	47	·31534	·07023	117-6	55· 4	173-0	176∙5
13	48	·27522	·11035	128.9	51.0	179-9	183· 4
14	49	·23532	·15025	141.3	45 ·5	186-8	191 ·4
15	50	·19118	·19 4 39	156.5	39 · 4	195-9	201-6
16	51	·14274	·2 1 283	174.9	32.3	207.2	214.9
17	52	·08762	· 297 95	198.6	24.0	222 ·6	232.7
18	53	·02561	· 3 5996	229-1	13.6	242.7	256-2
19	54	• •	••	269.6	• •	269-6	• •

Age m.	(l ₀₄ — l _{01 + 25})	Log. of Ditto.	Log. D 19 =4 25702 + Col. (2).	Log. (D m, m + 86.)	(3) - (4) + Log. 2.79741.	Value of Increase by the Annuity above the ±300 Ponation if Daughter Unmarried at 19, and Father then I lead.
	(1)	(2)	(3)	(4)	(5)	(7)
0	28952	4-46168	8.71870	9.89664	1.61947	41.6
	27479	·43900	-69602	.79444	-69899	50.0
1 2 3 4 5	26006-	·41507	·67209	•73313	·73637	54.5
3	24532	-38973	·64675	-68436	·75980	57.5
ă.	23040-	·36248	·61950	-63973	·77718	59.9
5	21546.	·33337	·5903 9	-59767	·79013	61.7
6	20007	·30118	·55820	-55673	·79888	62⋅9
6 7	18426.	·26543	-52245	-51651	·8033 5	63-6
8 9	16809•	·2255 4	·48256	·47671	·803 2 6	63.6
9	15157-	·18061	· 4 3763	·43665	• 7 98 39	62.9
10	13477-	·12959	-38661	•39631	·78771	61.3
11	11771-	·07081	·32783	·35570	·7695 4	58-8
12	10102∙	·00 44 1	·26143	·31534	·74350	55-4
13	8478-	3.92829	·18531	·27522	·70750	51.0
14	6908-	·83935	·096 37	·23532	·658 4 6	4 5·5
15	5399•	·73231	7.98933	·19118	•59556	39.4
16	3957∙	·59737	·85439	·14274	•50906	32.3
17	2589	· 41313	-67015	∙08762	•37994	24.0
18	1276-	·10585	∙36287	-02561	13467	13.6

6 PER CENT.

No. 15.—Old Rules. Daughters on Subsidiary Fund, above Age 19. Value of Survivorship Annuity after Father's Death.

Age m.	Log. $o^{m+30} \cdot d_{m+35}.$ $s_m \cdot p_{m+\frac{1}{2}}.$	Pm ÷ 1000.	Km. = Pm + Pm + 1	Log. Km.	$\binom{\text{Log.}}{\binom{K}{m \cdot m + 35}}$	Value of Reversionary Annuity.	Value of £100 per Annuat Age m+1.
19	7.42515	26616-	316127	8-49987	0.43074	2.696	279.8
20	·37438	23680	289511	·46166		2.899	300-8
		21343.		·42460	•46219		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
21	•32925	19514.	265831 · 244488 ·	·38826	·49357	3.116	323.1
22	•29034			·35212	·52440	3.345	346.4
23	-25579	18021-	224974		·55423	3.583	370-5
24	-22589	16823-	206953-	·31587	·58284	3.827	394.7
25	·19853	15795	190130-	·27905	∙60920	4.066	418.5
26	-17373	14919.	174335	•24140	·63374	4.303	442.0
27	-14880	14086-	159416	·20254	·65671	4.536	465.8
28	·12257	13261.	145330	·16236	•67929	4.779	489-2
29	-09600	12474.	132069-	·12080	·699 11	5.005	512-9
30	-06808	11697.	119595	.07773	·720 1 2	5.253	538.2
31	·03844	10925	107898	.03302	·74112	5 ·510	564-1
32	•00903	10210	96973	7.98665	·76136	5.772	590-5
33	6.97930	9534.5	86763.	•93833	·78085	6.037	616-9
34	·9 1 829	8877.5	77229	·88778	·79931	6.300	642.7
35	·91560	8233.8	68351	·83474	·81645	6.553	667.5
36	-88096	7602-6	60117-	·77900	·83224	6.796	691.0
37	·8 14 82	6995.5	52514.	·72028	-84660	7·024	713-1
38	·80671	6 4 07·8	45519.	·65819	-85960	7.238	733-3
39	·76563	$5829 \cdot 5$	39111.	•59230	·87086	7.428	751-1
40	•72090	5259-0	33281.	•52220	·88042	7.593	766-4
41	-67165	$4695 \cdot 2$	28022.	·44750	·88839	7·73 4	779-4
42	-61799	4149· 4	23327.2	·36786	·89502	7.853	790-2
43	-55818	3615.6	19177.8	·28280	•90039	7.950	799-1
44	·49256	3108-6	15562.2	·19207	-90477	8.031	806-3
45	·42094	2636-0	12453.6	4.09531	-90815	8.094	811.2
46	-34172	2196· 4	9817.6	6.99200	-91069	8.130	815-6
47	•25565	1801.6	7621.2	·88202	•91278	8-181	819-8
48	·16271	1454.5	5819.6	.76489	•91463	8.215	823-0
49	•06097	1150.7	4365.1	•63999	91620	8.245	826.7
50	5.95169	894.73	3214.4	.50710	•91847	8.288	830-4
51	-83283	680.50	2319.7	-36543	•92075	8-319	834.7
52	•70362	505.38	1639.2	-21463	-92292	8.374	839-2
58	-56387	363-49	1133.86	6.05457	·92481	8.410	842.6
54	•41484	259.92	768.37	5-88557	•92639	8.441	845.4
55	25273	178-95	508.45	·70625	•92771	8.467	848.7
56	-08005	120.23	329.50	-51786	92972	8.506	853.7
57	4.91349	81.939	209.272	-32071	•93283	8.567	860.2
58	74276	55.304	127.333	10493	93636	8.637	865-1
59	-55035	35.510	72.029	4.85751	93775	8.665	963.9
60	30932	20.385	36.519	•56252	93517	8.613	860-2
61	·01398	10.327	16.134	20774	93407	8.592	856-1
62	3.62950	4.2609	5.8074	3.76398	•93102	8·531	835.5
63	·10227	1.2655	1.5465	18935	·93102 ·91273	8.180	802.4
64	2.44869	·28099	28099	2.44869	·91275 ·89585	7·868	812-1
65	2.44809	•20033	.20099	2.44009		8.373	812-1
w	•••	• •	• • •		••	0.919	

6 PER CENT.

No. 16.—New Rules. Widows' Pensions. Value of Life Annuity, payable Half-yearly, in Advance, but reducible to one-half on Re-marriage.

Age m.	Value of Half Annuity till Death.	Value of Half Annuity till Marriage or Death.	Sum of Ditto.	Value of Annuity at Mean Age m+1.	Age m.	Value of Half Annuity till Death.	Value of Half Annuity till Marriage or Death.	Sum of Ditto.	Value of Annuity at Mean Age m+ 1.
13	7.428	5.024	12.452	12-343	57	5-122	5.043	10.165	10.075
14	7.398	4.835	12.233	12.140	58	5.014	4.971	9.985	9.885
15	7.366	4.680	12.046	11.972	59	4.904	4.881	9.785	9.680
16	7.334	4.563	11.897	11.855	60	4.791	4.783	9.574	9.461
17	7.304	4.509	11.813	11.806	61	4.675	4.673	9.348	9.230
18	7.275	4.524	11.799	11.840	62	4.556	4.556	9.112	8.990
19	7.245	4.636	11.881	11.926	63	4.434	4.434	8.868	8.745
20	7.219	4.752	11.971	12.015	64	4.311	4.311	8.622	8.498
21	7.191	4.868	12.059	12.102	65	4.187	4.186	8.373	8.248
22	7.163	4.982	$12 \cdot 145$	12.185	66	4.062	4.062	8.123	7.997
23	7.134	5.091	$12 \cdot 225$	12.262	67	3.936	3.935	7.871	7.745
24	7.104	5.193	$12 \cdot 297$	12.325	68	3.809	3.809	7.618	7.491
25	7.075	5.277	12.352	12.371	69	3.682	3.681	7.363	7.236
26	7.043	5.347	12.390	12.405	70	3.555	8.554	7.109	6.982
27	7.012	5.407	12· 4 19	12.430	71	3.428	3.427	6.855	6.729
28	6-980	5.460	12·440	12.448	72	3.302	3.300	6.602	6.477
29	6.947	5.509	12.456	12.467	73	3.176	3.175	6.351	6.227
30	6.912	5.565	12-477	12.490	74	3.052	3.051	6.103	5.980
31	6.877	5.625	12.502	12.514	75	2.928	2.929	5.857	5.737
32	6.838	5.687	$12 \cdot 525$	12.538	76	2.808	2.808	5.616	5.496
33	6.803	5.748	12.551	12.559	77	2.688	2.688	5.376	5.262
34	6.763	5.804	12.567	12.571	78	2.574	2.574	5.148	5.034
35	6.722	5.852	12.574	12.573	79	2.460	2.450	4.919	4.812
36	6.680	5.891	12.571	12.564	80	2.353	2.352	4.705	4.599
37	6.638	5.919	12.557	12.541	81	2.247	2.246	4.493	4.391
38	6-588	5.986	12.524	12.502	82	2-145	2.144	4.289	4.191
39	6.539	5.941	12.480	12.448	83	2.046	2.046	4.092	3.997
40	6.487	5.928	12-415	12.373	84	1.951	1.950	3.901	3.809
41	6.426	5.905	12.331	12.287	85	1.858	1.858	3.717	3.629
42	6.374	5.869	12-243	12.190	86	1.770	1.770	3.540	3.455
43	6.313	5.824	12.137	12.079	87	1.685	1.685	3.379	3.290
44	6.249	5.772	12.021	11.958	88	1.605	1.604	3.209	3.133
45	6.182	5.713	11.895	11.828	89	1.529	1.528	8.057	2.985
46	6.112	5.649	11.761	11.691	90	1.457	1.456	2.913	2.846
47	6.038	5.583	11.621	11.550	91	1.389	1.389	2.778	2.714
48	5.961	5.518	11.479	11.407	92	1.325	1.324	2·649	2.586
49	5.881	5.454	11.335	11.267	93	1.262	1.261	2.523	2.461
50	5.798	5.401	11.199	11.132	94	1.199	1.200	2.399	2.333
51	5.711	5.354	11.065	10.998	95	1.133	1.133	2.266	2.193
52	5.621	5.310	10.931	10.861	96	1.060	1.059	2.119	2.030
53	5.527	5.264	10.791	10.716	97	•970	-970	1.940	1.819
54	5-430	5.210	10.640	10.564	98	-849	-848	1.697	1.516
55	5.329	5.159	10.488	10.410	99	-668	-667	1.335	1.043
56	5.227	5.104	10.331	10.248	H	1	1 i		1

6 PER CENT.

No. 17.—New Rules. Sons' Benefits. Value of Temporary Annuity till Age 6, 10, and 21.

Age m.	Log. D ₂₁ + a ₂₁ + ·750 = 4 · 43929 - Log. D _m .	Value of Annuity after 21.	Value of Temporary Annuity till Age 21.	Value of Temporary Annuity from 6 till 21.	Value of Temporary Annuity from 10 till 21.	Value of Temporary Annuiry till Age 5.	Value of Temporary Annuity til Age 10.
0	0.43929	2.750	9.172	4.972	3.136	4.200	6.036
1	-53330	3.414	10.208	6.174	3.895	4.034	6.313
2	-58626	3.857	10.434	6.975	4.400	3.459	6.934
2 3	-62651	4.232	10.378	7.652	4.827	2.726	5-551
4	-66235	4.596	10.202	8.310	5.242	1.892	4.960
5	-69541	4.959	9.951	8.968	5.657	•983	4.294
6	·72689	5.332	9.642		6.082	• •	3-560
7	·75717	5.717	9.284	• •	6.521	• •	2.763
4 5 6 7 8 9	·78655	6-177	8.882	••	6.978	• •	1.904
	·81573	6.542	8.447	••	7.463	• •	-984
10	·84470	6.994	7.977				ŀ
11	·873 1 6	7.472	7.473				
12	·90189	7.978	6.927				1
13	·93009	8.513	5.342	1			
14	∙95815	9.081	5.715	1			1
15	-98618	9.687	5.045				1
16	1.01432	10.335	4.333				1
17	·04267	11.032	3.575	Ì			1
18	-07122	11.782	2.767				1
19	·09998	12.589	1.901	-			T I
20	-12883	13.453	·98 5				

6 PER CENT.

No. 18.—New Rules. Sons' Benefits. Value of £300 at Age 21.

Age sa.	$Log. \begin{pmatrix} D_{21} \\ \overline{D}_{m} \end{pmatrix}$	Value of £1 Endowment at 21.	Value of £300 Endowment at 21.
0	T-28147	-1912	57.36
1	·37548	-2374	71.12
2	· 42844	-2682	80-46
3	· 4 6869	2942	88-26
4	·50453	·3195	95.85
5	· 537 59	·3448	103·4 4
6	·56907	-3707	111-21
7	·59935	-3975	119-25
8	·62873	·4253	127.59
9	·65791	· 4549	136-47
10	-68688	-4863	145-89
11	·71564	-5196	155-88
12	·7 44 07	·55 4 7	166-41
13	·77227	-5919	177.57
14	∙80033	-6314	189-42
15	82836	·673 5	202.05
16	·85650	·7186	215.58
17	·88485	.7671	230-13
18	·913 4 0	·8192	245.76
19	·9 42 16	-8753	262-59
20	·97101	·9354	280-62

6 PER CENT.

No. 19.—New Rules. Sons' Benefits. Value of £10 Annuity till Age 10.

Age.	Value of £10 Annuity till Age 10.	Ditto at Mean Age $m + \frac{1}{4}$ $= p_{m+\frac{1}{4}}.$	Log. of Ditto.
0	60.4	61-8	1.79099
1	63.1	61.7	·79029
2	60.3	57 ⋅9	·76268
3	55.5	52.6	.72099
4	49.6	46.3	-66558
5	42.9	39.3	-59439
6	35.6	31.6	· 4 9969
7	27.6	23.3	-36736
8	19.0	14.4	·15836
9	9.8	4.9	69020

6 PER CENT.

No. 20.—New Rules. Sons' Benefits. Value of Total Benefits if both Parents are Dead or Mother Re-married.

Age.	Value of £125 Annuity till Age 21.	Value of £65 Annuity till Age 10.	Value of £20 Annuity till Age 6.	(1) - (2+3)	Value of ±300 at Age 21.	Total Value of Benefits.	Value at Mean Age m+ 1/2.	Value of £10 a Year Increased Pension till Age 10, after Mother's Marriage or Death.	Value of Total Bene- fit if both Parents are Dead or Mother Re-married.
	(1)	(2)	(3)						
0	1146.5	392.3	84.0	670-2	57.4	727-6	791.9	61.8	853.7
ĭ	1276.0	410.3	80.7	785.0	71.2	856.2	889-8	61.7	951.5
2	1304.3	392.2	69.2	842.9	80.5	923.4	946.9	57.9	1004.8
3	1297.3	360.8	54.5	882.0	88.3	970.3	990.7	52.6	1043.3
4	1275-3	322.4	37.8	915.1	95.9	1011 0	1029.6	46.3	1076-1
5	1243.9	279-1	19.7	945.1	103.4	1048.5	1066-8	39.3	1106-1
6	1205-3	231.4	• •	978.9	111.2	1085-1	1092.7	31.6	1124.3
7	1160.5	179-6	• •	980.9	119.3	$1100 \cdot 2$	1107.2	23.3	1130-5
8	1110.3	123.8	• •	986.5	127.6	1114-1	1121.3	14.4	113:5-7
9	1055.9	64.0	• •	991.9	126.5	1128.4	1135-7	4.9	1140-6
10	997.1	••	• •	997.1	145.9	1143.0	1116.5	••	1116.5
11	934.1	••	• •	934.1	155.9	1090.0	1061.2	••	1061.2
12	865-9	l ••	• •	965.9	166.4	1082.3	1001.4		1001-4
13	792.8		• •	792.8	177.6	9 7 0·4	937-1	••	937.1
14	714.4		• •	714.4	189.4	903.8	868-3	•••	868.3
15	630-6	•••	• •	630.6	202-1	832.7	795.0	••	795∙0
16	541.6	••	• •	541.6	215.6	$757 \cdot 2$	717-1	••	717-1
17	446.9	••	• •	446.9	230.1	677.0	634.4		634.4
18	345.9	••	• •	345.9	245.8	591.7	546.0	••	546.0
19	232.6	••	• •	237.6	262-6	$500 \cdot 2$	452.0	••	452.0
20	123-1	••	• •	123.1	280.6	403.7	351.9		351.9
21	••	••	• •		300.0	300.0	• •	•••	• •

No. 21.—New Rules. Sons' Benefits. Value of Total Benefits if Mother Living and not Re-married.

Age m. m+28.	3 _{ms} . (d+μ) _{ms+23} . η m + 23.	Ditto + Log. pm+1	P _m . ÷ 10,000	Km. = Pm +Pm+1	Log, K _m .	Log. Dm.m+28.	Log. (K m. (Dm. m + 28.)	Value of Increased Pension.	Ditto at Mean Age m+t.	Total Value of Benefits if Mother Living, and not Re- married.
0 28	7-39326	9.18425	152845	613049	9.78750	8.79040	0.99710	9.933	9.805	801.7
1 29	-30341	.09370	124080	460204	-66295	-67719	-98576	9.677	9.013	898-8
2 30	·23396	8.99664	99229.	336124.	·52650	-60486	-92164	8.349	7.549	954.4
3 31	·16829	-88928	77496	236895	·37456	-54538	-82918	6.748	5.949	996-6
4 32	·10155	·76713	58497-	159399-	·20249	·49069	•71180	5.150	4.376	1034-2
5 33	·03268	-62707	42371	100902-	·00390	·44736	∙55654	3.602	2.992	1069-8
6 34	6.95849	·45818	28720	58531.	8.76739	-39040	-37699	2.382	1.867	1094-6
7 35	-88479	·25215	17871	29811.	·47438	·34364	·13074	1.351	-976	1108-2
8 36	-81088	7.96924	9316.	119 4 0-	.07700	·29881	T.77819	·600	·373	1121.7
9 37	-72875	·41895	2624.	2624.	7.41895	.25523	-16372	·146	-073	1135.8

6 PER CENT.

No. 23.—New Rules. Daughters' Benefits. Value of £300 Donation on Marriage.

Age m.	Log. l _m μ _m · υ ^m . From Grant XVI.	Pm. Natural Number of ditto.	K m. Sum of ditto, P m inclusive.	Log. Km.	Log. $\binom{K_m}{D_m}$	Value of £1 on Marriage.	Value of £300 on Marriage
0		• •	• •		T-05416	·11328	34.0
1	i				-14817	·14066	44.2
2	••		• •	• •	-20113	·15890	47.7
3		••	• •	• •	-24138	.17433	52.3
4	••		• •		.27721	·18933	56.8
5	••		• •	• •	·31028	·20431	61.3
6	••	••	• •	• •	-34176	·21866	65.9
7	••	•••	• •	• •	·37204	·23553	70.6
8	· • •	••	• •	•	·40143	·25202	75.6
9	••	••	• •	• •	·43060	·26953	80.9
10	••	••	• •	• •	·45957	·28812	86.4
11	• •	• •	• •	• •	·48833	·30784	92.4
12	••	• •	• •	• •	·51676	·32867	98.6
13		••	• •	• •	·54496	·35072	105.2
14	2.48115	302.8	11328-1	4.05416	·57302	37413	112.2
15	·74974	562.0	11025.3	.04239	•59367	·39235	117.7
16	.95582	903.3	10463.3	·01967	-60792	40543	121.6
17	3-06678	1116.2	9560.0	3.98046	·61265	· 4 0987	123.0
18	·15244	1420.5	8393.8	92396	•60715	·40472	121.4
19	.07425	1186.5	6973.3	·8 4344	-58643	·38586	115.8
20	2.99344	985.0	5786-8	·762 44	-56405	·36648	109.9
$\begin{array}{c} 21 \\ 22 \end{array}$	·91042	813.6	4801.8	·68140	·54021	·34690	104.1
23	·82563	669.3	3988.2	-60078	·51519	-32718	98.2
25 34	·73942	548-8	3318.9	•52099	·48932	-30855	92.6
25	·63712	433.6	2770.1	·44250	·46301	•29041	87.1
26 26	•54320	349.3	2336.5	-36857	·43879	•27466	82.4
27	·45811	287.2	1987.2	-29824	•41624	·26076	78.2
28	·38147	240.7	1700.0	·23045	·39478	·24819	74.5
29	·31272 ·27029	205.5	1459.3	·16414	•37374	•23645	70.9
30	·21029 ·21947	186.3	1253.8 1067.5	·09823	•35234	·22508	67.5
31	·16115	165-8 144-9	901.7	.02837	•32715	·21240	63.7 59.6
32	-09611	124.8	756·8	2.95506	•29838	·19878	55.4
33	02487	105.9	632.0	·87898	•26646	·18470	51·2
34	1.94380	87.6	526·12	·80072	•23177	·17052	47·0
35	-85912	72.30	438·26	∙72109 ∙64173	·19493 ·15735	·15665 ·14366	43.1
36	•77099	59·02	365.96	·56343	·11980	·13177	39.5
37	-67900	47.75	306-94	·48706	·08314	.12110	36.3
38	•58349	38.33	259-19	·41361	.04839	.11179	33.5
39	·46705	29.31	220.86	·41501 ·34414	01665	·10391	31·2
40	-35613	22·71	191.55	·28229	2.99137	.09803	29.4
41	25352	17.93	168-84	·28229 ·2 2747	97221	.09380	28.1
42	·16375	14.58	150-91	·17872	·95846	·09088	27.3
43	-08987	12.30	136-33	·13459	•94890	-08890	26.7
44	∙00991	10.23	124.033	.09353	.94216	∙08753	26.3
45	0.96302	9.184	113.795	·05614	·93884	∙08686	26.1
46	·94531	8-817	104-611	.01957	·93641	-08638	25.9
47	·94643	8.840	95.794	1.98134	·93253	∙08561	25.7
48	.95701	9.058	86.954	93929	•92528	-08419	25.3
49	1.02709	10.644	77.896	·89151	·91286	∙08182	24.5
50	·04412	11.069	67.252	·82770	·88568	.07686	23.1
51	·02838	10-675	56-183	·74960	·84507	.07000	21.0
52	0.98838	9.736	45.508	-65809	·79159	.06189	18.6
53	·92825	8.477	35.772	·55354	·72531	.05313	15-9
54	·88448	7.664	27-295	·43608	·64571	.04423	13.3
55	·81886	6.590	19-631	·292 94	·54115	-03477	10.4
56	·72213	5.274	13-041	·11581	·40220	.02525	7.6
57	•57384	3.748	7.767	0.89025	21569	01643	4.9
58	·30952	2.039	4.019	·60412	3.96762	00928	2.8
59 60	08224	1.208	1.980	·29667	-69730	·00 4 98	1.5
	1.76922	-5878	-7722	T·88773	·32534	.00212	. ∙6
61	·26583	·1844	·1842	T·26576	4.74030	·00055	.2

6 PER CENT.

No. 24.—New Rules. Daughters' Benefits. Value of Increased Pension £10 till Age 10, and £25 from 10 till Marriage or Death, after Mother's Marriage or Death.

Age m. m+28.	Log. 5 m. (d+\mu)m+28. v m +28.	Log. P 11 + 12 ·	(1) + (2).	Pus + 100000.	= P m + P m + 1	Log. Km.	Log. D m m — 58.	$\begin{pmatrix} Log. \\ \frac{Km}{Dm, m+28.} \end{pmatrix}$	Value of Increase of Pension to Daughter after Mother's Death or Marriage.	
0 28	7.39326	2.26221	9-65547	45235.	379652	10-57938	8.79040	1.78898	61.5	65-9
1 29	30341	.31112	61453	41165.	334417	•52429		-84610	70.3	71.6
2 30	-23396	.33706	-57102	37241	293252	·46724		-86238	72.8	72.9
3 31 4 32	·16829	-35488	-52317	33356-	256811	·40826		-86288	72.9	72.4
5 33	·10155 ·03268	.37014 .38382	41050	29627	222655	-34764		-85695	71.9	71.1
6 34	6.95849	·39672	41650	26092	193028	•28562		·84626	70.2	69-1
7 35	·88479	.40909	-35521 -29388	22657 · 19671 ·	166936 · 144279 ·	•22256		·83216	67.9	66.7
8 36	·81088	.42144	23232	17074.	124608	15920 09555		·81556	65.4	64.0
9 37	-72875	.43409	16284	14549.	107534	03153		77674	62.6	61.2
10 38	·66174	.43441	-09615	12478-	92985	9.96841		·77630 ·75554	59·7 57·0	57.6 55.6
11 39	·57834	-42160	8-99994	9998-6	80507	90583		-73414	54.2	53.1
12 40	·50226	·40756	90982	8125.0	70508	-84824		·71625	52.0	51.2
13 41	·43676	-39182	-82858	6738-8	62383	•79507		·70163	50.3	49.6
14 42	•37649	-37639	·75288	5660-9	55644	.74542	.05569	·68973	48.9	48.7
15 43 16 44	·32095	-36361	-68456	4836-8	49983		.01399	-68483	48.4	48.5
17 45	·25982 ·20530	·35564 ·35372	•61546	4125.3	45146		7.96801	-68661	48.6	49.3
18 46	·15369	-35984	·55902 ·51348	3622-6 3262-1	41021	-61300		-69769	49.9	51.1
19 47	·10498	-37051	.47549	2988-8	37398. 34136.	·57285 ·53321		•71737	52.2	54.0
20 48	-06305	-38111	44416	2780.7	31147.	•49342		-74657 -77400	55.8	57.7
21 49	·04615	-39146	·43763	2739.3	28366.	·45280		.77490 .80154	59.6 63.3	65.0
22 50	.01229	·40106	•41335	2590.3	25627.	·40870		82436	66.7	68.3
23 51	5.96598	· 4 0993	37591	2376.4	23037	36243		84419	69.9	71.3
24 52	·90921	·41780	32701	2123.3	20661.	-31515		-86182	72.7	74.1
25 53 26 54	·83441	·42406	25847	1813.3	18538-	-26806		.87740	75.4	76.8
27 55	•79853	-42943	•22796	1690.3	16725.	-22337		.89305	78.2	79.4
28 56	·74254 ·67980	·43393 ·43807	117647	1501.3	15035.	·17707		-90636	80.6	81.9
29 57	·60640	.44217	·11787 ·04857	1311.8 1118.3	13534. 12222.	-13143		.91935	83.1	84.4
30 58	.51717	· 11 669	7.96386	920.15	11104.0	-08714 -04548		•93282	85.1	87.3
31 59	·45467	·45133	90600	805.38	10183.8		·04053	.94858 .96739	88.8 92.8	90.8 95.0
32 60	·39736	·45606	·85342	713.54	9378-4		6.98470	·98743		99.5
33 61	·34867	·46060	·80927	644.57	8664.9	-83776		2.00825	101.9	104.5
34 62	31323	46464	·77787	599-61	8020-3	90419		.02927	107.0	109.6
35 63	•29192	•46776	-75968	575.02	7420.7	·87044	-82082	-04962	112-2	114.7
36 64 37 65	·26951	•47012	·73963	549.07	6845.7	·83542		-06861	117-1	119-6
38 66	·2 1 862 ·22799	·47173 ·47261	·72035	525.23	6296-6	· 7 9911		.08629		124.4
39 67	·20772	.47232	-70060 -68004	501.88 478.68	5771.4	·76128		.10259	126-7	128-9
40 68	18681	·47100	65781	454.79	5269.5 4790.8	└ •72177 ├ •68041		-11746	131-1	133-1
41 69	-16513	•46879	63392	430.45	4336-0	-63709		·13071 ·14250		137.0
42 70	·14458	46583	-61041	407.77	3905.5	59168		-15320	138·8 142·3	140-6 143-9
43 71	·12099	·46225	-68324	383.04	3497.7	-54378		16271		147.9
44 72	.08739	·45803	55512	359.27	3114.7	•49342		17153	148-4	149.0
45 73	.07272	·45332	·52604	335.77	2755-4	·44018		-17934	151-1	152-4
46 74	•04313	•41840	•49153	310.12	2419-6	·38374		·18641	153-6	154.8
47 75 48 76	·01312	·44326	·45638	286.01	2109.5		·13103	-19315		157-2
49 77	4∙97 895 •9 1 207	·43823 ·43361	41718	261.33	1823.5		-06137	·19954		159.5
50 78	·89857	•42959	·37568 ·32816	237·51 212·89	1562.2		5.98807	20567	160.6	161-8
51 79	·85147	·42586	27733	189.38	1324.7	.04000	·90999 ·82733	21213	163.0	164-3
52 80	79889	·42226	-22115	166.40	1111.84 922.46	7.04405	·82733 ·73999		165.5	166-7 169-0
53 81	•74183	·41814	15997	144.53	756.06	·87856		·22496 ·23048		170-9
54 82	·67836	·41364	-09200	123.60	611.53	·78642			170.0	172-5
55 83	60945	·40858	-01803	104.24	487.93	·68836	·44977	23859	173.2	173-9
56 84	·53456	.40429	6-93888	86.872			-34217	-24181	174.5	174.9

No. 24 (continued).

Age == +28.	Log. 5 m. (d+ \(\mu \) m + 28. 7 m + 28.	Log. P=+4-	(1) + (2).	P w ÷ 100000.	К 161.	Log. Km.	Log. Dm. m+28.	$\left(\frac{\frac{\text{Log.}}{\text{Km}}}{\text{Dm. m+8.}}\right)$	Value of Increase of Pension to Daughter after Mother's Death or Marriage.	
	47004	00010		1					155.0	155.0
57 85	·45384	·39846	-85230	71.171	296.822	·47249	.22899	·24350	175.2	175.2
58 86	-36611	·39146	75757		225.651	35344	10991	·24353	175.2	174.8
59 87	·27 4 17	-38292	·65 709	45.404	168-428		4.98494	·24148	174.4	173.6
60 88	·17232	·37346	•545 7 8 ,	35-138	123·02 4	·08998		·23734	172.7	171.7
61 89	·06146	⋅3630 5	·42451	26.577	87-886	6.94392	.71245	·23147	170.4	169-0
62 90	3.94396	-35180	1 ⋅29576	19.759	61.309	78752	$\cdot 56349$	-22403	167· 5	165.5
63 91	·8111 4	-33925	1.15039	14.138	41.550	-61857	·40514	·21343	163.5	161.2
64 92	-66499	·32654	5.99153	9.8070	27.4122	·43794	·23670	•20124	158.9	156.5
65 93	.51372	-31429	-82801	6.7300	17.6052	·24564	.05804	.18760	154.0	150.6
66 94	-34743	-30081	61824	4.4488	10.8752	-03643	3.86856	. 16787	147.2	142.7
67 95	.16349	-28691	45040	2.8187	6.4264	5.80797	-66781	-14016	138-1	$132 \cdot 2$
68 96	2.97555	.27231	-24786	1.7695	2.6077	-55723	45575	.10148	126.3	117.0
69 97	·76155	.25744	-01899	1.0447	1.8382	26439		.03205	107.7	93.8
70 98	-54948	1.24180	4.78228	0.60573	.79351	4.89955		1.90220	79.8	56.6
71 99	•34066	0.93298	27364	·018778	-18778		.75099	•52265	33.3	16.7

6 PER CENT.

No. 25.—New Rules. Daughters' Benefits. Value of Total Benefits if Mother Living and not Re-married.

Age m.	Value of £100 per Annum till Marriage or Death.	Value of £40 per Annum till Age 10.	Value of £20 per Annum till Age 6.	(1) – (2)+(3).	Value of £300 on Marriage.	Total Value of Benefits.	Ditto at Mean Age = + ‡.	Total Value if Mother Living, in- cluding Value of Increase £10 till 10, and £25 after, at Mother's Marriage or Death.	Log. of Ditto.
1	1036-9	241.4	84.0	711.5	34.0	745.5	812.0	877-9	2.94345
Ō	1169-4	252.5	80.7	836-2	42.2	878-4	913.5	985-1	·99348
2	1211.4	241.4	69.2	900-8	47.7	948.5	973.1	1046-0	3.01953
3	1221.7	221.9	54.4	945.4	52.3	997.7	1019.4	1091-8	·03814
4	1220-4	198-4	37.8	984-2	56.8	1041-0	1061.0	1132-1	-05388
5	1211.0	171.7	19.6	1019.7	61.3	1081-0	1100.5	1169-6	·06804
6	1196.4	142.4	• • •	1054.0	65.9	1119.9	1128.7	1195.4	·07751
7	1177-4	110.5	• •	1066-9	70.6	1137.5	1145.8	1209-8	∙08271
8	1154.5	76-1	••	1078-4	75.6	1154.0	1162.6	1223.8	·08771
9	1129.5	39.3	• •	1090-2	80.9	1171-1	1179.9	1238-3	-09283
10	• •	• • •	••	1102.3	86.4	1188-7	1176.9	1232.5	•09079
11	• •	••	• •	1072-6	92.4	1165.0	1151.9	1205.0	·08099
12	••	• •	• • •	1040-1	98.6	1138.7	1124.4	1175.6	·07026
13		••	• •	1004.8	$105 \cdot 2$	1110.0	1094.6	1144.2	-05850
14		••	• •	966-9	112-2	1079-1	1066.4	1115-1	•04731
15	1	• •	• •	936.0	117.7	1053.7	1043.9	1092-4	03838
16	••	••	• • •	912.5	121.6	1034-1	1029.4	1078-7	03290
17	••	••	• •	901.7	123.0	1024.7	1025.4	1076-5	-03201
18	• • •	• •	• •	904.7	121.4	1026-1	1034.6	1088-6	·03687
19	• •	• •	• •	927-2	115.8	1043·0	1051.7	1109.4	·04509
20	• •	••	••	950-4	109-9	1060.3	1069.0	1130-5	05327
21	••	• •	• •	973-6	104-1	1077.7	1086-1	1151-1	.06111
22	• •	• •	• •	996.3	98· 2	1094.5	1102.6	1170.9	·05852
23			, ••	1018-1	92.6	1110-7	1118-2	1189.5	∙07536

No. 25 (continued).

.ge m.	Value of £100 per Annum till Marriage or Death.	Value of £40 per Annum till Age 10.	Value of £20 per Annum till Age 6.	(1)-(2)+(2).	Value of £300 on Marriage.	Total Value of Benefits.	Ditto at Mean Age m+i.	Total Value if Mother Living, in- cluding Value of Increase £10 till 10, and £25 after, at Mother's Marriage or Death.	l.og. of Ditto
24				1038-5	87.1	1125-6	1131.7	1205-8	-0812
25	1	• •		1055-4	82.4	1137.8	1142.7	1219-5	-0861
26				1069-4	78.2	1147-6	1151.8	1231.2	-0903
27				1081.4	74.5	1155.9	1159.4	1241.3	-0938
28				1091.9	70.9	1162.8	1166-0	1250-4	.0970
29		• •		1101.7	67.5	1169.2	1172-9	1260-2	1004
30		• •		1112.9	63.7	1176-6	1180-6	1271.4	-1042
31	• •	• •	• •	1125-0	59.6	1184.8	1188-7	1283-7	-1084
32	• •	• •	• •	1137.4	55.4	1192.8	1196.8	1296-3	.1127
33	••	• •	• •	1149.5	51.2	1200.7	1204.2	1308-7	-1168
34	••	• •	••	1160-8	47.0	1207.8	1210-7	1320-3	-1200
35		• •	• •	1170-4	43.1	1213.5	1215-6	1330-3	-1239
36	••	• •	• •	1178-2	39.5	1217.7	1218-9	1338.5	-1266
37	• •	• •		1183-8	36.3	1220-1	1220-4	1344-8	-1286
38		• •		1187-1	33.5	1220-6	1220.0	1348.9	-1299
39	• • •	• •		1188-2	81.2	1219.4	1217-2	1350.3	-1304
40			• •	1185-6	29.4	1215.0	1212-0	1349.0	-1300
41		••		1180-9	28.1	1209.0	1205.0	1345-6	-1289
42	1			1173-7	27.3	1201.0	1196.3	1340-2	-1271
43	••	• • •	• •	1164.8	26.7	1191.5	1186-1	1333-1	-1248
44	••	• •	• •	1154.4	26.3	1180-7	1174.7	1324.5	-1220
45	• •	• •	• •	1142.5	26-1	1168-6	1162-2	1314-6	-1187
46	• •	• •	• •	1129.8	25.9	1155.7	1149.0	1303.8	-1152
47		••		1116-6	25.7	1142.3	1135-6	1292-8	-1115
48	• •		••	1103.5	25.3	1128-8	1122-1	1281-6	.1077
4 9		• •	• • •	1090.8	24·5	1115.3	1109-2	1271.0	-1041
50	• •	••	• •	1080-1	23.1	1103.2	1097.5	1261.8	-1009
51	••	••	••	1070-8	21-0	1091.8	1086-2	1252-9	-0979
52	••	•••		1061.9	18-6	1080.5	1074-6	12 4 3-6	-0946
53	• •	• •	• • •	1052.8	15.9	1068-7	1062.0	1232.9	•0909
54	•••	• •	•••	1041.9	13.3	1055-2	1048.7	1221.2	-0867
55	•••	•••	•••	1031.7	10.4	1042-1	1035.3	1209.2	-082
56	•••	• •	• •	1020-8	7.6	1028-4	1021.0	1195.9	-0776
57	••	• •		1008-6	4.9	1013-5	1005-2	1180.4	-0720
58	•••	• • •	• •	994.1	2.8	996-9	987.3	1162.1	-0652
59		· • •	• •	976-2	1.5	977.7	967.4	1141.0	-0572
60	••	••		956.5	6	957-1	945.9	1117.5	•048
61	•••	••	••	934.5	2	934.7	922·9 899·0	1091.9	·0381 ·0271
62	•••	•••		911.1	١	911.1		1064.5	
63	1	••	• • •	886-8	::	886-8	874.5	1035.7	-0152
64	•••	•••	•••	862.2		862.2	849.8	1005-8	-0023
65 ee		••	• •	837.3	• •	837.3	824.8	975.4	2.9891 .9742
66 67		•••	•	812-3	• •	812.2	799.7	942·4 906·7	·9742
- •	• •	• •	•	787-1	::	787.1	774.5	866.1	9373
68 69	• •	• •		761·8 736·3	' '	761·8 736·3	749·1 723·6	817.4	.9124
70	• •	• •	••	736.3	::	736.3	698.2	754.8	8778
10		• •		685.5		685.5	672.9	689.6	-8386

6 PER CENT.

No. 26.—New Rules. Daughters' Benefits. Value of Total Benefits if both Parents are Dead, or Mother Re-married.

Daughters' Age m.	(1) Value of £25 a Year till Marriage or Death.	(2) Value of £15 a Year till Age 10.	Value of Increased Pension, (1) — (2).	Ditto at Mean Age m + i.	Log. of ditto.	Daughters' Pensic and Marriage Donation if both Parents are Dead or Mother Remarried, at Age m + 1.
0	259-2	90.5	168.7	182.9	2.26221	994-9
ĭ	291.9	94.7	197.2	204.7	·31112	1118.2
2	302.8	90-5	212.3	217.3	·33706	1119.4
3	305.4	83.2	222.2	226.4	·35488	1245-8
4	305-1	74.4	230.7	234.5	·37014	1295.5
5	302.7	64.4	238.3	242.0	•38382	1342.5
6 7	299·1 294·3	53·4 41·4	245.7	249·3	·39672	1378.0
8	288.6	28.5	252-9 260-1	256·5 263·9	•40909 •42144	1402.3 1426.5
9	282.4	14.7	267.7	203·3 271·7	·43409	1451.6
10	275.6	• •	275.6	271.9	·43441	1448-8
11	268-1	• •	268-1	264·0	·42160	1415.9
12	260.0	• •	260.0	255.6	·40756	1380.0
13	251.2	• •	251.2	246.5	·39182	1341.1
14	241.7	• •	241.7	237.9	·37639	1304.3
15 16	234·0 228·1	• •	234.0	231.0	·36361	1274.9
17	225.4	• • • • • • • • • • • • • • • • • • • •	228·1 225·4	226·8 225·8	∙3556 4 ∙35372	1256·2 1251·2
18	226.2	••	226.2	229·0	·35984	1263.6
19	231.8	• •	231.8	234.7	-37051	1286.4
20	237-6	• •	237.6	240.5	-38111	1309.5
21	243-4	• •	243.4	246·3	· 3 91 4 6	1332.4
22	249-1	• •	249.1	251.8	· 4 0106	1354.4
23	254.5	• •	254.5	257.0	· 4 0993	1375.2
24 25	259.6	• •	259.6	261.7	•41780	1393.4
26 26	263·8 267·3	• •	263.8 267.3	265·5 268·8	•42406 •42943	1408·2 1420·6
27	270.3	• •	270.3	271·6	·42943 ·43393	1431.0
28	273.0	• •	273.0	274.2	·43807	1440.2
29	275-4	• •	275.4	276.8	·44217	1449.7
30	278-2	• •	278.2	279.7	· 44 669	1460.3
31	281.2	• •	281.2	282.7	· 4 5133	1471.4
32	284.3	• •	284.3	285.8	·45606	1482.6
33 34	287·4 290·2	• •	287.4 290.2	288-8	·46060	1493.0
35	292.8	• •	292.8	291·5 293·6	• 46464 • 46776	1502·2 1509·2
36	294.5	• • •	294.5	295·2	·47012	1514-1
37	295.9	• •	295.9	296.3	·47173	1516.7
38	296-8	• •	296-8	296.9	·47261	1516.9
39	297.0	• •	297.0	296.7	·47232	1513-9
40	296-4	• •	296.4	295.8	·47100	1507.8
41	295.2	• •	295.2	294.3	·46879	1499-3
42 43	293.4 291.2	• •	293.4 291.2	292.3	·46583 ·46225	1488·6 1476·3
44	288.6	• •	288.6	$289.9 \\ 287.1$	·45803	1461-8
45	285-6	••	285.6	284.0	·45332	1446-2
46	282.4	• •	282.4	280.8	•44840	1429.8
47	279-1	• •	279.1	277.5	·44326	1413-1
48	275.9	• •	275.9	274.3	·43823	1396-4
49	272.7	• •	272.7	271.4	·43361	1380-6
50	270.0	• •	270.0	268.9	·42959	1366.4
51 52	267·7	• •	267.7 265.5	266·6	·42586	1352·8 1339·0
53	265·5 263·2	• •	263·5 263·2	264·4 261·9	·42226 ·41814	1339·0 1323·9
54	260.5	• •	260.5	259·2	·41364	1307-9
55	257.9	• •	257-9	256·5	·40858	1291.8

No. 26 (continued).

Daughters' Age m.	Value of £25 a Year till Marriage or Death.	(2) Value of £15 a Year till Age 10.	Value of Increased Pension, (1) — (2).	Ditto at Mean Age m + t.	Log. of ditto.	Total Value of Daughters' Pension and Marriage Donation if both Parents are lead, or Mother Re- married, at Age ss + 1.
56	255.2	• •	255-2	253.7	·40432	1274-7
57	252-1	• •	252.1	250.3	·39846	1255-5
58	248.5	• •	248.5	246.3	·39146	1233.6
59	244.0	• •	244.0	241.5	·38292	1208-9
60	239.1	• •	239.1	2 36 ·3	·37346	1182-2
61	233.6	• •	233.6	230.7	·3630 5	1153.6
62	227.8	• •	227.8	22 1 ·8	-35180	1123.8
63	221.7	• •	221.7	218-4	·33925	1092.9
64	215-0	• •	215.0	212-1	·3265 4	1061-9
65	209.3	• •	209-3	206-2	·31429	1031-0
66	203-1	• •	203-1	199-9	-30081	999.6
67	196-8	• •	196-8	193-6	·28691	968-1
68	190-4	• •	190-4	187-2	$\cdot 27231$	936-3
69	184-1	• •	184 1	180-9	·257 44	904.5
70	177.7	• •	177.7	174.5	·24180	872-7
71	171.4	• •	171.4	85.7	1.93298	758-6

6 PER CENT.

No. 27.—New Rules. Wives' Reversionary Benefits. Value of Reversionary Annuity
(by No. 16) to Wife after Husband's Death.

Age m. m—7.	(1) Log. p_{m-7} .	(2) Col. (1) + Log. d_{m} . s_{m-7} . v^{m} .	(3) Pm. Natural No. of ditto ÷ 100.	(4) K _m = P _m + P _m + 1.	(5) Log. K m.	$Log. \binom{(6)}{D_{m,m-7}}$	Value of Reversions Annuity t Wife after Husband' Death.
20 13	1.09142	7.00316	100730-	1754193-	8.24408	0.40267	2.527
21 14	.08422	-00915	102129-	1653463	-21839	·41017	2.571
22 15	.07817	6.99050	97836-	1551334-	·19070	·41629	2.608
23 16	.07390	.97348	94076	1453498-	·16242	·42246	2.645
24 17	.07210	·94997	89119-	1359422-	·13335	-42803	2-679
25 18	.07335	·92857	84834.	1270303	·10391	·43365	2.714
26 19	.07649	·90286	79958	1185469-	·17389	·43910	2.749
27 20	.07972	-87709	75351.	1105511-	.04356	·44438	2.782
28 21	-08286	-85120	70990-	1030160-	.01290	·44967	2.816
29 22	·08586	-83094	67755	959170-	7.98190	·45477	2.850
30 23	-08856	·80454	63759	891415-	95008	-45951	2-881
31 24	-09079	·77693	59832.	827656	.91785	·46399	2.911
32 25	.09240	·75589	57002	767824	88526	·46828	2.940
33 26	•09360	·72695	43327	710822-	·85176	·47194	2.964
34 27	.09437	-69723	49800.	657495	·81789	·47585	2.991
35 28	-09503	-66802	46561.	607695	·78369	·47984	3-019
36 29	∙09576	·63806	43457.	561134.	.74907	-48383	3.047
37 30	·09656	-60818	40568	517677.	·71406	·48788	3-075
38 31	.09740	-58325	38305-	477109	·67862	·49197	3-104
39 32	-09823	-55329	35751.	438804	•64227	-49574	3-131
40 33	-09896	•53499	34276	403053-	-60536	·49945	3-159
41 34	.09937	·51531	32757	368777	-56676	-50205	3.177
42 35	.09944	•49303	31119-	336020	·52637	-50368	3.189
43 36	.09913	·46979	29498-	304901	·48416	-50405	3.192
44 37	-09833	•44343	27761.	275403	·43997	·50330	3.186
45 38	.09733	·41638	26084	247642.	-39382	-50118	3.171
46 39	.09510	-37150	23523	221558-	·34549	·49776	3-146
47 40	.09248	-32374	21074-	198035-	·29674	49413	3.120
48 41	.08927	-28089	19094	176961.	·24788	·49079	3-096
49 42	-08600	-21727	16492	157867	19829	·48711	3.070
50 43	-08203	·15898	14420-	141375-	·15037	·48511	3.056

No. 27 (continued).

Age m. sn.—7.	(1) Log. p_{m-7} .	(2) Col. (1) + Log. $d_m . s_{m-7} . v^m$.	(3) Pm. Natural Nº. of ditto + 100.	(4) Km = Pm + Pm + 1.	(5) Log. K _m .	$Log. \begin{pmatrix} 6 \\ K_{m} \\ \hline D_{m.m-7} \end{pmatrix}$	Value of Reversionary Annuity to Wife after Husband's Death.
51 44	·07766	.09721	12509.	126955•	·10365	·48457	8.052
52 45	-07291	-03932	10948	114446.	.05860	·48561	3.059
53 46	-06785	5.98630	9689-5	103498-	.01493	48837	3.079
54 47	-06258	-93699	8649.5	93808-9	6.97224	·49233	3.107
55 48	.05717	-89205	7799-2	85159.4	.93023	·49727	3.142
56 4 9	.05181	·85108	7097-1	77360-2	·88852	-50300	3.184
57 50	·0 1 657	·81546	6538-2	70263-1	·84673	-50957	3.233
58 51	·04131	·78210	6054.8	63724.9	·80431	-51632	3.283
59 52	·03587	·75493	5687-6	57670-1	·76095	-52344	3.338
60 53	.03003	·72281	5282 1	51982.5	·71586	-52997	3.388
61 54	-02383	·69485	4952-8	46700-4	·66932	·53650	3.440
62 55	·017 4 5	·66561	4630.3	41747.6	•62063	•54218	3.485
63 56	·01068	·6338 4	4303.7	37117-3	·56958	·54725	3.526
64 57	-00325	·60015	3982.4	32813-6	·51605	-55161	3.561
65 58	0.99498	•56335	3658.9	28831.2	· 4 5986	∙55509	3.590
66 59	98588	•52301	3334.3	25172.3	·40092	·56807	3.615
67 60	•97594	·48100	3026.9	21838-0	·33921	-56033	3.634
68 61	·96520	·43680	2734.0	18811-1	.27441	-56193	3.647
69 62	·95376	•38957	2452.3	16077-1	-20621	•56278	3.654
70 63	•94176	•33895	2182.5	13624.8	·13433	-56288	3.645
71 64	•92932	•28484	1926-8	11442-3	·05851	•56222	3.649
72 65	•91635	•22758	1688-8	9515.5	5.97843	•56075	3.637
73 66	•90293	·16672	1468-0	7826-7	-89358	-55841	3.618
74 67 75 68	-88902	·10137 ·03051	1262.9	6358.7	·80337	•55498	3·589 3·551
76 69	•87454 •85950	4.95260	1072-8 896-60	5095·8 4023·0	·70721 ·60455	·55035 ·54445	3.503
77 70	·83930 ·84398	-86912	739-81	3126.4	·49504	-53814	3.453
78 71	-82795	·77593	596.94	2386.59	•37778	·53043	3.392
79 72	-81137	-67619	474.45	1789-65	25277	-52187	3.326
80 73	-79428	-56612	368-23	1315-20	11899	-51211	3.252
81 74	.77670	·44743	280.18	946.97	4.97634	-50178	3.175
82 75	-75868	31872	208-31	666.79	-82399	·48979	3.089
83 76	•74005	18037	151.49	458-48	-66132	.47746	3.002
84 77	-72115	.02902	106.91	306.99	·48712	•46345	2.907
85 78	•70191	3.86633	73.507	200.076	-30268	•45007	2.819
86 79	-68233	-69112	49.104	126-569	·10233	-43281	2.709
87 80	-66266	-50051	31.660	77.465	3.88911	·41619	2.607
88 81	·64256	·29494	19.722	45-805	-66091	-39739	2.497
89 82	-62232	.06982	11.744	26.083	· 4 1636	·37853	8.391
90 83	-60173	2.83007	6.7619	14.3390	·15652	·36022	2.292
91 84	-58081	•56420	3.6661	7.5771	87950	-34241	2.200
92 85	-55979	-30150	2.0022	3.9110	-59229	-33463	2.161
93 86	-53845	-02817	1.0670	1.9088	·28076	-32994	2.138
94 87	-51720	1.72006	-52488			·31969	2.088
95 88	· 4 9596	-35673	•22737			·29154	1.957
96 89	·47494	0.95191	-08959	08952	·95192	-20329	1.597

6 PER CENT.

No. 28.—New Rules. Sons' Reversionary Benefits. Value of Reversionary Benefits (by No. 21) to Sons after Father's Death.

Son's Age m.	Log. d _{m+35} . s _m . v _{m+35} .	Log. p = 1.	Sum of (1) + (2).	Pm. ÷ 100,000	K _m =P _m +P _m +1	Log. Km.	Log. D _m , m+35.	Log. (Km. (Dm.m+35)	Value of Reversion- ary Benefits to Son after Father.	Ditto at Mean Age =+ \$.
0	7-24950	2.90401	10-15351	142400-	1724274	11-23661	9.01093	2.22568	168-1	181-7
1	.17488	∙95366	·12854	134444.	1581874.	-19917	8.90874	·29043	195.2	200-5
2	-12841	•97973	-10814	128274	1447430-	·16060	-84742	-31318	205.7	207.7
3	-09562	·99852	-09414	124205.	1319156.	·12030	·79866	·32164	209-7	210-1
4	-06173	3.01460	·07633	119215.	119 4 951•	.07735	·75402	∙32333	210.5	209.7
5	·04235	∙02930	·07165	117937.	1075736.	.03171	·71197	⋅31974	208-8	206-6
6	-02315	·03926	-06241	115454.	957799.	10.98127	⋅67103	·31024	204.3	200-7
7	•00308	·04462	·04770	111609.	842345.	·92549	-63080	· 294 69	197-1	192-3
8	6.98311	·0 1 988	•03299	107892	7 30736.	·86376	· 5 9101	27275	187-4	181.3
9	·96134	-05530	·01664	103906-	6228 14 .	·79438	·55094	·24344	175-2	167.7
10	•93915	· 047 86	9.98701	97053.	518938-	·71512	•51061	·20451	160-1	151.6
11	•90103	·02580	•92683	84495.	421885	•62519	·46999	·15520	143.0	134.3
12	·86084	·00061	·86145	72686	337390	•52813	·42963	·09853	125.5	116-8
13		2.97179	·78982	61634.	264704	·42276	⋅38952	·03324	108.0	99.4
14	·77277	·93867	·71144	51456.	203070	-30765	·34961	1.95804	90.8	82.6
15	·72 1 97	•90037	·6253 4	42203	151614.	-18074	·30988	·87086	74.3	66.5
16	·67384	-85558	·52942	33839	109411	-03906	·27026	·76880	58-7	51.6
17	·62755	·80236	·42991	26910-	75572	9.87836	·23072	·64764	44.4	37.9
18	∙58651	·73719	•32370	21072	48662	68719	19116	· 49 603	31.3	25.4
19	54945	·65514	20459	16017	27590	·44075	·15146	·28929	19.5	14.3
20	·51704	·54642	-06346	11573	11573.	∙06345	-11156	0.95189	9.0	4.5

6 PER CENT.

No. 29.—New Rules. Daughters' Reversionary Benefits. Value of Reversionary Benefits (by No. 25) to Daughters after Father's Death.

Daugh- ter's Age m.	Log. sm.d = + 35-	Log. 5 m.d m + 35. 9 - m + 36.	Ditto + Log. P = + i-	Pm ÷ 1,000,000.	K _m =: P m + P m + 1 ⋅	Log K _{ss.}	$\left(\frac{Log.}{D_{m.m} + 35.}\right)$	Value of Reversion- ary Benefits to Daughter after Father's Death.	At Mean Age m + i.
0	8-13521	7-24950	10.19295	15594	229481.	11-36074	2.34981	223.8	243.9
ĭ	-08589	17488	16836	14735	213887	-33019	·42145	263.9	273·5
$ar{2}$	-06473	-12841	14794	14059-	199152	•29918	·45126	283.0	288.7
3	-05724	-09562	.13376	13607	185093	-26738	·46873	294.3	298.2
4	·0 1 866	-06173	·11561	13050-	171486-	·23424	·48022	302-1	304.8
5	-05458	.04235	-11039	12894 -	158436-	·19986	·48790	307.5	309.0
6	-06069	∙02315	10066	12608	145542.	·16298	· 4 9196	310.4	310.7
7	-06593	-00308	-08579	12184	132934	·12362	•49282	311.0	310.3
8	·07126	6.98311	.07082	11771.	120750	·08109	·49089	309-6	308-1
9 10	·07480 ·07791	·96134 ·93915	·05417 ·02994	11328 · 10714 ·	108979 · 97651 ·	·03735 10·98968	·48641 ·47908	306·5 301·4	304·0 298·0
11	·06510	90103	9.98202	9594.5	86937	•93920	·46922	294.6	291·1
12	-05022	•86084	93110	8533.0	77342	·88842	·45879	287.6	284·1
13	.03271	-81803	·87653	7525-4	68809	-83765	-44814	280.6	277.3
14	-01057	-77058	-81789	6574.9	61284	·78735	·43775	274.0	272.4
15	7.98148	-71619	·75457	5682.9	54709-	·73806	·43258	270.8	271.1
16	·9 4 352	-65292	·68582	4850.9	49026-	·690 1 3	·43340	271.3	$274 \cdot 4$
17	•90361	·58770	-61971	4165.9	44175.	·64518	•44327	277.5	283.7
18 19	·86127	•52006	•55693	3605.2	40009-	·60216	·46225	289.9	300.2
20	·81909 ·78302	·45257 ·39120	·49766 ·44447	3145·4 2782·7	36404· 33259·	·56115 ·52191	·49202 ·52244	310·5 333·0	321.8
21	.75294	·33581	-39692	2494.1	30476	·48396	-55293	357.2	345·1 370·0
22	•72965	28722	-35574	2268.5	27982	·44688	-58302	382.8	396.2
23	.71141	·24367	·31903	2084-6	25714.	·41017	-61228	409.5	423.2
24	-69899	·20594	-28722	1937-4	23629	·37345	-64042	436.9	450.4
25	-69059	·17224	·25842	1813-1	21692.	·33630	·666 4 5	463.9	477.3
26	-68582	·14216	•23249	1708.0	19879-	•29839	·69073	490.6	503.9
27 28	·68165	·11269	•20657	1609-1	18171.	-25938	·71355	517.1	530.9
28 29	·67671	·08244	·17949 ·15217	1511-8	16562	·21911 ·17754	·73604 ·75618	544·6 570·4	557.5
30	·67131 ·66413	·05173 ·01925	·13217	1419-6 1329-0	15050- 13630-	13450	·77719	598.6	584.5 613.4
31	•65509	5.98490	·09336	1239.8	12301	08994	.79804	628.1	643.3
32	-64628	.95079	·06350	1157.4	11061.	04379	-81850	658.4	673.8
33	·637 41	·91664	.03350	1080-2	9903-2	9.99578	-83830	689-1	704.4
34	·62784	·88174	·00241	1005-6	8823.0	·94562	∙85715	719.7	734.6
35	·61723	·84582	8.96977	932.76	7817-4	·89306	·87 1 77	749.5	763.9
36	•60543	-80871	·93533	861.65	6884-6	·83788	-89112	778.3	792.0
37	•59294	·77092	·89958	793.56	6022.9	·77981	·90613	805.6	818-6
38 39	·57933 ·56385	·73200 ·69122	·86198 ·82165	$727.75 \\ 663.21$	5229·3 4501·5	·71844 ·65336	·91985 ·93192	831·5 854·9	843.2
40	·54575	64781	·82163 ·77782	599·54	3838-3	·58414	·94236	875.7	865·3 884·8
41	-52401	60076	72968	536.64	3238.8	•51038	95127	893.9	901.8
42	·49861	•55006	67723	475.59	2702.2	·43172	-95888	909.7	916.4
43	·46773	·49387	•61873	415.65	2226-6	·34764	·96523	923.0	928-8
44	•43159	· 43 243	55448	358-49	1810-9	·25789	•97059	934.5	939-2
45	·38996	-36549	·48428	304.99	1452-4	·16209	•97493	943.9	947.7
46	·34104	·29126	40647	254.96	1147.44	·05971	·97840	951.5	954.8
47 48	·28537 ·22281	21029	32182	209.81	892·48 682·67	8.95060 -83421	·98136 ·9839.5	958·0 963·7	960.9
48	15103	·12212 ·02534	·23017 ·12949	169·89 1 34 ·74	512·78	·85421 ·70993	·98614	968-6	966-2 971-7
50	.07108	4.92008	02107	104.97	378-04	.57754	98891	974.8	977.8
51	6.98121	80491	7.90283	79.952	273.074	-43628	99160	980.8	983.7
52	-88099	-67938	.77406	59.437	193-122	·28583	99412	986.5	989-1

No. 29 (continued).

Daugh- ter's Age m.	Log. s _{m.} d _m + 35.	Log. s_m, d_{m+35} . $p.m+35$.	Ditto + Log. P m + i	Pm ÷ 1,000,000.	Km = Pm + Pm + 1,	Log. Km.	Log. (Km. D sa.m + 35.)	Value of Reversion- ary Benefits to Daughter after Father's Death.	At Mean Age m+1
53	·77068	-54376	· 63 469	43-121	133-685	-12609	-99632	991-6	993-3
54	∙65136	-39914	·48593	30.615	90·56 1	7.95696	-99777	994.9	996-6
55	-51899	-24146	·32396	21.084	59.949	·77778	-99923	998.2	1000.7
56	·37654	-07371	·15140	14-171	38.865	·58956	3.00140	1003.2	1007-0
57	-24102	3.91288	6.98491	9.6585	24.6936	·39259	-00467	1010-8	1015.4
58	10268	·74924	·81448	6.5235	15.0351	·17710	·00854	1019-9	1021-9
5:)	5.94394	-56519	· 62248	4.1926	8.5116	6.93001	-01025	1023-9	1021-3
60	.73772	·33366	-38191	2.4094	4.3190	-63538	-00803	1018-7	1017-8
61	·47823	•04887	·08705	1.2219	1.9096	•28094	-00727	1016.9	1013-6
62	-13041	2.67574	5.70289	·50 1 53	·68765	5.83737	·00441	1010-2	989-4
63	4.64048	·16051	·17574	·14988	·18312	·2657 4	2.98612	968-5	949-6
64	-02465	1.51937	4.52167	·0332 1 1	·0332 4	4.52167	·96883	930.7	••
	l		l				l		

6 PER CENT.

No. 30.—New Rules. Husband and Wife. Value of Joint Life Annuity to End of 16th Year of Service.

Age of Husband m.	N m . m - 7.	11 (Dm. m-7) D36.29.)	(1) + (2) K **-	Log. of Ditto.	$\left(\frac{\underset{\text{N m. m}}{\text{Log.}}}{\prod_{\text{10 m. m}-7.}}\right)$	Value of Temporary Joint Life Annuity.
20	599386•	23369-	622755	5.79432	0.95291	8.972
21	535085	21031	556116.	·74517	·93695	8.649
22	475600-	18822-	494422	-69410	-91969	8.312
23	420651	16743-	437394	-64087	•90091	7.960
24	369915.	14812.	384727	-58516	·87984	7.583
25	323113.	13055.	336168-	-52656	·85630	7.183
26	279982	11427	291409	·46450	·82971	6.756
27	240246.	9771.	250017.	-39797	79879	6.292
28	203667	8324	211991.	-32632	·76309	5.796
29	170006-	6986	176992	·24795	•72082	5.258
30	139062-	5741.	144803-	·16077	·67020	4.680
31	110627.	4591.	115218-	·06153	·6076 7	4.052
32	84507-	3530.	88037.	4.94467	•52769	3.371
33	60529	2547.	63076	·79986	·4200 4	2.637
34	38548.	1633.	40181.	•60402	·26198	1.828
35	18418-	785-	19203.	-28337	I-97952	.954
36	• •		• •	• •	• •	• •

Value of Joint Life Annuity to End of 25th Year of Service.

Age of Husband	N m . m - 7.	11 (Dm.m-7 - D46·38-)	(1) + (2) K m.	Log. of Ditto.	$\left(\frac{\underset{M}{\text{Log.}}}{\text{Log.}}\right)$	Value of Temporary Joint Life Annuity.
20	706512-	28232-	734741.	5.86613	1.02472	10.586
21	642211.	25892-	668103.	-82484	.01662	10.390
22	582726-	23684	606410	.78277	∙00836	10.194
23	527777•	21605.	549382.	-73987	0.99991	9.998
24	477041.	19674-	496715.	-69611	99079	9.790
25	430239.	17871-	448110.	-65138	∙98112	9.575
26	387108.	16189-	403297	·60563	·97084	9.351
27	347372.	14633-	362005.	.55872	·9 5 954	9.111
28	810793.	13186-	323979.	·51052	.94729	8.857
29	277132.	11848.	288980.	·46087	.93374	8.585
30	246188.	10603-	256791.	·40958	•91901	8.299
31	217753.	9453.	227206.	·35643	·90257	7.990
32	191633.	8391.	200024.	-30107	-88409	7.658
33	167655.	7410-	175065	-24328	·8633 9	7.301
34	145674.	6496-	152170.	∙18233	·84029	6.923
35	$125544 \cdot$	5646	131190-	·11790	·81405	6.517
36	107126.	4862.	111988-	-04918	•7839 4	6.081
37	90292	4136-	94428.	4.97510	·74892	5.609
38	74 923.	3465	78388	89425.	·70760	5-100
39	60910.	2843.	63753.	80450-	·65797	4.550
40	48148.	2270.	50418	70259	· 5 9668	3.951
41	36541.	1740-	38281	58298	·51827	3.298
42	26005.	1249.	27254	43543.	·41274	2.587
43	16453.	798.	17251.	23681	0.25670	1.806
44	7809.8	382	8191.8	91338-	T-97671	-948
45	• •			• •	- • •	• •

6 PER CENT.

No. 31.—New Rules. Members' Single Life. Value of Annuity to End of 16th Year of Service.

Age m.	N	$\frac{1}{3}\frac{1}{4}$ (D _m - D ₃₆).	(1) + (2) K m-	Log. of Ditto.	Log. $\left(\frac{K_{m}}{\overline{D_{m}}}\right)$	Value of Temporary Annuity.
	(1)	(2)				
20	283590-	10041-	293631.	5.46180	0.97392	9-417
21	254521.	8972.	263493.	·42076	.95733	9.064
22	227458	8052-	235510.	·37201	93963	8.702
23	202286.	7186-	209472.	•32112	-92021	8.322
24	178884.	6375	185259.	·27678	·89852	7.916
25	157136.	5616.	$162752 \cdot$	·21152	-87410	7.483
26	136934 -	4908-	141842.	·15180	·84641	7.021
27	118173.	4247.	122420.	∙08785	·81460	6.525
28	$100754 \cdot$	3632	104386.	5.01866	·77765	5.993
29	84586.	3059-	87645.	4.94273	·73408	$5 \cdot 421$
30	69587.	2523-	72110 .	-85800	∙68193	4.808
31	55675.	2025.	57700-	·76118	·61780	4.148
32	42776.	1561.	44337.	·64677	·53622	3· 1 37
33	30823.	1127.	31950.	·50 11 7	·42698	2.673
34	19749.	826.	20575.	4.31334	26906	1.858
35	9494.	345-	9843.	3.99313	1∙98220	·9 6 0
36	• •	••	• •	••	••	• •

6 PER CENT.

Value of Annuity to End of 25th Year of Service.

Age m.	N _m .	$\frac{1}{2}\frac{1}{4}$ (D _m - D 46).	(1) + (2) K m.	Log. of Ditto.	Log. $\left(\frac{Km}{\overline{D_m}}\right)$	Value of Temporary Annuity.
	(1)	(2)				
20	342331 ·	12181-	354512	5-54963	1.05575	11.370
21	313262	11214.	324476	-51119	.04776	11.162
22	286199-	10295	296494	·47201	-03963	10.955
23	261027	9427	270454	·43209	∙03118	10·7 44
24	237625.	8616-	246241.	•39136	.02210	10.522
25	215877.	7858-	223735.	•34974	-01232	10.288
26	195675.	7149-	202824.	∙80711	1.00172	10·0 1 0
27	17691 4 ·	6490-	183404.	•26340	0.99015	9.776
28	159495.	5874.	165369	·21846	·97745	9·49 4
29	143327	5301-	148628-	17211	·96346	9.193
30	128328	4765-	133093.	-12415	·94808	8-873
31	114416.	4267-	118683.	-07438	·93100	8.531
32	101517.	3802-	105319.	5.02251	·91196	8-165
33	89564.	3369-	92933.	4.96817	-89068	7-775
34	78490-	2966.	81456-	·91092	⋅86664	7.356
35	68235.	2591.	70826-	·85019	·83926	6-907
36	58741.	2242.	60983.	·78521	-80777	6-42 4
37	49955.	1918-	51873.	·71494	·77116	5·90 4
38	41828-	1616-	43444.	·63793	·72797	5·8 4 5
39	34314.	1334	35648	·55204	·67619	4.745
40	$27371 \cdot$	1073	28444 •	· 4 5399	·612 4 3	4.097
41	20962-	828-	21790.	·33826	-53147	3-400
42	15053.	599.	15652.	4.19457	·42303	2·6 4 9
43	9610.	385.	9995.	3.99978	0.26395	1.836
44	4602.	186-	4788-	3.68015	·98052	∙956
45	• •	••	• •	•••	••	• •

6 PER CENT.

No. 32.—New Rules. Members' Single Life. Value of Life Annuity.

(From Neison, Table II.)

lge m.	Log. Dm.	D ₁₈₆ .	= D _m +1 + D _m +2	Log. N m.	$Log. \left(\frac{Nm}{Dm}\right)$	Value of Life Annuit
20	4.49388	31180.	389845•	5.59089	1.09701	12.503
21	·46343	29069.	360776	•55724	-09381	12.411
22	·43238	27063	333713	•52337	-09099	12.337
23	·40091	25172.	308541.	·48931	∙08840	12.257
24	·36926	23402	285139	·45506	∙08580	12.184
25	83742	21748.	263391	·42060	-08318	12-111
26	-30539	20202	243189.	·38595	∙08056	12.038
27	·27325	18761	224428-	·35108	.07783	11.963
28	·24101	17418.	207010	·31599	·07 1 98	11.884
29	·20865	16168.	190842-	·28067	.07202	11.804
30	-17607	14999.	175843-	·24512	•06905	11.723
31	·14338	13912.	161931-	·20933	∙06595	11.640
32	·11055	12899.	149032-	$\cdot 17327$	⋅06272	11.554
33	.07749	11953.	137079-	·13697	∙05948	11.468
34	·04428	11073.	126006-	·10041	-05613	11.380
35	.01093	10255.	115751	·06352	•05259	11.287
36	3.97744	9493.8	106257	•02637	.04893	11.193
37	·94378	8785-8	97471.	4.98888	•04510	11.094
38	·90996	8127-6	89343-	·95106	•04110	10.993
39	·87585	7513-6	81829-	·91291	•03706	10.891
40	·84156	6943-2	74886	·87440	·03284	10.785
41	-80679	6409.0	68477	·83554	·02875	10.684
42	·77154	5909.4	62568-	·77635	•02481	10.588 10.495
43	•73583	5442.9	57125-	·75683	·02100	
44	•69963	5007-6	52117.	·71698	•01785	10.408 10.325
45	•66296	4602.1	47515-	·69683	-01387	10.525
46	•62579	4224-6	43290	•63639	·01060 ·00707	10.247
47	-58856	3877-6	39412.	•5956 3	-00319	10.104
48	·55134	3559-1	35853- 32586-	∙55453 ∙51303	-09885	9.974
49 50	·51518	3267-2	29586-	·47109	0.99391	9.861
51	·47718 ·44039	3000·4 2756·7	26829	·42860	98821	9.732
52	·40391	2534·6	24294	·88550	98159	9.585
53	·36759	2331.3	21963	·34169	.97410	9.421
54	·33131	2144-4	19819-	29708	.96577	9.242
55	29497	1972-3	17847-	·25157	•95660	9.049
56	25842	1813-1	16034	·20504	.94662	8.843
57	-22155	1665.5	14368-	·15740	·93585	8.627
58	·18419	1528-2	12840-	·10857	·92438	8.402
59	·14620	1400-2	11440.	-05843	·91223	8.170
60	-10743	1280-6	10159-3	-00685	•89942	7.933
61	.06771	1168.7	8990-6	8.95379	88608	7.692
62	-02691	1063-9	7926-7	·89909	·87218	7.450
63	2.98490	965-83	6960.9	·84267	·85777	7.207
64	·94160	874-18	6086-7	·78438	·84278	6.963
65	·89692	788-71	5298-0	·72411	-82719	6.717
66	·85074	709-15	4588-8	·66170	·81096	6.471
67	-80299	635-32	3953.5	·59698	·79399	6.223
68	·75344	566-81	3386-7	·52978	.77634	5.975
69	·70192	503.41	2883.3	·45989	·75797	5·728 5·481
70	•64821	444.85	2438-4 2047-4	·38710	·73889 ·71908	5.237
71	·59212	390.95	1705-8	∙31120 •23193	-69848	4.994
72	-53345	341.55	1409.4	·23193 ·14903	-67718	4.755
73 74	·47185	296.38	1154-1	·14905 ·06224	-65521	4.521
7 4 75	·40703 ·33863	255·29 218·09	936-01	2.97128	-63265	4.292
76	·33863 ·26631	184-63	751.38	·87586	-60955	4.070
77	·18974	154.79	596.59	·77568	-58594	3.854
78	·18974 ·10857	128.40	468-19	·67042	-56185	3.646
79	·02248	105.31	362.88	.55976	-53728	3.446
80	1.93110	85-330	277.55	.44334	-51224	3.253

No. 32 (continued).

Age m.	Log. Dm.	D _{en} .	N _m =D _{m+1} + D _{m+2}	Log. N m.	$\log \left(\frac{N_m}{D_m}\right)$	Value of Life Annuity.
81	-83408	68-246	209-30	•32077	· 4 8669	3-067
82	·73106	53·834	155-47	19165	•46059	2.888
83	62157	41.838	113.63	.05549	-43392	2.716
84	-50516	32.001	81.633	1.95187	·40671	2.551
85	-38132	24.061	57.572	·76021	-37889	2.393
86	·24956	17.765	39-807	•59996	•35040	2.241
87	·10931	12.862	26-945	·43048	-32117	2.095
88	0.96032	9.1268	17.818	$\cdot 25086$	·29054	1.952
89	·80230	6.3431	11.475	.05975	·25745	1.809
90	·6349 3	4.3145	7.1603	0.85493	•22000	1.660
91	· 4 5791	$2 \cdot 8702$	4.2901	·63247	·17456	1.495
92	•27089	1.8659	2.4242	-38457	·11368	1.299
93	∙06433	1.1597	1.2645	·10192	.03759	1.090
94	1.82735	•67197	∙59256	I.77273	1.94538	-882
95	·54661	. •35205	·24051	-38113	·83452	-683
96	-20456	·16016	-08035	2.90499	.70043	∙502
97	2 ⋅77564	·05965	-02070	31597	•54033	-347
98	-23162	·01705	∙00365	5.56229	·33067	-214
99	3.52110	• 003319		4 ·53718	-01608	·104
100	4.53718	·000344	i l		1	1

No. 1.—Old Rules. Widows. Annuity till Marriage or Death. D and N Columns. (From Neison, Table V.)

Age m.	Log. Dm.	D _{mt} .	N m ¹ = J) m+1 + D m+2	Log. N _m .	Age m.	Log. D _{m.}	D 101.	$ \begin{array}{c} N_s m \\ \Rightarrow D_m + 1 \\ + D_m + 2 \end{array} $	Log. N =
0	5.00000	100000	1076608-	6.03206	51	·11447	1301.6	14212.	·15266
ĭ	4.91011	81304	995304	5.99795	52	∙08056	1203.8	13008.	-11411
$\hat{2}$	86126	72654	922650-	.96504	53	·04640	1112-8	11895.	·07536
3	92513	66854	855796-	.93237	54	·01266	1029-6	10865 ·3	·03603
4	.79341	62146-	793650	·89963	55	2.97820	951.04	9914.3	3.99626
5	-76447	58139-	735511.	·86659	56	•94363	878-27	9036-0	•95598
6	.73710	54588.	680923	·83310	57	•90920	811.33	8224.7	91512
7	·71094	51397.	629526	·79901	58	·87526	750.34	7474.4	-87358
8	-68567	48492.	581034.	·76420	58	84225	695.42	6779.0	-83117
9	-66061	457 73 ·	535261	·72856	60	·80939	644.75	6134.3	·78777
10	-63576	43228.	492033.	·69199	61	·77658	597.83	5536.5	·74324
11	61112	408 11 .	451189-	·65434	62	·74359	554·1	4982.4	·69744
12	-58680	38619	412570	·61550	63	·71008	512.96	4469-4	•65025
13	-56272	36536	3 76034	.57522	64	67563	473.84	8995-6	-60158
14	53878	34 575•	341459-	·53334	65	-64017	436-69	3558·9	•55132
15	•51046	32394	309065	·49005	66	·60354	401.37	3157·5	·49934 ·44554
16	•47761	30034	279031	•44565	67	•56570	367·88 336·12	2789-6 2453-5	38979
17	-43780	27403	251628-	·40076	68	•52649	306·08	2147·4	-33191
18	-39091	24598	227030	·35608	69	·48584	277.68	1869.76	3.27179
19	•33523	21639	205391	·31258	70	•44354	250.90	1618-86	20921
20	-28073	19087	186304.	•27021	71	·39950	225.66	1393-20	14401
21	•22764	16890-	169414.	•22894	72	·35345	201.97	1191-23	-07598
22	17615	15002	154412.	·18867	73	·30529 ·25471	179.77	1011-46	00495
23	12635	13377	141035	14933	74	20158	159.07	852.39	2.93064
24	07829	11975	129060-	·11079	75 76	·14554	139-81	712.58	85283
25	.03270	10782	118278	.07294	77	·08640	122.01	590.57	.77127
26	3.98903	9750-6	108527	·03553 4·99861	78	.02376	105.62	484.948	68569
27	94681	8847·2 8047·7	99680- 91632-	•96205	79	1.95741	90.659	394.289	•59582
28	•90567 •86527	7332·8	84299	.92582	80	88692	77.076	317-213	-50135
29	·80327 ·82472	6679·2	77620	-88997	81	-81208	64.875	252.338	·40199
30 31	.78429	6085-4	71535.	85452	82	·73246	54.008	198-330	-29739
32	.74425	5549.5	65986	81945	83	-64784	44-447	153.883	-18718
33	70480	5067-6	60918	-78474	84	.55773	36-119	117.764	·07100
34	66612	4635.8	56282	.75037	85	·46191	28.967	88.797	1.94840
35	62846	4250.7	52031	4.71626	86	·35970	22.893	65.904	-81891
36	•59183	8906-9	48124-	-68236	87	·25064	17.809	48.095	68210
37	-55623	8599-4	44525	-64860	88	-13415	13.619	34.476	•53752
38	-52165	3323.9	41201.	-61491	89	·00969	10-226	24.2505	38472
39	-48803	3076-3	38125.	-58121	90	0.87665	7.5275	16.7230	-22331
40	-45558	2854.8	35271.	.54742	91	·73474	5.4293	11.2937	.05281
41	·42404	2654.9	32616-	·51343	92	·58369	3.8343	7.4594	0.87270
42	-39315	$2472 \cdot 6$	30144.	·47920	93	·42341	2.6510	4.8084	-68200
43	-36271	2305.2	27839	·44465	94	•25348	1.7926	8.0158	•47940
44	-33250	2150-3	25689-	·4097 4	95	07348	1.1844	1.8314	26278
45	-30254	2007.0	23682.	.37442	96	T-88358	·76486	1.06651	-02796
46	.27254	1873.0	21809.	·33864	97	⋅68375	·48278	•58373	T-76621
47	-24229	1747.0	20062-	-30237	98	•47398	•29784	•28589	·45620
48	-21160	1627.8	18434.	·26562	99	25459	-17972	·10617	·02600
49	·18036	1514.8	16919.	.22837	100	-02600	-10617	••	
50	-14785	1405 ·6	15513.	19069	•				1

No. 2.—Old Rules. Widows. Value of Annuity, Payable Half-yearly, in Advance, till Marriage or Death.

5 PER CENT.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25 26 27 28 29 30 31 31 31 32 33 34 34 34 34 34 34 34 34 34 34 34 34	(1) 1.03206 08784 .10378 .10724 .10622 .10212 .09600 .08807 .07853 .06795 .05623 .04322 .02870 .01250 0.99456 .97959 .96794 .96296 .96517 .97735	(2) 10·766 12·242 12·699 12·801 12·771 12·651 12·474 12·248 11·982 11·694 11·382 11·046 10·683 10·292 9·876 9·541 9·288 9·182 9·299 9·492	(3) 11-516 12-992 13-449 13-551 13-551 13-521 13-224 12-998 12-732 12-444 12-132 11-796 11-433 11-042 10-626 10-291 10-038 9-932 9-979	(4) 12.254 13.221 13.500 13.536 13.461 13.313 13.111 12.865 12.588 12.288 11.964 11.615 11.238 10.459 10.165 9.985	50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65	(1) -04284 -03819 -03355 -02896 -02337 -01806 -01235 -00592 -099832 -98892 -97838 -96666 -95385 -94017 -92595	(2) 11-037 10-919 10-803 10-690 10-553 10-425 10-288 10-137 9-961 9-748 9-514 9-514 9-261 8-992 8-713 8-432	(3) 11.787 11.669 11.553 11.440 11.308 11.175 11.038 10.887 10.711 10.498 10.264 10.011 9.742 9.463	(4) 11-728 11-611 11-497 11-372 11-239 11-107 10-963 10-695 10-381 10-138 9-877 9-603 9-323
1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 25 26 27 28 29 30 31 32 33	1.03206 .08784 .10378 .10724 .10622 .10212 .09600 .08807 .07853 .06795 .05628 .04322 .02870 .01250 .099456 .97959 .96794 .96296 .96517 .97735	10.766 12.242 12.699 12.801 12.771 12.651 12.474 12.248 11.982 11.694 11.382 11.046 10.683 10.292 9.876 9.541 9.288 9.182	11-516 12-992 13-449 13-551 13-521 18-401 13-224 12-998 12-732 12-444 12-132 11-796 11-433 11-042 10-626 10-291 10-038 9-932	12.254 13.221 13.500 13.536 13.461 13.313 13.111 12.865 12.588 12.288 11.964 11.615 11.238 10.834 10.459 10.165 9.985	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65	.04284 .03819 .03355 .02896 .02337 .01806 .01235 .00592 .098832 .98892 .97838 .96666 .95385 .94017	11.037 10.919 10.803 10.690 10.553 10.425 10.288 10.137 9.961 9.748 9.514 9.261 8.992 8.713	11.787 11.669 11.553 11.440 11.308 11.175 11.038 10.887 10.711 10.498 10.264 10.011 9.742	11-728 11-611 11-497 11-372 11-239 11-107 10-963 10-799 10-605 10-381 10-138 9-877 9-603
1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 25 26 27 28 29 30 31 32 33	.08784 .10378 .10724 .10622 .10212 .09600 .08807 .07853 .06795 .05628 .04322 .02870 .01250 .099456 .97959 .96794 .96296 .96517 .97735	12.242 12.699 12.801 12.771 12.651 12.474 12.248 11.982 11.694 11.382 11.046 10.683 10.292 9.876 9.541 9.288 9.182	12.992 13.449 13.551 13.521 13.521 13.998 12.732 12.444 12.132 11.796 11.433 11.042 10.626 10.291 10.038 9.932	13·221 13·500 13·536 13·461 13·313 13·111 12·588 12·588 12·288 11·964 11·615 11·238 10·459 10·165 9·985	51 52 53 54 55 56 57 58 59 60 61 62 63 64 65	.03819 .03355 .02896 .02337 .01806 .01235 .00592 .98892 .97838 .96666 .95385 .94017	10.919 10.803 10.690 10.553 10.425 10.288 10.137 9.961 9.748 9.514 9.261 8.992 8.713	11.669 11.553 11.440 11.303 11.175 11.038 10.887 10.711 10.498 10.264 10.011 9.742	11-611 11-497 11-372 11-239 11-107 10-963 10-799 10-605 10-381 10-138 9-877 9-603
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 25 26 27 28 29 30 31 32 33 33	-10378 -10724 -10622 -10212 -09600 -08807 -07853 -06795 -05623 -04322 -02870 -01250 0-99456 -97959 -96794 -96296 -96517 -97735	12-699 12-801 12-771 12-651 12-474 12-248 11-982 11-694 11-382 11-046 10-683 10-292 9-876 9-541 9-288 9-182 9-229	13-449 13-551 13-551 13-521 13-998 12-732 12-444 12-132 11-796 11-433 11-042 10-626 10-291 10-038 9-932	13.500 13.536 13.461 13.313 13.111 12.865 12.588 11.964 11.615 11.238 10.834 10.459 10.165 9.985	52 53 54 55 56 57 58 59 60 61 62 63 64 65	.03355 .02896 .02337 .01806 .01235 .00592 .09832 .98892 .97838 .9666 .95385 .94017	10-803 10-690 10-553 10-425 10-288 10-137 9-961 9-748 9-514 9-261 8-992 8-713	11.553 11.440 11.308 11.175 11.038 10.887 10.711 10.498 10.264 10.011 9.742	11-497 11-372 11-239 11-107 10-963 10-799 10-605 10-381 10-138 9-877 9-603
3 44 5 66 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 223 224 225 227 228 29 30 31 32 33	-10724 -10622 -10212 -09600 -08807 -07853 -06795 -05623 -04322 -02870 -01250 -0-99456 -97959 -96794 -96296 -96517 -97735	12-801 12-771 12-651 12-474 12-248 11-982 11-694 11-382 11-046 10-683 10-292 9-876 9-541 9-288 9-182 9-229	13.551 13.521 13.401 13.224 12.998 12.732 12.444 12.132 11.796 11.433 11.042 10.626 10.291 10.038 9.932	13.536 13.461 13.313 13.111 12.865 12.588 12.288 11.615 11.238 10.834 10.459 10.165 9.985	53 54 55 56 57 58 59 60 61 62 63 64 65	.02896 .02337 .01806 .01235 .00592 0.99832 .98892 .97838 .96666 .95385 .94017	10.690 10.553 10.425 10.288 10.137 9.961 9.748 9.514 9.261 8.992 8.713	11.440 11.303 11.175 11.038 10.887 10.711 10.498 10.264 10.011 9.742	11-372 11-239 11-107 10-963 10-799 10-605 10-381 10-138 9-877 9-603
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	-10212 -09600 -08807 -07853 -06795 -05623 -04322 -02870 -01250 0-99456 -97959 -96794 -96296 -96517 -97735	12-651 12-474 12-248 11-982 11-694 11-382 11-046 10-683 10-292 9-876 9-541 9-288 9-182 9-229	18-401 13-224 12-998 12-732 12-444 12-132 11-796 11-433 11-042 10-626 10-291 10-038 9-932	13.313 13.111 12.865 12.588 12.288 11.964 11.615 11.238 10.834 10.459 10.165 9.985	55 56 57 58 59 60 61 62 63 64 65	.01806 .01235 .00592 0.99832 .97838 .96666 .95385 .94017	10.553 10.425 10.288 10.137 9.961 9.748 9.514 9.261 8.992 8.713	11.308 11.175 11.038 10.887 10.711 10.498 10.264 10.011 9.742	11.239 11.107 10.963 10.799 10.605 10.381 10.138 9.877 9.603
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	.09600 .08807 .07853 .06795 .05628 .04322 .02870 .01250 0.99456 .97959 .96794 .96296 .96517 .97735	12.474 12.248 11.982 11.694 11.382 11.046 10.683 10.292 9.876 9.541 9.288 9.182 9.229	13-224 12-998 12-732 12-444 12-132 11-796 11-433 11-042 10-626 10-291 10-038 9-932	13.111 12.865 12.588 12.288 11.964 11.615 11.238 10.834 10.459 10.165 9.985	56 57 58 59 60 61 62 63 64 65	.01235 .00592 0.99832 .98892 .97838 .96666 .95385 .94017	10·288 10·137 9·961 9·748 9·514 9·261 8·992 8·713	11.038 10.887 10.711 10.498 10.264 10.011 9.742	10.963 10.799 10.605 10.381 10.138 9.877 9.603
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30 31 32 33	.08807 .07853 .06795 .05623 .04322 .02870 .01250 .0-99456 .97959 .96794 .96296 .96517 .97735	12·248 11·982 11·694 11·382 11·046 10·683 10·292 9·876 9·541 9·288 9·182 9·229	12.998 12.732 12.444 12.132 11.796 11.433 11.042 10.626 10.291 10.038 9.932	12.865 12.588 12.288 11.964 11.615 11.238 10.834 10.459 10.165 9.985	57 58 59 60 61 62 63 64 65	.00592 0.99832 .98892 .97838 .96666 .95385 .94017	10·137 9·961 9·748 9·514 9·261 8·992 8·713	10.887 10.711 10.498 10.264 10.011 9.742	10·799 10·605 10·381 10·138 9·877 9·603
8 9 10 11 112 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	.07853 .06795 .05628 .04322 .02870 .01250 0.99456 .97959 .96794 .96296 .96517 .97735	11.982 11.694 11.382 11.046 10.683 10.292 9.876 9.541 9.288 9.182 9.229	12.732 12.444 12.132 11.796 11.433 11.042 10.626 10.291 10.038 9.932	12.588 12.288 11.964 11.615 11.238 10.834 10.459 10.165 9.985	58 59 60 61 62 63 64 65	0-99832 -98892 -97838 -96666 -95385 -94017	9.961 9.748 9.514 9.261 8.992 8.713	10·711 10·498 10·264 10·011 9·742	10.605 10.381 10.138 9.877 9.603
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	.06795 .05623 .04322 .02870 .01250 0.99456 .97959 .96794 .96296 .96517 .97735	11.694 11.382 11.046 10.683 10.292 9.876 9.541 9.288 9.182 9.229	12.444 12.132 11.796 11.433 11.042 10.626 10.291 10.038 9.932	12.288 11.964 11.615 11.238 10.834 10.459 10.165 9.985	59 60 61 62 63 64 65	•98892 •97838 •96666 •95385 •94017	9·748 9·514 9·261 8·992 8·713	10·498 10·264 10·011 9·742	10·381 10·138 9·877 9·603
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	.05623 .04322 .02870 .01250 0.99456 .97959 .96794 .96296 .96517 .97735	11.382 11.046 10.683 10.292 9.876 9.541 9.288 9.182 9.229	12·132 11·796 11·433 11·042 10·626 10·291 10·038 9·932	11.964 11.615 11.238 10.834 10.459 10.165 9.985	60 61 62 63 64 65	•97838 •96666 •95385 •94017	9.514 9.261 8.992 8.713	10·264 10·011 9·742	10·138 9·877 9·603
11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25 26 27 28 29 30 31 32 33	.04322 .02870 .01250 0.99456 .97959 .96794 .96296 .96517 .97735	11.046 10.683 10.292 9.876 9.541 9.288 9.182 9.229	11.796 11.433 11.042 10.626 10.291 10.038 9.932	11.615 11.238 10.834 10.459 10.165 9.985	61 62 63 64 65	•96666 •95385 •94017	9·261 8·992 8·713	10.011 9.742	9-877 9-603
12 13 14 15 16 17 18 20 21 22 23 24 25 26 27 28 29 30 31 32 33	.02870 .01250 0.99456 .97959 .96794 .96296 .96517 .97735	10.683 10.292 9.876 9.541 9.288 9.182 9.229	11.433 11.042 10.626 10.291 10.038 9.932	11-238 10-834 10-459 10-165 9-985	62 63 64 65	·95385 ·94017	8.992 8.713	9.742	9.603
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	.01250 0.99456 .97959 .96794 .96296 .96517 .97735	10-292 9-876 9-541 9-288 9-182 9-229	11.042 10.626 10.291 10.038 9.932	10.834 10.459 10.165 9.985	63 64 65	·94017	8.713		
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	0-99456 -97959 -96794 -96296 -96517 -97735	9.876 9.541 9.288 9.182 9.229	10.626 10.291 10.038 9.932	10·459 10·165 9·985	64 65			1 9.463 (4.272
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	•97959 •96794 •96296 •96517 •97735	9.541 9.288 9.182 9.229	10·291 10·038 9·932	10·165 9·985	65	•92595	8.439		
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	•96794 •96296 •96517 •97735	9·288 9·182 9·229	10.038 9.932	9.985		01115		9.182	9.041
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	•96296 •96517 •97735	9·182 9·229	9.932			·91115 ·89580	8.150	8-900 8-617	8·759 8·475
18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	∙96517 ∙97735	9.229			66 67	·87984	7·867 7·583	8.333	8.192
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	-97735			10.111	68	86330	7·300	8.050	7.908
20 21 22 23 24 25 26 27 28 29 30 31 32 33			10.242	10.377	69	-84607	7.016	7.766	7.625
21 22 23 24 25 26 27 28 29 30 31 32 33	·98948	9.761	10.511	10.646	70	82825	6.734	7.484	7.343
22 23 24 25 26 27 28 29 30 31 32 33	1.00130	10.030	10.780	10-911	71	-80971	6.452	7.202	7.063
24 25 26 27 28 29 30 31 32 33	-01252	10.292	11.042	11-168	72	·79056	6.174	6.924	6.786
25 26 27 28 29 30 31 32 33	·02298	10.543	11.293	11.410	73	·77069	5-898	6.648	6.513
26 27 28 29 30 31 32 33	·03250	10.777	11.527	11.624	74	·75024	5.627	6.377	6.243
27 28 29 30 31 32 33	·0 1 024	10-971	11.721	11.801	75	·72906	5.359	6.109	5.978
28 29 30 31 32 33	·04650	11-130	11.880	11.949	76	.70729	5 ·09 7	5.847	5.719
29 30 31 32 33	-05180	11.267	12.017	12.077	77	-68487	4.840	5.590	5.466
30 31 32 33	·05638	11.386	12.136	12.191	78	•66193	4.591	5.341	5.220
31 32 33	•06055	11.496	12.246	12.309	79	-63841	4.319	5.099	4.983
32 33	•06525	11.621	12.371	12.438	80	-61443	4.116	4.866	4.735
33	·07023 ·07520	11.755	12.505	12.573	81	·58991	3.890	4.640	4.531
1	.07994	11.891 12.021	12.641 12.771	12.706 12.831	82 83	•56493 •53934	3·672 3·462	4.422 4.212	4.317 4.111
	08425	12.021	12.771	12.031	84	51327	3.260	4.010	3.913
35	-08780	12.241	12.991	13.030	85	48649	3.065	3.815	3.722
36	·09053	12.318	13.068	13.094	86	·45921	2.879	3.629	3.540
37	-09237	12.370	13.120	13.133	87	·43146	2.701	3.451	3-366
38	·09326	12.395	13-145	13.144	88	•40337	2.531	3.281	3.202
39	·09318	12.393	13-143	13-124	89	37503	2.372	3.122	3.047
40	·09184	12.355	13-105	13.070	90	·34666	2.222	2.972	2.901
41	·08939	$12 \cdot 285$	13-035	12.988	91	-31807	2.080	2.830	2.763
42	·08605	12.191	12.941	12.884	92	·28901	1.945	2.695	2.630
43	·08194	12.076	12.826	12.761	93	·25859	1.814	2.564	2.498
44	·07724	11.946	12.696	12.623	94	•22592	1.682	2.432	2.364
45	·07188	11.800	12.550	12.472	95	18930	1.546	2.296	2-220
46	06610	11.644	12.394	12.314	96	14438	1.394	2.144	2.052
47 48	·06008 ·05402	11.484	12.234	12.155	97	·08246 1·98222	1.209	1.959 1.710	1·835 J·526
48		11.325 11.169	12-075 11-919	11.997 11.853	98 99	.77141	•960 •591	1.710	1.320

5 PER CENT.

No. 3.—Old Rules. Widows and Children. Value of Life Annuity (Mortality only).

D and N Columns. (From Neison, Table VI.)

Age m	Log. Du.	D _m ,	N m = Dm+1 + Dm+2	Log. Nm.	Age m.	Log. Dm.	D _W .	N m = I ¹ m+1 + Dm+2	Log. N
0	5.00000	100000-	1293548	6-11178	51	-58322	3830-2	44884-4	-65209
ī	4.91011	81304	1212244	-08359	52	.55521	3591.0	41293.4	-61588
$ar{2}$	-86126	72654	1139590-	-05675	53	•52694	3364.7	37928.7	•57897
3	-82513	66854	1072736-	-03049	54	·49835	3150.3	34778·4	-54130
4	.79341	62146	1010590-	-00458	55	·46941	$2947 \cdot 2$	31831.2	→50288
5	.76447	58139-	952451.	5.97884	56	·44004	2754.5	29076.7	•4635
6	.73710	54588-	897863-	.95321	57	·41016	2571.3	26505.4	·42333
7	.71094	51397	846466	.92761	58	37975	2397.5	24107.9	·3821
8	-68567	48492	797974.	•90199	59	-34883	2232.7	21875.2	·3399
9	-66061	45773.	752201	·87633	60	-31733	2076-5	19798 7	·2966
10	-63576	43227	708974	-85063	61	-28523	1928.5	17870-2	·2521
11	-61112	40843.	668131	-82486	62	-25249	1788-5	16081.7	•2063
12	-58680	38619.	629512.	·79900	63	-21898	1655 ·7	1 44 26.0	-1591
13	.56272	36536-	592976	.77304	64	18453	1529.4	12896-6	·1104
14	-53878	34577	558399	·74695	65	-14907	1409.5	11487-1	·0602
15	-51486	32724	525675.	·72072	66	-11244	1295.5	10191.6	.0082
16	·49084	30963	494712.	-69435	67	.07460	1187-4	9004.2	3.9544
17	·46660	29282	465430.	-66785	68	.03539	108 4 .9	7 919∙ 3	-8986
18	•44217	27680	437750.	-64123	69	2.99474	987-96	6931.37	·8408
19	-41755	26155.	411595.	-61448	70	.95244	896.27	6035-10	·7806
20	39279	24705.	386890	-58759	71	-90840	809.84	5225.26	·7181
21	36792	23330	363560	-56958	72	86235	728.37	4496-89	-6529
22	-34298	22028-	341532.	-53343	73	-81419	651.91	3844.98	.5849
23	·31795	20795	320737	-50615	74	·76361	580-24	3264.74	•5138
24	29284	19626-	301111.	·47873	75	-71048	513.43	2751.31	·4395
25	-26765	18520-	282591	-45116	76	65444	451.27	2300·04	36173
26	24237	17473.	265118.	·42344	77	•59530	393.82	1906-22	·2801′
27	-21710	16485	248633.	39555	78	-53266	340.93	1565.29	1946
28	-19154	15543.	233090-	36752	. 79	•46631	292-62	1272.67	1047
29	16600	14655.	218435.	-33933	80	39582	248.78	1023.89	0102
30	14038	13816.	204619-	·31095	81	-32098	209.40	814.49	2.91089
31	11467	13022	191597	.28240	82	24136	174.33	640-16	-80629
32	-08888	12271	179326-	·25365	83	15674	143.46	496.70	-69609
33	•06301	11561.	167765	.22471	84	-06663	116.58	380.118	•5799
34	03707	10891	156874.	·19554	85	1.97001	93.500	286-618	45730
35	01104	10257	146616.9	-16619	86	-86880	73.892	212.726	-3278
36	3.98496	9659-6	136957.3	-13659	87	·75957	57.487	155-239	1920
37	95879	9094.7	127862-6	-10673	88	·64305	43.959	111-280	-04649
38	93256	8561.7	119300.9	·07664	89	-51859	33.006	78-274	1.8936
39	-90627	8058-8	111242.1	.04626	90	-38555	24.297	53.977	.7322
40	-87993	7584.6	103657.5	-01561	91	·24364	17.524	36.453	-56173
41	-85352	7137-1	96520.4	4.98462	92	.09259	12.376	24.0772	3816
42	-82703	6714.8	89805.6	-95331	93	0.93231	8.5568	15.5204	0.1909
43	-80047	6316.4	83489-2	-92163	94	·76239	5.7862	9.7342	-98830
44	.77380	5940.2	77549.0	-88958	95	-58240	3.8230	5.9112	.77168
45	74703	5585-1	71963.9	-85712	96	-39248	2.4688	3.4424	-53686
46	·72013	5249.6	66714.3	-82422	97	-19265	1.5583	1.88412	2751
47	69309	4932.8	61781.5	·79086	98	1.98288	-96135	-92277	1.9650
48	-66590	4633-4	57148-1	-75701	99	.76349	-58008	∙3 4269	-5349
49	-63854	4350.5	52797.6	·72262	100	-53490	·34269		1
50	-61098	4083.0	48714-6	-68766	:1 -1-				1

5 PER CENT.

No. 4.—Old Rules. Widows and Children. Value of Life Annuity, Payable Half-yearly, in Advance. (From Neison, Table VI.)

Age m.	Log. $\left(\frac{Nm}{Dm}\right)$	Value of Annuity a _m .	Value of Annuity, Half-yearly, in Advance, am + .750.	Ages #4.	Log. $\left(\frac{N_{m}}{D_{m}}\right)$	Value of Annuity a.s.	Value of Annuity, Half-yearly, in Advance, a m + .750.
0	1.11178	12.935	13-685	50	.07668	11.931	12.681
1	.17348	14.910	15.060	51	-06887	11.718	12-468
2	•19549	15.685	16.435	52	-06067	11.500	12.250
3	•20536	16.046	16.796	53	∙05203	11.273	12.023
4	-21117	16.262	17.012	54	·04295	11.040	11.790
5	·21437	16.382	17-132	55	-03344	10.801	11.551
6	-21611	16.448	17.198	56	-02351	10.556	11.306
7	•21667	16.469	17.219	57	-01317	10.308	11.058
8	-21632	16.456	17.206	58	-00241	10.031	10.781
9	-21572	16.433	17.183	59	0.99112	9.798	10.548
10	-21487	16.401	17.151	60	•97931	9.535	10.285
11	.21374	16.358	17.108	61	•96689	9.266	10.016
12	·21220	16.301	17.051	62	·95385	8.992	9.742
13	•21032	16.230	16.980	63	-94017	8.713	9-463
14	-20817	16.150	16.900	64	·92596	8.433	9-183
15	·20586	16-064	16.814	65	·91114	8.150	8-900
16	•20351	15.978	16.728	66	-89578	7.866	8-616
17	-20125	15.895	16-645	67	·87984	7.683	8.333
18	·19906	15-815	16.565	68	·86330	7.300	8-050
19	·19693	15.737	16.487	69	·84608	7.016	7.766
20	·19480	15.660	16.410	70	-82824	6.734	7.484
21	·19266	15.583	16.333	71	-80971	6.452	7.202
22	·19045	15.504	16.254	72	·79056	6.174	6.924
23	-18820	15.424	16.174	73	·77071	5.898	6.648
24	⋅18589	15.342	16.092	74	·75023	5-626	6.376
25	·18351	15.258	16.008	75	·72906	5.359	6.109
26	⋅18107	15.173	15.923	76	·70729	5.097	5.847
27	·17845	15.082	15.832	77	•68477	4.839	5.589
28	·17598	14.996	15.746	78	·6619 4	4.591	5-341
29	·17333	14.905	15-€55	79	-63841	4.349	5.099
30	·17057	14.811	15.561	80	61442	4.115	4.865
31	·16773	14.714	15.464	81	-58991	3.890	4.640
32	·16477	14.614	15.364	82	-56493	3.672	4.422
33	·16170	14.511	15.261	83	•53935	3.462	4.212
3 4	·15847	14.404	15.154	84	·51329	3.261	4.011
35	·15515	14.294	15.044	85	·48649	3.065	3.815
36	·15163	14.178	14.928	86	·45922	2.879	3.629
37	·14794	14.059	14.809	87	•43243	2.707	3.457
38	-14408	13.934	14.684	88	•40337	2.531	3.281
39	13999	13.804	14.554	89	•37503	2.372	3.122
40	·13568	13.667	14.417	90	·34666	2.222	2.972
41	13110	13.524	14.274	91	·31809	2.080	2.830
42	12628	13.375	14.125	92	·28902	1.945	2.695
43	-12116	13.218	13.968	93	•25859	1.814	2.564
44	·11578	18.055	13.805	94	-22591	1.682	2.432
45	·11009	12.909	13.659	95	·18928	1.546	2.296
46	·10409	12·708 12·525	13.458 13.275	96 97	·14438	1·39 4 1·209	2·1 44 1·959
47 48	·09777 ·09111	12·325 12·335	13.085	98	-08246 T-98221	·960	1.710
48 49	09111	12-535 12-136	13.085	98	1·98221 ·77141	·591	1.710
40	100200	12-190	12.000	99	.4/141	.991	1.947

5 PER CENT.

No. 5.—Old Rules. Sons and Daughters. Values of Temporary Annuity till Age 6, 10, and 21.

Age m.	Log. D ₆ + Log. (a ₆ + ·750)	Value of Life Annuity	Log. D ₁₀ + Log. (a ₁₀ + ·750)	Value of Life Annuity	Log. D ₁₉ + Log. (a ₁₉ + .750).	Value of Life Annuity	Value of	Temporary at Age sa.	Annuit y
Age m.	= '97258 - Log. Dm.	after Age 6.	= ·87005 - Log. Dm.	after Age 10.		after Age 19.	Till Age 6.	Till Age 10.	Till Age 19.
0	-97258	9-388	-87005	7.414	·63469	4.312	4.297	6-271	9.373
1	1.06247	11.547	·9599 4	9.119	•72458	5·304	4.113	6.541	10.356
2	-11132	12.922	1.00879	10-204	·773 1 3	5.935	3.513	6.231	10.500
3	·14745	14-048	·04492	11-090	·80956	6.450	2.753	5.706	10.346
4	-17917	15-107	·07664	11.930	-84128	6-938	1.905	5.082	10.074
5	-20811	16-148	·10558	12.752	-87022	7.417	·984	4.380	9.715
6	••	••	·13295	13.582	·89759	7.899	• •	3.616	9.299
7	••	••	·15911	14.425	·92375	8.390	• •	2.794	8.829
8	••	••	·18438	15.289	·94902	8.892	• •	1.917	8.314
9		••	·209 44	16-197	·97408	9.421	• •	-986	7.762
10	••	••	• •	••	-99893	9.975	• •	• •	7.176
11	••	••	• •	••	1.02357	10.558	• •	• •	6.550
12	••	••	••	• •	·04789	11.166	• •	• •	5.885
13		••	••	• •	∙07197	11.802	• •		5.178
14	••	••	••	•• [-09591	12.471	• •	••	4.429
15		••	••	••	·11983	13-177	• •		3.637
16		••	••	• •	·14385	13.927	• •	••	2.801
17	••	• •	••	• •	·16809	14.726	• •	••	1.919
18		• •	• •	• •	·19252	15-578	• •	• • •	-987

5 PER CENT.

No. 6.—Old Rules. Sons and Daughters. Value of £300 at Age 19.

Age m.	Log. D _m = '41755 - Log. D _m .	Value of £1 at Age 19.	Value of £300 at Age 19.
0	Ī·41755	-2616	78.5
1	·50744	-3217	96.5
2	· 5 5629	-3600	108.0
3	·59242	-3912	117-4
4	·62414	·4209	126.3
5	·65308	•4499	135.0
6	·680 45	·4791	143.7
7	·70661	·5089	152-6
8	·73188	·5394	161-8
9	·75694	·5714	171-4
10	·78179	·6050	181.5
11	·80643	·6404	192-1
12	·83075	·6773	203-2
13	·85483	·7159	214.8
14	·87877	·7564	226-9
15	·90269	·7993	239-8
16	·92671	·8447	253.4
17	·95095	·89 32	268.0
18 i	·97538	·9 44 9	283.5

5 PER CENT.

No. 7.—Old Rules. Sons and Daughters. Value of Increase of Pension £20 till Age 6, and £30 from Age 6 till 10, after Mother's Death.

	Log. d _{m+28} .	Ditto + Log.	Nat. No. of Ditto = Pm.	Km = Pm + Pm + 1	Log, of K w	Log. Dm.m+28.	Log. Km Dm.m+28	Value of Increase on Pension.	Ditto at Mean Age m+ 1.
0 28	7.15690	9-33328	215417.	1136031	-05538	·19154	0.86384	7.309	7·334
1 29	·08995	-27578	188703-	920614	·96408	-09730	-86678	7.358	6.986
2 30	∙05154	-22092	166311.	731911	·86446	·04402	·82044	6.614	6.113
3 31	-02109	·16254	145392.	565600	.75251	-00337	·74914	5.612	5.072
4 32	·99352	·0990 3	125611.	420208	·62347	·96705	·65642	4.533	3.983
5 33	·96743	∙02813	106691.	294597	·46923	.93342	-53581	3.434	2.896
6 34	.94272	·925 11	84225.	187906	.27395	-90131	·37264	2.359	1.879
7 35	-91905	·76785	58594	103681	.01570	-87030	·14540	1.398	1.024
8 36	-89458	·53307	34125.	45087	-65405	-84014	-81391	-651	·410
9 37	·8696 3	·03989	10962-	10962	-03989	-81010	.22979	-170	-085

5 PER CENT.

No. 8.—Old Rules. Sons and Daughters. Value of Total Benefits if Mother is Living.

Age m.	Value of £100 Annuity till Age 19.	(2) Value of £50 Annuity till Age 10.	(3) Value of £20 Annuity till Age 6.	(4) (1)-(2)+(3)	Value of ±300 at Age 19.	Total Value of Benefits if Mother Living.	Ditto at Mean Age m + 1.	Total with Increase of £20 at Age 0 to 6, and £30 at Age 6 to 10, after Mother's Death.	Log. Ditto.
0	937-3	313-6	85.9	537.8	78.5	616-3	669-5	676-8	2.83046
1	1035-6	327.2	82.3	626-1	96.5	722.6	749-4	756-4	87875
2	1050-0	311.6	70.3	668-1	108-0	776-1	793.9	800-0	·90309
3	1034.6	285-3	55-1	694.2	117-4	811.6	826-6	831.7	·91997
4	1007.4	254.1	38.1	715.2	126-3	841.5	854.7	858.7	·93384
5	971.5	219.0	19.7	632.8	135.0	867.8	880.3	883.2	·94606
6	929.9	180.8	· • •	749-1	143.7	892.8	894.3	896-2	·952 4 0
7	882-9	139.7	• •	743.2	152.6	895-8	896.6	897-6	·95308
8	831.4	95.9	• •	735.5	161.8	897.3	897.8	898-2	·95337
9	776-2	49.3	• • •	726.9	171.4	898.3	898.7	898-8	95366
10	717-6	• • •	••	717-6	181.5	899-1	873.1	••	·94106
11	655-0	• • •		655.0	192-1	847.1	819-4	1	91350
12	588.5	• •	• •	518.5	203.2	791.7	762-1		-88201
13	517.8	• •	••	517.8	214.8	732-6	701-2	· · ·	-84584
14	442.9	• •		442.9	226.9	669.8	636.6		-80387
15	363.7	• • •	••	363.7	239.8	603.5	568.5		·75473
16	280-1	••	••	280.1	253.4	533.5	496.7		·69609
17	191.9	••	••	191.9	268-0	459.9	421.0	•••	-62428
18	98.7	• •	••	98.7	283.5	382.2	341.1	1	·53288
19		· • •	••	••	300.0	300.0	• •	1 1	• •

5 PER CENT.

No. 9.—Old Rules. Sons and Daughters. Value of Total Benefits if both Parents are Dead.

Age m.	Value of £30 Annuity, Age 0 to 10.	Value of £10 Annuity, Age 0 to 6.	Total Value of Increased Pensions (1) - (2).	Value of Ditto at Mean Age m+ 1=pm+1.	Log. of pm+i.	Value of Total Benefits if both Parents are Dead.
0	188-1	43.0	145.1	150-1	2.17638	819-6
1	196-2	41.1	155-1	158.4	·18583	902-8
2	186.9	85.1	151.8	147.7	·16938	941.6
2 3	171.2	27.5	143.7	138.5	·14145	965-1
	152.5	19-1	133.4	127.5	·10551	982.2
4 5	131.4	9.8	121.6	115.0	.06070	995.8
6	108-5	• •	108.5	96.1	1.98272	992.2
7	83.8	• •	83.8	70.6	-84880	964.9
8	57.5	• •	57.5	43.5	· 63 849	941.3
9	29.6		29.6	14.8	·17026	918.5

5 PER CENT.

No. 10.—Old Rules. Husband and Wife. D and N Columns, and Value of Joint Life Annuity. (From Neison, Tables II. and III.)

Ages 5. 76 - 7.	Log. Dm.m-7.	D _{m.m-7} + 10,000.	N 196. 186 - 7.	Log. Nm.m-7.	Log. $\left(\frac{N_{m,m-7}}{D_{m,m-7}}\right)$	Value of Joint Lii Annuity.
0 13	7.92374	2000 0	100070	9.01650	1.09276	12.381
0 13 1 14	-89166	8389-6	103872- 96026-	8.98239	-08773	12.239
2 15	-86497	7846-2	88698	·94791	08294	12.104
3 16	·83164	7327.7	81865	91310	·07846	11.980
4 17	-80412	6833·4 6369·7	75495	·87792	.07380	11.852
5 18	-77318	5931.6	69563-	84238	06920	11.727
6 19	-74182	5518-5	64044	-80648	.06466	11.605
7 20	·71033	5132.5	58912	.77020	.05987	11.478
8 21	-67849	4769.7	54142	·73353	-05504	11.351
9 22	-64651	4431.1	49711.	69645	.04994	11.219
0 23	-61407	4112.2	45599	-65895	·0 14 88	11.089
1 24	-58147	3814.8	41784	-62101	.03954	10.953
2 25	-54871	3537·6	38246	•58259	-03388	10.812
3 26	•51566	3278-4	34968	-54367	-02801	10.666
4 27	·48200	3533.9	31934	-50425	.02225	10-526
5 28	·44793	2805.0	29129	·46433	-01640	10-385
6 29	·41344	2590.8	26538-	.42387	·01043	10-243
7 30	·37850	2390.6	24147	-38286	.00436	10-101
8 31	-34308	2203.3	21944.	-34132	0.99824	9.960
9 32	-30708	2028-1	19916.	•29920	.99212	9.820
0 33	-27057	1864.5	18051	-25650	.98593	9-681
1 34	23349	1712.0	16339	-21323	.97974	9.544
2 35	19559	1568-9	14770-	.16938	.97379	9-414
3 36	15712	1435.9	13334-2	12496	96784	9.286
4 37	-11780	1311.60	12022-6	-08001	-96221	9.161
5 38	-07788	1196-31	10826-3	-03447	-95659	9.049
6 39	-03709	1089-16	9737.1	7.98843	·95134	8.940
7 40	6.99609	991.04	8746-1	94181	·94572	8.825
8 41	-95468	900.91	7845.2	-89460	-93992	8.708
9 42	-91289	818-26	7026.9	·84676	93387	8.588
0 43	-87108	743.16	6283.7	.79822	-92714	8· 1 56
1 44	-82902	674.56	5609-1	·74889	-91987	8.315
2 45	-78706	612.44	4996.7	-69868	-91162	8.159
3 46	.74474	555-57	4441.1	-64749	-90275	7·99 1
4 47	.70221	503.74	3937-38	-59521	-89300	7.816
5 48	-65937	456-43	3480.95	-54170	-88233	7.627
6 49	-61605	413.10	3067.85	· 48683	-87078	7.426
7 50	-57180	373.08	2694.77	·43053	-85873	7.223
8 51	-52675	336-32	2358-45	·3726 4	-84589	7.013
9 52	48039	302.27	2056-18	·31307	-83268	6.803
0 53	·43288	270.94	1785.24	25169	-81881	6.589
1 54	-38403	242.12	1543-12	.18839	-80436	6.373
2 55	·33367	215-61	1437-51	-12303	·78936	6.157
3 56	·28167	191.28	1136-23	.05545	·77378	5.940
£ 57	-22701	169.01	967-22	6.98553	.75762	5.723
5 58	·17225	148-68	818-54	91304	-24079	5.505
6 59	·11455	130.18	688-36	⋅83782	.72327	5.288
7 60	.05469	113.42	574.91	·75962	-70493	5.069
8 61	5.99241	98.268	476-67	-67822	-68581	4.851
9 62	.92747	84.619	392.05	-59334	-66587	4.633
0 63	-85961	72.379	319-67	-50470	-64509	4.417
1 64	·78861	61.463	258-21	· 41197	-62336	4.201
2 65	.71407	51.769	206.44	-31479	-60072	3.988
3 66	-63568	43.220	163-22	·21277	·57709	3.771
4 67	.55302	35.729	127.492	-10547	-55245	3.568
5 68	•46559	29.215	98.277	5.99245	-52686	3.364
6 69	•37295	23.602	74.675	-87318	-50023	3.164
7 70	.27388	18.788	55-887	.74731	·473 1 3	3.975
8 71	-16844	14.738	41.149	61436	-44592	2.792
9 72	-05610	11.379	29.770	·47378	-41768	2.616
30 73	4.93623	8-6311	21.136	-32502	-38879	2.448

No. 10 (continued).

Ag m. #	es 1—7.	Log. Dm.m-7.	P _{m.m.−7} — 10,000.	Nm m-7.	Log. Nm,m-7.	$Log. \left(\frac{Nm.m-7}{Dm.m-7}\right)$	Value of Joint Life Annuity.
81	74	-80798	6-4266	14.709	·16758	-35960	2.289
82	75	-67173	4.6961	10.0128	·00055	·32882	2.132
83	76	·52626	3.3594	6·653 4	4·8230 4	·29678	1.981
84	77	·36944	2.3412	4.3122	· 634 70	·26526	1.842
85	78	·20257	1.5943	2.7179	·43 1 23	·23166	1.705
86	79	·02354	1.0557	1.66219	·22068	·19714	1.575
87	80	3.83105	·67772	·98 1 47	3.99320	·16215	1.453
88	81	·62578	·422 4 5	·56202	·7 4 975	12397	1.330
89	82	· 4 0429	·25368	·30834	·48903	08474	1.216
90	83	·16655	·14674	·161601	·2084 4	-04189	1.101
91	84	2.91137	·0815 40	·080061	2.90342	T-99205	.982
92	85	· 6 361 4	·043265	-036796	·56580	·92966	-850
93	86	·33419	·021587	·0152090	·18210	·84791	.705
94	87	1.99319	·0098444	·0053646	1.72954	·73635	-545
95	88	•59917	·0039735	-0013911	·14337	•54420	·350
96	89	·14337	-0013911				
97	90					!	
98	91			ĺ		1	
99	92						
100	93					<u> </u>	

5 PER CENT.

No. 11.—Old Rules. Reversionary Benefits. Value of Annuity after Husband's Death to Wife till Re-marriage or Death.

Age m. m - 7.	(1) Log. $(d_{m} \cdot s_{m} - 7 \cdot v_{m}).$. (2) Log. p_{m-7} .	Sum of (1) + (2).	P ₁₀ ;	К т.	Log. Km.	Log. (K _m (D _m , m-7)	Value of Reversion ary Annuity to Wife after Husband's
20 13	5.99407	1.03479	7.02886	106871	2273001	8-35666	0-43292	2.710
21 14 22 15	6.01137	·01949	·03086	105364	2166130	33568	•44102	2.764
22 15 23 16	·01290 5·99426	000711	-02001	104715	2058766	·31361 ·29095	·44863 ·45631	2.810
24 17	97667	0-99935 -99808	6·99361 ·97475	98539. 94352.	1954051· 1855512·	·29093 ·26846	·46434	2.860 2.913
25 18	95814	1.00479	96293	91818-	1761160	•24581	.47263	2.969
26 19	.93340	01607	.94947	89016	1669342	-22255	48071	3.025
27 20	·90852	.02719	·93571	86240.	1580326	19874	-48841	3.079
28 21	-88360	·03786	·92146	83456-	1494086	·17438	· 4 9589	3.132
29 22	·86446	·0 1 798	·91244	81741.	1410630-	·14940	-50289	3.183
30 23	·83948	-05729	-89677	78844	1328889	12349	-50942	3.232
31 24 20 05	-81375	·06536	·87911	75702-	1250045	·09691	-51544	3.277
32 25 33 26	·79522 ·76919	.07192	·86714	73644	1174343	04167	·52107 ·52601	3.319 3.357
34 27	·74282	·07733 ·08196	·84652 ·82478	70230- 66801-	1100699· 1030469·	·04167 ·01305	·53105	3.397
35 28	.71705	·08604	·80309	63546	963668	7.98393	.53600	3.436
36 29	-69050	-09022	·78072	60356	900122	95430	-54086	3.474
37 30	·66394	.09475	·75869	57371.	839766	-92416	-54566	3.513
38 31	·64228	·099 14	.74172	55172.	782395	-89343	-55035	3.551
39 32	-61561	·10401	$\cdot 71962$	52 4 35.	727223.	-86167	•55459	3.586
40 33	-60069	·10826	·70895	51162.	674788	-82917	-55860	3.619
41 34	•58472	·11197	·69669	49738	623626	·79492	-56143	3.643
42 35 43 36	·56649 ·54767	·11494	·68143 ·66474	48021· 46210·	573888. 525867.	·75883 ·72088	·56324 ·56376	3.659 3.663
44 37	-52623	·11707 ·11836	·64459	44115.	479657	68093	-56313	3.657
45 38	-50429	11873	62302	41978.	435542	.63903	-56115	3.640
46 39	•46576	·11807	•58383	38356	393564	-59501	.55792	3.613
47 40	·42474	·11628	.54102	34755.	355208.	.55049	-55410	3.584
48 41	-38921	·11354	·50275	31824.	320153	-50576	-55108	3.557
49 42	•33298	·11005	·44303	27735.	288629	·46034	.54745	3.527
50 43	•28278	·10588	·38866	24471.	260894	•41646	·54537	3.511
51 44 52 45	•22950	·10116	·33066	21412.	236423. 215011.	•37368	·54465 ·54540	3·505 3·511
53 46	·18048 ·13663	∙09594 •09040	·27642 ·22703	18898- 16867-	196113.	-33246 -29250	-54776	3.530
54 47	-09671	·08476	·18177	15187	179246	-25346	-55125	3.558
55 48	06129	∙07807	13936	13784	164059	21500	-55563	3.594
56 49	.02980	∙07383	·10363	12695.	150275	17690	-56085	3.638
57 5 0	-00353	.06922	-07275	11824.	137580-	-13856	-56676	3.688
58 51	4.97955	∙06487	.04442	11077-	125756-	·09954	.57279	3.739
59 52	·95894	∙06058	-01952	10460-	114679	-05949	-57910	3.794
60 53	•93977	·05584	5.99561	98992	104219	-01795	·58507	3.847
61 54 62 55	·92213	·05073	•97286 •94900	9394·2 8892·0	94320·1 84925·9	6-97460 -92904	·59057 ·59537	3.896 3.939
63 56	·90340 ·88250	·04560 ·03993	·94900 ·92243	8363.7	76033.9	·92904 ·88101	·59934	3.975
64 57	·86036	·03338	·89374	7829.6	67670.2	-83040	-60250	4.004
65 58	-83595	•02551	-86146	7268-8	59840-6	.77700	-60475	4.025
66 59	-80883	·01624	82507	6684.5	52571.8	.72075	-60620	4.038
67 60	·78087	-00595	·78682	6121.0	45887-3	·66169	-60700	4.046
68 61	·75153	0.99900	·75053	5630.2	39766-3	∙59951	-60710	4.047
69 62	·71985	•98241	·70226	5038-0	34136-1	•53321	60574	4.034
70 63	-68535	·96956	·65491	4517.6	29098-1	·46386	·60425	4.020
71 64 72 65	-64780	·95622	·60402 ·55007	4018·1 3548·7	24580·5 20562·4	·39060 ·31307	-60203 -59900	4.000
72 65 73 66	·60762 ·56430	·94245 ·92814	•49244	3107.7	17013.7	23081	-59513	3.936
74 67	·51697	·913 39	·43036	2693-8	13906-0	14330	-59019	3-892
75 68	•46471	-89807	36278	2305-6	11212.2	-04968	-58408	3.838
76 69	·49596	-88224	-28820	1941.8	8906-6	5.94971	-57675	3.774
			1	ļ		1		; !

No. 11 (continued).

m. 1	ge n 7.	(1) Log. (d _m . s _{m-7} .	(2) Log. Pm - 7.	Sum of (1) + (2).	P™ ÷ 100.	K _m .	Log. K.	$\left(\frac{\text{Log.}}{\text{D}\frac{\text{K m}}{m, m-7}}\right)$	Value of Reversion- ary Annuity to Wife after Husband's Death.
77	70	-34211	-86587	·20798	1614-3	6964-8	·84291	·56904	3.707
78	71	-26907	·84899	-11806	1312-4	5350.5	.72839	-55995	3.630
79	72	·19004	·83161	·02165	1051-1	4038-1	-60618	.55007	3.549
80	73	-10117	·81378	4.91495	822-1	2987-0	·47524	•53903	3.460
81	74	-00418	·79539	·79957	630.3	2164.9	·33544	.52743	3.368
82	75	3.89760	·77656	·67416	472-2	153 1 ·6	·18600	.51424	3.268
83	76	·78200	·75732	·53932	346-2	1062-4	·02629	-50075	3.168
84	77	·65366	·73767	·39133	246.2	$716 \cdot 2$	4.85503	·48557	3.059
85	78	·51433	·71767	·23200	170-6	470.0	·67210	·46958	2.948
86	79	·36284	·697 4 9	∙06033	114.9	299-4	·47625	·45270	2.836
87	80	·19599	-67697	3.87296	74.64	184.52	·26604	·43 1 98	2.723
88	81	·01464	·65619	·67083	46.86	109.88	·0 1 092	•41514	2.601
89	82	2.81387	⋅63518	·44905	28.12	63.02	3.79948	·39528	2.485
90	83	-59883	-61395	-21278	16.32	34.90	·54283	·37604	2.377
91	84	·35804	•59251	2.95055	8.924	18.583	·26912	·35743	2.277
92	85	.12043	∙57078	-69121	4.911	9.659	2.98493	•34855	2.231
93	86	1.87257	·54900	·42157	2.640	4.74 8	⋅67 651	-34284	2.204
94	87	-58982	·52711	·11693	1.309	2.108	·32387	•33141	2.145
95	88	25184	50542	1.75726	∙5718	·7988	1.90244	· 3 0199	2.004
96	89	0.87216	· 4 8387	·35603	·2270	·2270	·35603	-21221	1.630

5 PER CENT.

No. 12.—Old Rules. Sons' and Daughters' Reversionary Benefits. Value of Reversionary Benefits till Age 19 after Father's Death. (From Neison, Tables II. and VI.)

Age s. ns + 35	$\log_{n} d_{m+85}.$	Ditto+Log.	P _m ÷ 100,000.	K 38 =P+mPm+1	Log. Km.	Log. Dm.m+35.	$ \begin{pmatrix} Log. \\ K_m \\ \overline{D_{m.m+35}} \end{pmatrix} $	Value of Reversion- ary Benefits to Sons and Daughters.	Ditto at Mean Ag m + 1.
0 35	7.39358	10-22404	167510	2015864	11.30447	9.15501	2.14946	141-1	151.6
1 36	-32308	·20183	$159159 \cdot$	1848354.	·26680	·05694	-20986	162.0	165.5
2 37	·28073	18382	152693.	1689195.	·22768	8.99974	·22794	169.0	169.7
3 38	·25205	17202	148601.	1536502	·18653	•95509	·231 44	170.4	169.7
4 39	-22228	15612	$143258 \cdot$	1387901.	·14236	•91457	-22779	169.0	167.2
5 40	·20701	15307	142256.	1244643.	∙09503	·87663	·21840	165.4	162.4
6 41	·19193	14433	139422.	1102387	·04234	·83981	·20253	159.4	155.3
7 42	·17598	12906	134608.	962965	·98361	-80370	⋅17991	151.3	146.3
8 43	·16012	·11349	129864.	828357-	10.91822	.76802	·15020	141.3	135.4
9 44	·14247	-09613	124776.	698493	·84416	·73207	-11209	129.5	122.5
10 45	·12439	-06545	116264.	573717	·75870	⋅69585	-06285	115.6	107.9
11 46	·09039	-00389	100900-	457453.	⋅66034	•65935	-00099	100.2	92.5
12 47	.05432	9.93633	86363.	356553.	-55212	62311	1.92901	84.9	77-4
13 48	∙01562	-86146	72688	270190.	·43167	→58711	·84456	69.9	62.7
14 49	6.97448	.77835	$60027 \cdot$	197502.	·29557	•55132	·74425	55.5	48.9
15 50	·93080	•68553	48476.	137475.	·13824	•51131	·62693	42.4	36.4
16 51	·88379	-57988	38008.	88999•	9.94939	·46698	·48241	30.4	25.0
17 52	-84162	·46590	29235.	50991	·707 49	·41598	-29151	19.6	14.5
18 53	-80469	33757	21756.	21756.	-33757	·35809	0.97948	9.5	4.8

5 PEB CENT.

No. 14.—Old Rules. Daughters on the Subsidiary Fund under Age 19. Value of Increased Benefits over Donation at Age 19 after Father's Death.

Age.	(1) Log. (D ₁₀ . m + 35).	Log. (D _{19·54}) + Log. 327·3 = 11·54802 less Col. (1).	Value of Survivorship Annu- ity of £100 a Year if Daughter Un- married at 19 and Father then Living.	Value of Excess over £300 Donation if Daughter Un- married at 19, and Father then Dead.	Total Increase of Value under the Subsidiary Rules,	Ditto at Mean Age m+1.
0	9-89664	1.65138	44.8	57.6	102-4	113.6
1	·79856	-74946	56.2	68.5	124.7	131· 4
2 3 4 5	·74136	·80666	64-1	73-9	138-0	143.2
3	-69671	·85131	71.1	77.3	148-3	153∙0
4	· 6 5619	·8918 3	78.0	79.7	157.7	162-1
	-61826	·92976	85.1	81.3	166.4	170.6
6 7 8 9	-58143	·96659	92.6	82.2	174.8	178-9
7	•54533	2.00269	100-6	82.3	182.9	186.8
8	•50965	·03837	109-2	81.5	190.7	1 94 .6
	·47370	-07432	118.7	79-8	198-5	$202 \cdot 3$
10	•43748	·11054	129.0	<i>77</i> ⋅1	206-1	209-9
11	·40098	·14704	140.3	73.3	213.6	217.3
12	·36474	·18328	152.5	68· 4	220.9	224.5
13	·32874	· 2 1928	165.7	62.3	228.0	231.5
14	·29295	$\cdot 25507$	179.9	55.1	235.0	239.8
15	·25293	·2950 9	197-3	47.3	244.6	250·8
16	·20860	-33942	218.5	38· 4	256.9	265-4
17	·15761	·39041	245.7	28.2	273.9	285.3
18	· 0 9971	·44831	280.7	15∙9	296-6	312.0
19	••	• •	327.3	• •	327.3	

No. 14 (continued).

Age m.	(1) l ₅₄ - l _{m+35} (By Table II.)	(2) Log. of Ditto.	(3) Log. D ₁₉ =4·33523 + Col. (2).	(4) Log. (Dm·m+35).	(5) (3)-(4).	(6) (£1024.2-£300) =Log. 2.85986 + Col. (5).	(?) Value of Increase by the Annuity above the £300 Donation if Daughter Un- married at Age 19 and Father then Dead.
o	28952-	4.46168	8.79691	9-89664	2 -90027	1.76013	57-6
1	27479.	·43900	·77423	·79856	·97567	83553	68.5
2	26006.	41507	·75030	·74136	I-00894	∙86880	73-9
2 3 4 5	24532	·38973	·72496	-69671	.02825	-88811	77.3
4	23040-	·36248	-69771	-65619	.04152	-90138	79.7
5	21546.	·33337	· 6 6860	-61826	·05034	·91020	81.3
6	10007	-30118	·63641	-58143	·05 4 98	·91484	82.2
7	18426.	·26543	•60066	·54533	-05533	·91519	82.3
8	16809.	·22554	·56077	-50965	.05112	-91098	81.5
9	15157.	·18061	·51584	·47370	·04214	·90200	79.8
10	13477.	-12959	·46482	·43748	$\cdot 02734$	-88720	77.1
11	11771-	-07081	·40604	·40098	.00506	·86492	73.3
12	10102.	·00441	·33964	-36474	2.97490	·83 4 76	68-4
13	8478	3.92829	-26352	-32874	·93 4 78	·79464	62.3
14	6908-	-83935	-17458	·29295	·881 63	·74149	55-1
15	5399-	·73231	·06754	-25293	·81461	·67447	47-3
16	3957	·59737	7.83260	·20860	·72400	-58386	38-4
17	2589.	· 4 1313	·74836	-15761	∙ 59075	·45061	28.2
18	1276.	-10585	· 44 108	-09971	·34137	·20123	15.9

5 PER CENT.

No. 15.—Old Rules. Daughters on Subsidiary Fund above Age 19. Value of Survivorship Annuity after Father's Death.

Age m.	Log. v = +35 · d = +35 · s = · p = + i ·	P _{,m} ÷ 1000.	= Pm + Pm + 1	Log. K w.	$\begin{pmatrix} \log_{Km} \\ 0 & m + 35 \end{pmatrix}$	Value of Reversionary Annuity.	Value of £100 per Annum at Age m + §.
19	7-69094	49084	640330-	8-80640	0.51496	3.273	339.4
20	·64480	44137.	591246-	.77177	•54588	3.515	364.4
21	-60420	40198-	547109-	·73807	•57651	3.772	390.6
22	·56984	37140.	506911.	·70493	-60642	4.040	417.9
23	-53972	34651.	469771	-67189	-63523	4.318	445.9
24	-51418	32672-	435120-	-63861	•66270	4.599	473.7
25	•49115	30985	402448-	-60471	-68786	4.874	500.8
26	·47060	29553.	371463	-56991	.71114	5.142	527.4
27	·44987	28175.	341910.	·53391	·73286	5.406	553.7
28	·42782	26781	313735.	·49657	.75336	5.667	579.8
29	•40541	25434	286954	·45781	.77299	5.929	606.6
30	∙38158	24076-	261520-	·41750	-79260	6.203	634.5
31	-35604	22701	237444	·37555	-81195	6.486	663.0
32	-33060	51409-	214743.	-33191	·83080	6.773	691.7
33	-30483	20176-	193334.	·28630	·84888	7.061	720.3
34	·27775	18956-	173158-	·23845	·86593	7.344	747.9
35	-24892	17739-	154202-	·18808	-88163	7.61 4	774.2
36	-21806	16522-	136463.	·13501	·89597	7.870	798.0
37	·18567	15335.	119941-	.07896	·90889	8-109	821.7
38	-15124	14166.	104606	.01957	•92037	8.325	842.1
39	·11391	12999.	90440-	7.95636	•93029	8.517	859.8
40	-07283	11826-	77441.	·88897	-93845	8.679	874.5
41	.02716	10645.	65615	·81700	•94503	8.811	886.5
42	6.97708	9485.9	54970-	·74013	∙95032	8.919	896-1
43	·92084	8333.7	45484.	·65786	-95435	9.002	903.5
44	∙85880	7224.4	37150.	·56996	·95744	9.067	908.9
45	·79076	6176-8	29926-	·47605	·9 5 956	9.111	912.5
46	·71511	5189·3	23749	·37565	•96087	9.138	914.8
47	·63261	4291.5	18560-	·26858	•96177	9.157	916.4
48	·54317	3492.8	14268-	·15436	•96242	9.171	917.6
49	44496	2785.9	10775.	·03242	•96283	9.180	919-2
50	·33921	2183.8	7989-4	6.90251	·96396	9.204	921.7
51	-22380	1674.2	5805-6	·76385	·96514	9.229	$924 \cdot 1$
52	·09809	1253.4	4131.4	·61610	·96625	9.252	926-1
53	5.96186	915.93	2878-0	·45909	·96707	9.270	$927 \cdot 1$
54	·8162 4	655.00	1962-06	-29272	-96717	9-272	927.3
55	-65755	454.52	1397-06	·11631	·96728	9.274	928.2
56	·48824	307.78	852.54	5.93071	·96797	9.289	930.7
57	·32498	211-34	544.76	· 73 621	·96961	9.324	934.5
58	·15760	143.75	333-42	$\cdot 52299$	-97157	9.366	936.3
59	4.96839	92.980	189-666	·27800	.97127	9.360	931.3
60	·73964	53.789	96-686	4.98536	96692	9.267	923.1
61	· 43869	27·4 59	42.897	·63243	∙96355	9.195	911.9
62	.05746	11.415	15.438	18859	·95631	9.043	872.3
63	3.53349	3.4158	4.0227	3.60452	·92 44 7	8.404	752.6
64	2.78313	·60692	·60692	2.78313	-82275	6-640	770-4
65	••	• •	••	• •	••	••	••

5 PER CENT.

No. 16.—New Rules. Widows' Pensions. Value of Life Annuity, payable Half-yearly, in Advance, but Reducible to One-half on Re-marriage.

Age m.	Value of Half Annuity till Death.	Value of Half Annulty till Marriage or Death.	Value of Annuity Reducible on Re- marriage.	Value of Ditto at Mean Age m + 1.	Age m.	Value of Half Annuity till Death.	Value of Half Annuity till Marriage or Death.	Value of Annuity Reducible on Re- marriage.	Value of Ditto at Mean Age m + 1.
13	8.490	5.521	14.011	13.887	57	5.529	5.443	10.972	10-858
14	8.450	5.313	13.763	13.658	58	5.390	5.355	10.745	10.634
15	8.407	5.146	13.553	13.468	59	5-274	5.249	10.523	10.398
16	8.364	5.019	13.383	13.335	60	5-142	5.132	10.274	10.143
17	8.322	4.966	13.288	13.279	61	5.008	5.005	10.013	9.877
18	8.282	4.989	13.271	13.317	62	4.871	4.871	9.743	9.602
19	8.243	5.121	13.364	13.412	63	4.731	4.731	9.462	9-322
20	8.205	5.255	13.460	13.508	64	4.591	4.591	9.182	9.041
21	8.166	5.390	13.556	13.602	65	4.450	4.450	8.900	8.758
22	8.127	5.521	13.648	13.690	66	4.308	4.308	8.616	8.474
23 24	8.087	5.646	13.733	13.771	67	4.166	4.166	8.332	8·191 7·908
24 25	8.046 8.004	5.763 5.860	13.809	13.836	68	4.025	4.025 3.883	8·050 7·766	7.625
26	7.961	5.940	13.864 13.901	13.882	69	3.883 3.742	3.742	7.484	7.343
$\frac{26}{27}$	7.916	6.008	13.901 13.924	13.912 13.932	70	3.601	3.601	7.202	7.063
28	7.873	6.068	13.941	13.932	71 72	3.462	3.462	6.924	6.786
28	7.827	6.123	13.950	13.957	73	3.324	3.324	6.648	6.512
30	7.780	6.185	13.965	13.974	74	3.188	3.188	6.376	6.242
31	7.732	6.252	13.984	13.993	75	3.054	3.054	6.108	5.977
32	7.682	6.320	14.002	14.008	76	2.923	2.923	5.846	5.717
33	7.630	6.385	14.015	14.018	77	2.794	2.795	5.589	5.464
34	7.577	6.445	14.022	14.019	78	2.670	2.670	5.340	5-219
35	7.522	6.495	14.017	14.007	79	2.549	2.549	5.098	4.981
36	7.464	6.534	13.998	13.981	80	2.432	2.433	4.865	4.752
37	7.404	6.560	13.964	13.939	81	2.320	2.320	4.640	4.531
38	7.342	6.572	13.914	13.881	82	2.211	2.211	4.422	4.317
39	7.277	6.571	13.848	13.804	83	2.106	2.106	4.212	4.111
40	7.208	6.552	13.760	13.707	84	2.005	2.005	4.010	3.912
41	7.137	6.517	13.654	13.593	85	1.907	1.907	3.814	3.721
42	7.062	6.470	13.532	13.464	86	1.814	1.814	3.628	3.540
43	6.984	6.413	13.397	13.323	87	1.728	1.725	8.453	3.366
44	6.902	6.348	13.250	13.177	88	1.640	1.640	3.280	3·201 3·047
45	6.829	6.275	13.104	13.015	89	1.561	1.561	3.122	2.901
46	6.729	6.197	12.926	12.840	90	1.486	1.486	2.972	2.762
47	6.637	6.117	12.754	12.666	91	1.415	1.415	2.830 2.694	2.629
48 49	6.542 6.443	6.037	12·579 12·402	12.490	92	1.347 1.282	1.347 1.282	2.564	2.498
50	6.340	5.959 5.893	12.402	12.317 12.150	93	1.282	1.282	2.432	2.364
50 51	6.234	5.834	12.255	11.984	95	1.148	1.148	2.296	2.220
52	6.125	5.776	11.901	11.816	96	1.072	1.072	2.144	2.051
53	6.011	5.720	11.731	11.638	97	.979	.979	1.958	1.834
54	5.895	5.651	11.546	11.454	98	-855	-855	1.710	1.525
55	5.775	5.587	11.362	11.267	99	-670	-670	1.340	1.045
56	5.653	5.519	11.172	11.072	"	""			

5 PER CENT.

No. 17.—New Bules. Sons' Benefits. Value of Temporary Annuity till Age 6, 10, and 21.

Age m.	Log. D ₆ + Log. a ₆ + · 750 = 5 · 97258	Value of Life Annuity after Age 6.	Log. D_{10} + Log. a_{10} + .750 = 5.87005	Value of Life Annuity after Age 10.	Log. D ₂₁ + a ₂₁ + ·750 = 5 · 58099	Value of Life Annuity after	Values of	Temporary A	Annuity at
	— Log. D _{m.} (By No. 3.)	7M	- Log. D _{m.}	alter Age 10.	- Log. D _m ,	Age 21.	Till Age 6.	Till Age 10.	Till Age 21
0	0.97258	9.388	0.87005	7.414	0.58099	3.811	4.297	6.271	9.874
1	1.06247	11.547	-95994	9.119	·67088	4.687	4.113	6.541	10.973
2	·11132	12.922	1.00879	10.204	·71973	5.245	3.513	6.231	11.190
3	.14745	14.043	·04492	11.090	·75586	5.700	2.753	5.706	11.096
4	·17917	15-107	·07664	11.930	·78758	6.132	1.905	5.082	10.880
5	·20811	16.148	.10558	12.752	·81652	6.554	.984	4.380	10.578
6	1	• •	·13295	13.582	·84389	6.981	• •	3.616	10.217
7	• •		·15911	14.425	·87005	7.414		2.794	9.805
8	• •		·18438	15.289	-89532	7.858		1.917	9.348
9	• •	• •	·20944	16-197	-92038	8.325		∙986	8.858
10	••	• •	••		.94523	8.815		• •	8.336
11			• • •	• •	•96987	9.330			7.778
12					•99419	9.867		•••	7.184
13					1.01827	10.430	• •	• • •	6.550
14	• •	, ••	• •		.04221	11.021	٠	••	5.879
15	· • •	•••	• •		.06613	11.645		• • •	5.169
16	• •			• •	-09015	12.307			4.421
17	• •	· • •			11439	13-013			3.632
18	• •	• •	• •		-13882	13-767			2.798
19	• •			• •	·16344	14.570	• •	• •	1.917
20	••	· • •	1		·18820	15.424	• •	• •	∙986

5 PER CENT.

No. 18.—New Rules. Sons' Benefits. Value of £300 at Age 21.

Age m.	$Log.\left(\frac{D_{21}}{D_m}\right)$	Value of Endowment of £1 at Age 21.	Value of £300 Endowment at Age 21.
0	I-36792	-2333	69-99
1	·45781	-2870	86-10
2	-50666	-3211	96.33
3	•54279	-3490	104.70
4	.57451	·8754	112.62
5	-60345	·4013	120.39
6	-63082	·4274	$128 \cdot 22$
7	-65698	·4539	136-17
8	·68225	·4811	144.33
9	.70731	-5097	152.91
10	·73216	-5397	161-91
11	·75680	-5712	171.36
12	·78112	6041	181.23
13	·80520	-6386	191.58
14	·82914	-6747	202-41
15	·85306	·7130	213.90
16	·87708	·7535	226.05
17	·90132	·7968	239.04
18	·92575	·8 429	252-87
19	·95037	-8920	267-60
20	·97513	·9443	283-29

5 PER CENT.

No. 19.—New Rules. Sons' Benefits. Value of £10 Annuity till Age 10.

Age.	Value of £10 Annuity till Age 10.	Ditto at Mean Age m+t p=+t	Log. of Ditto.
0	62.7	64.1	1.80686
1	65.4	63.9	-80550
2	62.3	59.7	.77597
3	57.1	53.9	·73159
4	50.8	47.3	-67486
5	43.8	40.0	-60206
6	36.2	32.1	•50651
7	27.9	23.6	-37291
8	19-2	14.5	-16137
9	9.9	4.9	0.69020

5 PER CENT.

No. 20.—New Rules. Sons' Benefits. Value of Total Benefits if both Parents are Dead or Mother Re-married.

Age m.	(1) Value of £125 Annuity till Age 21.	(2) Value of £65 Annuity till Age 10.	(3) Value of £20 Annuity till Age 6.	(1) (2+3)	Value of £300 at Age 21.	Total Value of Benefits.	Value at Mean Age m+1.	Value of £10 a Year in- creased Pen- sion till Age 10 if Mother Dead or Re-married,	Value of Tota Benefits if both Parents are Dead or Mother Re-married.
0	1234-3	407.6	85.9	740-8	70.0	810-8	880.5	64.1	944.6
ī	1371-6	425.2	82.3	864,1	86.1	950-2	985.0	63.9	1048-9
2	1398-8	405.0	70.3	923.5	96.3	1019-8	.1042.8	59.7	1102.5
3	1387.0	370.9	55.1	961.0	104.7	1065.7	$1085 \cdot 0$	53.9	1138.9
4	1360.0	330.3	38-1	991.6	112-6	1104.2	1121.3	47.3	1168-6
5	1322-3	284.7	19.7	1017-9	120.4	1138-3	1154.3	40.0	1194∙3
6	1277-1	235.3	• •	1042-1	$128 \cdot 2$	1170.3	1175.3	32.1	1207.4
7	1225-6	181.6	• •	1044.0	$136 \cdot 2$	1180-2	1184.2	23.6	1207.8
8	1168-5	124.6	• •	1043.9	144.3	1188-2	1192.2	14.5	1206.7
9	1107.3	• •	• •	1043-2	152.9	1196-1	1200.0	4.9	1204.9
10	1042.0	• •	• •	1042.0	161.9	1203.9	1173-8	••	1173.8
11	972.3	• •	• •	972.3	171· 4	1143.7	1111.5	••	1111.5
12	898-0	• •	• •	898-0	181.2	1079-2	1044.8	• •	1044.8
13	818-8	• •	• •	818-8	191.6	1010.4	973.9	••	973.9
14	734.9	• •	• •	734.9	$202 \cdot 4$	937.3	898.7	••	898-7
15	646-1	• •	• •	646-1	213.9	860.0	819.4	• •	819-4
16	552.6	• •	• •	552⋅6	226-1	778.7	735.9	••	735.9
17	454.0	• •	• •	454.0	239.0	693.0	647.9	••	647.9
18	349.8	• •	• •	349.8	252.9	602.7	555-0	••	555-0
19	239.6	• •	• •	239.6	267.6	507.2	456.9	••	456.9
20	123.3	• •	• •	123.3	283.3	406.6	353.3	••	353.3
21	••	• •	• •	••	300.0	300.0	• •		• •

5 PEB CENT.

No. 21.—New Rules. Sons' Benefits. Value of Total Benefits if Mother Living and not Re-married.

Age m. m+28	Log. 8 m. (d+ u)m+28.	Ditto + Log. Pm+t.	P m ÷ 10,000.	Km = Pm + Pm+1	Log. K m.	Log. Dm.m+28.	$ \begin{pmatrix} $	Value of increased Pension of ±10 till Age 10.	Ditto at Mean Age m+i.	Total Value of Benefits if Mother Living and not Re- married.
0 28 1 29 2 30 3 31	·42279 ·35746 ·29590	9·31538 ·22829 ·13343 ·02749	206719- 169157- 135966- 106534-	633969- 464812- 328846-	9.92463 .80207 .66728 .51699	8-90567 -79657 -72836 -67299	1.01896 .00550 0.93892 .84400	10-446 10-127 8-688 6-982	10.287 9.408 7.835 6.143	890-8 994-4 1050-6 1091-1
4 32 5 33 6 34 7 35 8 36	.23328 .16852 .09845 .02887 6.95908	8-90814 -77058 -60496 -40179 -12045	80936- 58963- 40268- 25223- 13196-	222312. 141376. 82413. 42145. 16922.	-34696 -15038 8-91600 -62475 -22845	.62242 .57521 .53036 .48772 .44701	.72454 .57517 .38564 .13703 T.78144	5.303 3.760 2.430 1.371 .605	4.532 3.095 1.901 .988 .376	1125.8 1157.4 1177.2 1185.2 1192.6
9 37	-88107	7.57127	3726	3726-	7.57124	•40754	-16370	•146	-073	1002-1

8 PER CENT.

No. 22.—New Rules. Daughters' Benefits. Value of Temporary Annuity till Age 6 and 10.

Log. D ₁₀ + Log.	Value	Log. D ₆ + Log.	Value of Appuits	Temporar	y Annuity.	Value	Value of £20 per
= 5.71969 - Log. D _m (By N°. 1.)	after Age 10.	$(a_6 + .750)$ = 5.85846 - Log. D _m .	after Age 6.	Till Age 10.	Till Age 6.	Annum till Age 10.	Annum till Age 6.
0.71969	5.2443	0.85846	7.2187	6.272	4.297	250.9	85.94
·85843	7.2182	.99720	9.9357	6.231	3.513	249.2	82-26 70-26 55-06
.92628	8.4388	∙06505	11.616	5.082	1.905	203.3	38·10 19·68
.98259 1.00875	9.6071 10.204			3.617 2.794	•••	144.7 111.8	
•03402 •05908	10·815 11·457	• • • • • • • • • • • • • • • • • • • •	• •	1·917 ·987	• •	76.7 3 9.5	• •
	+ Log. (a ₁₀ + .750) = 5.71969 - Log. D _m (By N°. 1.) 0.71969 -80958 -85843 -89456 -92628 -95522 -98259 1.00875 -03402	+ Log. Value of Annuity = 5.71969 - Log. Dm (By No. 1.) 0.71969 - \$\frac{5.2443}{8.0958} \tag{6.4503} \tag{8.89456} \tag{7.2182} \tag{8.9456} \tag{8.4388} \tag{9.9522} \tag{9.9203} \tag{9.9203} \tag{9.9259} \tag{9.0203} \tag{9.0203} \tag{9.0203} \tag{9.0203} \tag{9.0203} \tag{9.0203} \tag{0.00875} \tag{10.204} \tag{0.03402} \tag{10.815}	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

5 PER CENT.

No. 23.—New Rules. Daughters' Benefits. Value of £300 Donation on Marriage.

	(1) l _m . µm	(2)	(3)	(4)	(8)		1 ,	Value	Valu
Lge.	No. of Mar- riages to 100,000 Born.	Log Ditto.	Log. l _m \mu_m. v _m .	P _m , Nat. N°. of Ditto.	K _m =P _m +P _{m+1}	Log. Km.	$Log\left(\frac{K_m}{D_m}\right)$	of £1 on Marriage.	of £30 on Marria
0	20.2.					4.14261	T-14261	·1389	41.7
ĭ				• •	1 ::	·14261	23250	·1708	51.2
2				• •		-14261	-28135	·1911	57.3
3		• • •	1			-14261	·31748	.2077	62-3
4	••			• •		-14261	·34920	$\cdot 2235$	67-1
5	••	• •		• •	• •	·14261	·37814	2389	71.7
6	••		••	• •	••	·14261	·40551	2544	76.5
7	• • •	••	••	• •	• •	·14261	43167	·2702	81.1
8	•••	••		• •	••	·14261 ·14261	·45694 ·48200	·2864 ·3034	85.9 91.0
9 10	••	• •		• •	•••	·14261 ·14261	•50685	·3213	91.4
11	::	::	1 : 1	• •	::	·14261	•53149	·3400	102-0
12		::		• •	::	14261	-55581	-3596	107.9
13			::	••		·14261	.57989	-3801	114.0
14	685.	2.83543	2.53878	345.8	13887-4	·14261	-60383	· 4 016	120-5
15	1347.	3.12933	-81149	6647.9	13541-6	·13168	-62122	·4180	125-4
16	2295	·36071	3-02168	1051.2	12893.7	·11039	·63278	·4293	128-8
17	3140.	·49698	·13676	1370-1	11842.5	.07346	•63566	·4322	129.7
18	4055	•60795	·22654	1684-8	10472.4	.01999	·62908	·4257	127.7
19	3590	·55506	15246	1420-6	8787-6	3.94387 -86729	·60864 ·58656	·4061 ·3860	121.8 115.8
20 21	3159· 2766·	·49956 ·44184	07577	1190-6 992-80	7367.0 6176.4	.79074	•56310	·3657	119.7
21 22	2412.	-38236	2·99686 ·91620	824·52	5183.6	-71463	53848	·3455	103.7
23	2096	-32145	-83410	682.50	4359.1	-63940	.51305	-3259	97.8
24	1756-	-24446	·73592	544.40	3676-6	-56545	·48716	-3070	92-1
25	1499.	·17585	-64612	442.71	3132.2	· 4 9585	·46315	·2905	87.2
26	1306-	-11606	·56514	367.40	2689.5	·42967	·41064	·2758	82.7
27	1161.	.06478	· 4 9262	310.90	2322-1	-36588	41907	·2625	78-8
28	1050-	-02128	•42798	267.90	2011-2	·30346	39779	•2499	75.0
29	1010-	00416	•38967	245.28	1743.3	·24137 ·17551	·37610 ·35079	·2377 ·2243	71.3 67.3
30 31	951· 882·	2.97865 -94563	•34297	$220.28 \\ 194.43$	1498.0 1277.7	·10643	-32214	2100	63.0
32	805.	90590	·28876 ·22784	168.98	1083-3	.03475	•29050	·1952	58.6
33	724.	-85996	16071	144.78	914.39	2.96113	25633	·1804	54.1
34	637.	-80420	.08376	121.27	769-61	·88627	·22015	-1660	49.8
35	556-	·74483	-00320	100.74	648.34	-81180	⋅18334	·1525	45.8
36	481.	-68200	1.91919	83.021	547-600	·73846	·14663	1402	42.1
37	412.	•61532	·83132	67.814	464.579	-66706	11083	1291	38.7 35.8
38	351.	·54511	•73992	54.944	396.765	·59854 ·53380	·07689 ·04577	·1194 ·1111	33.3
39 40	284· 234·	·45398 ·36836	·62760 ·52079	42·423 33·173	341.821 299.398	·47625	-02067	1049	31.5
41	195.	29106	·42230	26·442	266.225	·42526	.00122	•1003	30-1
42	168	22660	-33665	21.710	239.783	-37981	2.98666	.0970	29-1
43	151.	-17802	26688	18.488	218.073	·33860	·97589	0946	28.4
44	133-	-12337	·19104	15.525	199.585	-30014	·96764	·0928	27-8
45	126.	-10178	14826	14.069	184.060	•26496	•96242	•9917	27.5
46	129.	10038	·13167	13.635	169.991	-23042	95788	·0908 ·0895	27.2 26.9
47 40	137.	13581	•13991	13.801	156.356	·19413 ·15397	·95184 ·94237	·0895 ·0876	26.5
48 49	148· 185·	·17169 ·26708	·15460 ·22880	$14.276 \\ 16.936$	142.555 128.279	10816	92780	.0817	25.4
50	204.	•30941	24995	17.781	111.343	-04665	89880	.0792	23.8
51	208.	-31898	-23833	17.311	93.562	1.97110	·85663	.0719	21.6
52	202.	-30429	-20245	15.939	76.251	-88225	-80169	·0633	19-0
53	186.	·26946	·14643	14.010	60.312	·78040	·73400	.0542	16.3
54	178.	·25100	·10678	12.787	46.302	•66560	-65294	.0450	13.5
55	162.	·21068	04527	11.099	33.515	•52524	·54704	.0352	10.6
56	138.	·13926	0.95266	8.9673	22.416	·35056	·40693 ·21949	-0255 -0166	7·7 5·0
57	104.	·01627 1·77726	-80848	6-4340 8-5241	13.449 7.015	·12869 0·84603	3.97077	·0093	2.8
58 59	60· 38·	•57529	·54828 ·32512	3·5341 2·1141	3.4809	·54169	-69944	.0050	1.5
60	19.	28757	01621	1.0380	1.3668	·13570	·32631	.0021	-6
61	6.	0.80949	1.51694	-32881			T-74036	-0005	.2

5 PER CENT.

No. 24.—New Rules. Daughters' Benefits. Value of Increased Pension, £10 till Age 10, and £25 from Age 10 till Marriage or Death, after Mother's Marriage or Death.

.Age n. m+28.	(1) Log. Sm.(d+#)m+38. ym+28.	(2) Log. Pm+4.	(1) + (2) = Log. Pm.	P ₀₀ + 100,000.	Km- Pm+Pm+1	Log. Km.	Log. Dm.m+28-	Log. (No. (Dm. m+28)	Value of Increase of Pension to Daughter after Mother's Death or Marriage.	Ditto at Mean Age m + 1.
0 28	7.50852	2-32284	9-83136	67820-	597960-	10.77667	8-90567	1.87100	74.3	79.5
1 29	•42279	-37051	·79330	62130-	530140	•72439	·79657	•92782	84.7	86.1
2 30 3 31	·35746 ·29590	·39445 ·41078	·75191 ·70668	56482. 50896.	468010. 411528.	·67026 ·61440	·72836 ·67299	·94190 ·94141	87·5 87·4	87·5 86·7
4 32	·23328	·42423	-65751	45448	360632	•55706	-62242	93464	86.0	84.9
5 33	·16852	·43584	-60436	40212-	315184	· 4 9856	-57521	∙92335	83.8	82.4
6 34 7 35	·09845 ·02888	·44669	·54514	35086· 30599·	274972	·43929 ·38001	•53036	•90893	81.1	79·5 76·4
8 36	·95908	·45680 ·46672	·48570 ·42580	26656	239886- 209287-	32075	·48772 ·44701	·89229 ·87374	78.0 74.8	70. 4 73.1
9 37	·88107	47683	-35790	22798.	182631	·26157	·40754	-85403	71.5	69.9
10 38	-81817	·47582	•29399	19678	159833.	20366	•36930	·83436	68.3	66.7
11 39 12 40	·73889 ·65692	·46285	·20174 ·10547	15913. 12749.	140155- 124242-	·14662 ·09426	·33223 ·29665	·81439 ·79761	65·2 62·7	63.9 61.8
13 41	·60554	·44855 ·43265	.03819	10919.	111493.	04724	·26222	·78502	61.0	60.2
14 42	·54939	·41731	8-96670	9261.9	100574.	·00247	-22858	·77389	59.4	59-1
15 43	·49796	·40500	•90296	7997.6	91312	9.96053	19101	•76952	58.8	59.0
16 44 17 45	•44095 •39054	·39724 ·39602	·83819 ·78656	6889·5 6117·3	83314· 76425·	·92072 ·88324	·14918 ·10055	·77158 ·78269	59·1 60·6	59·9 62·0
18 46	·34300	·40278	-74578	5569.0	70308-	-84700	-04486	-80214	63.4	65.6
19 47	·29846	·41397	.71243	5157.4	64739	·81117	7.98012	-83105	67.8	70.1
20 48 21 49	·26064 ·24788	·42521	·68585	4851.2	59582· 54731·	•77512	91611	·85901	72.3	74.6
22 50	·21812	·43584 ·44592	·68372 ·66404	4827·5 4613·6	49904	·73823 ·69814	·85297 ·79017	·88526 ·90797	76·8 80·9	78·9 82·8
23 51	·17593	·45530	-63123	4277.9	45290	∙65600	.72817	-92783	84.7	86.5
24 52	·12328	·46330	-58658	3859.9	41012	·61291	•66739	·94552	88.2	89.8
25 53 26 54	·05259 ·02083	·46982 ·47524	·52241 ·49607	3329·7 3133·8	37152· 33822·	·56998 ·52920	·60883 ·55261	·96115 ·97659	91·4 94·7	93·1 96·2
27 55	6.96895	·47986	·44881	2810.7	30688	·48697	·49712	98985	97.7	99.2
28 56	·910 33	·48387	-39420	2478-6	27877	·44525	·44260	2.00265	100.6	102.2
29 57	-84104	·48813	32917	2133.9	25399	•40482	⋅38896	-01596	103.7	105.6
30 58 31 59	∙75593 •69755	·49276 ·49734	·24869 ·19489	1772·9 1566·4	23265· 21492·	•36670 •33228	·33566 ·28341	·03104 ·04887	107·4 111·9	109.7 114.4
32 60	64435	.50202	14637	1400.8	19926	•29942	23170	.06772	116.9	119.6
33 61	·59978	·50623	·10601	$1276 \cdot 5$	18525	·26776	·18063	-08713	122-2	125.0
34 62	·56845 ·55126	·51001	.07846	1198.0	17248	-23674	13015	10659	127.8	130.7
35 63 36 64	-53297	·51295 ·51508	·06421 ·04805	1159·3 1117·0	16050· 14891·	·20548 ·17292	·08016 ·03027	·12532 ·14265	133.5 138.9	136·2 141·5
37 65	-51620	-51627	.03247	1077-6	13774	·13906	6.98040	-15866	144 1	146.6
38 66	·49969	·51667	·01636	1038-4	12696-	·10367	•93038	-17329	149.0	151.3
39 67 40 68	·48353 ·46674	·51601 ·51415	7·99954 -98089	998·94 956·95	11658·1 10659·2	·06662 ·02772	-88012 -82964	·18650 ·19808	153.6 157.8	155·7 159·7
41 69	·44917	·51148	96065	913.38	9702.3	8.98687	.77864	20823	161.5	163.2
42 70	·43274	·50786	-94060	$872 \cdot 17$	8788-9	·94393	·72664	-21729	164.9	166.5
43 71	•41327	·50379	91706	826-15	7916.7	·89854	67335	.22519	168.0	169.4
44 72 45 73	·39378 ·37323	·49900 ·49374	·89278 ·86697	781·23 736·16	7090-5 6309-3	·85068 ·79998	·61828 ·56135	·23240 ·23863	170.8 173.2	172·0 174·3
46 74	-34775	·48827	·83602	685.52	5573.1	·74610	-50196	-24414	175.4	176.5
47 75	-32186	-48259	·80445	637-46	4887 6	·68910	·43977	•24933	177.6	178.6
48 76 49 77	·29181 ·25904	·47698	.76879 .73077	587·21 537·98	4250·1 3662·9	·62840 ·56383	·37423 ·30504	·25417 ·25879	179.5	180·5 182·6
50 78	·21966	·47173 ·46716	·68682	486·21	3124.9	·30363 ·49484	-23108	·26376	181·5 183·6	184·7
51 79	·17668	·46270	-63938	435.89	2638.7	· 4 2139	·15254	-26885	185.7	186.8
52 80	·12822	·45849	·58671	386-11	2202.8	-34298	-06932	·27366	187.8	187.7
53 81 54 82	∙07528 ∙01592	·45378 ·44871	·52906 ·46463	338·11 291·49	1816-7 1478-6	·25928 ·16985	5.98152 .88934	·27776 ·28051	189.6 190.8	190·2 191·4
55 83	5.95113	·44342	39455	248.06	1187.1	·10565 ·07449	.79145	·28304	191.9	192.3
56 84	-88035	·43775	-31810	208.02	939-05	7.97269	68796	.28473	192.6	192.7

No. 24 (continued).

A (ge + 28.	(1) Log. Sm.(d+μ) m+28. υπ + 28.	(2) Log. Pm + 1.	(1) + (2) = Log. P _m .	P _{sn} + 100,000.	Km. Pm + Pm+1~	Log. Km.	Log. Dm.m+28.	Log. (Mm. (Dm.m+38)	Value of Increase of Pension to Daughter after Mother's Death or Marriage,	Ditto at Mean Age m+1.
57	85	·80375	· 4 3136	·23511	171-83	781.08	-86394	-57890	·28504	192-8	192.5
	86	•72013	·42341	.14354	139.17	559-20	.74757	·46394	-28363	192-2	191.4
59	87	•63231	·41414	·04645	111.29	420.03	·62328	-34306	·28022	190-6	189-4
60	88	•53458	·40381	6.93839	86.774	808.74	·48959	-21490	·27469	188-2	186-6
61	89	·42783	-39252	·82035	66-123	221.97	·34629	-07882	.26747	185-1	183-2
62	90	·31445	-38021	·69466	49.506	155-85	·19271	4.93398	-25873	181-4	179-0
63	91	18574	·36736	-55310	35.736	106-347	·02674	.77974	·24700	176-6	173.9
64	92	-04371	-35411	-39782	24 · 993	70-611	6.84887	·61543	·23344	171.2	178-2
65	93	4.89656	·34005	-23661	17·2 4 8	45.618	·65914 ·	·44088	·21826	165.3	161-4
66	94	·73439	·32572	-06011	11.484	28.375	·45294	.25551	19743	157-6	152.5
67	95	-55457	-31111	5.86568	7.3397	16.8906	·22766	∙05887	-16879	147.5	141.0
68	96	·37074	$\cdot 29579$	-66653	4.6401	9.5509	5.98004	3.85094	·12910	134.6	124-6
69	97	-16086	-28012	·44098	2·7604	4.9108	-69115	-63165	-05950	114-6	100-0
70	98	8-95290	·26364	-21654	1.6464	2.1504	.33252	·40077	1.93175	85.5	60-2
71	99	·74820	1.95424	4.70244	·50401	-50401	4.70244	·15853	•54391	85.0	17-5

No. 25.—New Rules. Daughters' Benefits. Value of Total Benefits if Mother Living and not Re-married.

Age m.	(1) Value of ' £100 per Annum' till Marriage or Death.	Value of £40 per Annum till Age 10.	(3) Value of £20 per Annum till Age 6.	(4) (1)-(2)+(3)	(5) Value of £300 on Marriage.	(6) Total Value of Benefits.	Ditto at Mean Age m+t.	(8) Value of Total Benefits if Mother Living and not Re-married.	(9) Log. of Ditto.
0	1151-6	250.9	85-9	814-8	41.7	856-5	931-5	1011.0	3-00475
1	1299-2	261.7	82.3	955-2	51.2	1006-4	10 11 .6	1130.7	·05335
2	1344.9	249.2	70.3	1025-4	57.3	1082.7	1108-4	1195.9	-07769
3	1355-1	228.3	55.1	1071.7	62.3	1134·0	1155.9	12 4 2·6	·0 94 33
4	1352-1	203.3	38.1	1110.7	67-1	1177-8	1197.4	1282.3	·10799
5	13 1 0·1	175.2	19.7	1145.2	71.7	1216.9	1235.5	1317-9	·11988
6	1322.4	144.7	••	1177.7	76.3	1254.0	1261-6	1341-1	·12746
7	1299.8	111.8	••	1188-0	81.1	1269-1	1175.8	1352-2	·13104
8	1273.2	76.7	••	1196.5	85.9	1282-4	1289-2	1362.3	·13427
9	1244.4	39∙5] ••	1204.9	91.0	1295.9	1302.8	1372.7	·13758
10	• •	••	• •	1213-2	96.4	1309-6	1295-6	1362.3	·13427
11	• •	• •	•••	1179-6	102.0	1281.6	1266-4	1330-3	·12395
12		••	••	1143.3	107.9	1251-2	1234.7	1296.5	·11277
13	• • •	• •	• •	1104-2	114.0	1218-2	1200.6	1260-8	10065
14	• •	••	• •	1062-6	120.5	1183-1	1168-8	1227.9	-08916
15	•••	• • •	••	1029-1	125.4	1154.5	1148.5	1202.5	-08009
16		••	••	1003-8	128-8	1132-6	1127.7	1187-6	·07467
17		• •	• •	993-2	129.7	1122.9	1124.3	1186.3	-07419
18	• •		• •	997.9	127.7	1125-6	1135-8	1201.4	·07969
19	• •	••	••	1024-2	121.8	1146.0	1156.5	1226-6	-08870
20	• •	• • •	• •	1051-1	115.8	1166-9	1182.3	1256.9	·09930
21	•••	••	• •	1078-0	119.7	1197.7	1202.8	1281.7	·10779
22	• • •	• • •	••	1104.2	103.7	1207.9	1217.5	1300-3	·11404
23		• •	• •	1129.3	97.8	1227-1	1236-0	1322.5	·12140
24	• •	••	• •	1152.7	92.1	1244-8	1252-1	1341.9	-12772
25	• •	••	• •	1172-1	87-2	1259-3	1265.0	1358-1	·13293

No. 25 (continued).

	1	I	ī		1	1		}	<u> </u>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) Value of	(9)
l	Value of £100	.Value of	Value of ±20		Value of	Total Value	Ditto at	Total Benefits	
Age m.	per Annum	per Annum	per Annum	$(1)-\overline{(2)+(3)}$	£300	of	Mean Age	Living.	Log. of Ditto.
	till Marriage		till	(1) (2)+(0)	on Marriage.	Benefits.	m+±.	and not	0. 2.000
ĺ	or Death.	Age 10.	Age 6.					Re-married.	
26				1188-0	82.7	1270-7	1275-6	1371-8	-13729
27			• •	1201.7	78-8	1280.5	1273.6	1383.8	·15/29 ·14107
28	::			1213.6	75.0	1288-6	1292.2	1394.4	·14107
29	::			1213.6 1224.6	71.3	1295.9	1300.2	1405.8	·14439 ·14792
30	1			1237.1	67.3	1304.4	1300.2	1418-7	·15189
31	::			1250.5	63.0	1313.5	1318.1	1432.5	15509
32	::			1264.1	58.6	1322.7	1327.0	1446.6	·16035
33	::			1277.1	54.1	1331.2	1335.1	1460-1	·16438
34	::			1289-1	49.8	1338.9	1341.9	1472-6	16808
35				1299-1	45.8	1344.9	1346.9	1483-1	17117
36				1306.8	42.1	1348.9	1349.8	1491.3	.17357
37				1312.0	38.7	1350.7	1350-5	1497-1	.17525
38	l I			1314-5	35.8	1350-3	1348.9	1500.2	17615
39				1314.3	33.3	1347.6	1344.8	1500-5	17624
40				1310-5	31.5	1342.0	1337.8	1497.5	17537
41				1303.5	30.1	1333.6	1328-4	1491.6	.17365
42				1294.1	29.1	1323.2	1317-1	1483-6	·17132
43				1282.6	28.4	1311.0	1304.2	1473-6	-16838
44				1269-6	27.8	1297-4	1289.9	1461.9	·16492
45	l I			1255.0	27.5	1282.5	1274.5	1448-8	-16100
46				1239.4	$\overline{27.2}$	1266-6	1258-4	1434.9	·15682
47	l		1	1223.4	26.9	1250.3	1242.0	1420-6	.15247
48	l		!	1207.5	26.3	1233.8	1225.5	1406-0	14799
49	l l			1191.9	25.4	1217.3	1209.9	1392.5	·14380
50				1178-7	23.8	1202.5	1195.5	1380-2	.13994
51				1166-9	21.6	1188.5	1181.4	1368-2	.13615
52		••	••	1155.3	19.0	1174.3	1167-3	1355-0	·13195
53				1144.0	16.3	1160-3	1152.0	1342-2	.12782
54	i	••	••	1130-3	13.5	1143-8	1135.9	1327-3	-12297
55	!	• •		1117.5	10.6	1128-1	1119.8	1312-1	.11797
56		• •	••	1103-8	7.7	1111.5	1102.6	1295.3	.11237
57	••			1088-7	5.0	1093.7	1083-8	1276.3	·10595
58		• •	• •	1071.1	2.8	1073-9	1062-6	1254.0	·09830
59	••	• •	• •	1049.8	1.5	1051.3	1039-1	1228-5	•08938
60		••	• •	1026-4	-6 ∣	1027-0	1014-1	1200.7	·079 1 3
61		••	• •	1001-1	-2	1001.3	987.7	1170.9	·06852
62	• •	• •	•• !	974-2	••	974.2	960-2	1139-2	·05660
63	••	• •	•• j	946-3	••	946.3	932.2	1106-1	·0 1 379
64	••	• •	••	918-2	••	918.2	904-1	1082.3	·03435
65	••	••	••	890-0	••	890-0	875-8	1037.2	.01586
66	••	••	•• ;	861.7	••	861.7	847.5	1000.0	-00000
67	••	• •	••	833.3	••	833-8	819-1	960-1	2.98232
68	••	••	• •	805-0	••	805.0	790·S	915.4	.96161
69	••	••	••	776-6	••	776-6	762.5	862.5	.93576
70	••	••	• • ;	748-4	••	748-4	731.3	794·5	•90009
71	••	• •	••	720-2	• •	720-2	706-3	723.8	·859 62
		1	ļ	· ·	1				

5 PER CENT.

No. 26.—New Rules. Daughters' Benefits. Value of Total Benefits if both Parents are Dead, or Mother Re-married.

Daughter's Age m.	(1) Value of £25 a Year till Marriage or Death.	(2) Value of £15 a Year till Age 10.	Value of Increased Pension, (1) - (2).	Ditto at Mean Age m+t.	Log, of Ditto.	Value of Total Benefits, if both Parents are Dead, or Mother Re-marrie at Age m+1.
0	287-9	94-1	193-8	210-3	2.32284	1141.8
1	324.8	98-1	226.7	234.7	·37051	1279-3
2	336 ⋅2	93.5	242.7	248.0	·39445	1356-4
3 4	838·8 838·0	85.6 76.2	253·2 261·8	257·5 265·6	·41078 ·42423	1413-4 1463-0
5	335.0	65.7	269-3	272·8	·42425 ·43584	1508-3
6	830-6	54.3	276-3	279.7	•44669	1541.3
7	324.9	41.9	283-0	286.3	·45682	1562-1
8	318-3	28.8	289.5	292.9	·46672	1582-2
.9	311.1	14.8	296.3	299.8	·47683	1602.6
10 11	803·3 294·9	• •	303·3 294·9	299·1 290·3	·47582 ·46285	1594·7 1556·7
12	285.8		285.8	280.9	-44855	1515-6
13	276.0		276.0	270.8	•43265	1471.4
14	265-6	••	265-6	261.4	·41731	1430-2
15	257-3	••	257-3	$254 \cdot 1$	·40500	1397.6
16	250.9	••	250.9	249.6	-39724	1377.3
17	248.3	•••	248·3 249·5	248·9 252·8	·39602 ·40278	1373·2 1388·6
18 19	249·5 256·0	l ::	256.0	252·8 259·4	·40278 ·41397	1415.9
20	262·8	::	262.8	266·2	·42521	1448-5
21	269.5		269-5	272.8	•43584	1475-6
22	276-0	••	276-0	$279 \cdot 2$	·44592	. 1496-7
23	282.3	• •	282.3	285.3	·45530	1521-3
24	288-2	••	288-2	290.6	•46330 •46982	1542·7 1560·0
25 26	293·0 297·0		293.0 297.0	295·0 298·7	•40982 •47524	1574-3
20 27	300-4	::	300.4	301.9	47986	1586-5
28	303-4		803.4	804.7	•48387	1596-9
29	306-1	••	306-1	807.7	·48813	1607-9
80	309-3	••	309.3	311.0	·49276	1620-0
31	312-6	••	312.6	314.3	•49734	1632-4
32 33	316.0	••	316·0 319·3	317·7 320·8	•50202 •50623	1644.7 1655.9
34	319·3 322·3	• •	322.3	320·8 323·6	-51001	1665.5
85	324.8	::	324.8	325-8	-51295	1672.7
36	326.7	••	326.7	327·4	-51508	1677-2
87	328.0	••	328-0	328.3	-51627	1678-8
38	328-6	••	328-6	328.6	-51667	1677.5
39	328-6	••	328.6	328·1	·51601 ·51415	1672·9 1664·5
40 41	327·6 325·9	••	327·6 325·9	326·7 324·7	-51148	1653-1
42	323·5		323.5	322.0	-50786	1639-1
43	320.6	1 ::	320-6	319.0	-50379	1623-2
44	317.4		817-4	315.5	· 4 9900	1605-4
45	313.7	••	313.7	811.7	•49374	1586-2
46	309-8	•••	309.8	3 07⋅8	·48827	1566-2
47 48	305·8 301·9	••	305·8 301·9	803⋅8 299⋅9	•48259 •47698	1545-8 1525-4
49	298.0	••	298.0	296·3	·47173	1506-2
50	294.7		294.7	293.2	·46716	1488-7
51	291.7		291.7	290-2	·46270	1471-6
52	288-8		288-8	287-4	·45849	1454.7
53	286-0	• •	286.0	284.3	·45378	1436-3
54	282.6	••	282.6	281·0	·44871	1416-9 1397-4
55 56	279-4 275-9	•••	279·4 275·9	$277.6 \\ 274.0$	•44342 •53775	1376-6
56 57	273·9 272·2	::	273.9	270·0	·43136	1353-8
58	267.8		267.8	265-1	·42341	1327.7
59	262.4	١	262.4	259.5	•41414	1298-6

No. 26 (continued).

Daughter's Age sa.	w Voer till Marriage	(2) Value of £15 a Year till Age 10.	Value of Increased Pension, (1) — (2).	Nean Age m+1.	Log. of Ditto.	Value of Total Benefits, if both Parents are Dead, or Mother Re-married at Age m+1.
60	256-6		256-6	253.4	•40381	1267.5
61	250.3	••	250.3	246.9	•39252	1234-6
62	243.5	• •	243.5	240.0	-38021	1200-2
63	236-6	• •	236-6	233.0	·36736	1165-2
64	229.5	• •	229.5	226.0	-35411	1130-1
65	222.5	• •	222.5	218.8	·34005	1194-6
66	215.2	١	215.2	211.7	·82572	1059-2
67	208.3	١	208.3	204.7	-31111	1023-8
68	201.2		201.2	197.6	•29579	988-4
69	194-1		194.1	190.6	-28012	953-1
70	187-1	• • •	187-1	183.5	-26364	917.8
71	180-0		180-0	90.0	1.95424	796.3

5 PER CENT.

No. 27.—New Rules. Wives' Reversionary Benefits. Value of Reversionary Annuity
(by No. 16) to Wife after Husband's Death.

.Ag ™. m	ge • — 7.	(1) Log. (d _{m.} s _{m-7} . v ^m).	(2) Log. P = -7.	Sum of (1) + (2).	P _m + 100.	K m = P m + P m + 1	Log. K m.	$ \begin{array}{c} \text{Log.} \\ \left(\frac{Km}{Dm, m-7}\right) \end{array} $	Value of Survivo ship Annuit to Wife after Husbane
20	13	5-99407	1.14261	7.13668	136987	2689018-	8-42959	0.50585	3.205
21	14	6.01137	·13539	·14676	140204	2552031	·40688	-51222	3.258
22	15	-01290	·12930	·14220	138739 -	2411827-	·38238	·51740	3.292
23	16	5.99426	·12499	·11925	131598-	2273088	-35662	·52198	3.326
24	17	·97667	·12317	-09984	125846.	2141490-	·33072	·52660	3.369
25	18	-95814	·12441	-08255	120934	2015644	·30440	∙53122	3.39
26	19	·93340	·12749	∙06089	115051.	1894710-	-27754	·53572	3.43
27	20	-90852	·13059	-03911	109423-	1779659	·25035	-54002	3.46
28	21	·88360	·13360	-01720	1 04 040•	1670236	•22277	·54428	3.50
29	22	·86446	·13640	∙00086	102000-	1566196.	·19485	·54834	3.53
30	23	·83948	-13897	6.97845	95159.	1464196.	·16560	-55153	3.56
31	24	⋅81375	·14101	·95476	90107-	1369037-	·13640	•55493	3.58
32	25	.79522	·14245	∙93767	86630	1278930.	·10684	•55813	3.61
33	26	·76919	·14339	·91258	81767-	1192300-	·07639	·56073	3.63
34	27	-74282	·14401	·88683	77060-	1110333.	·04552	·56352	8.66
35	28	·71705	·14442	-86147	72689	1033473	·01431	-56638	3.68
36	29	-69050	·14479	·83529	68437•	960784	7.98262	-56918	3.70
37	30	•66394	-14532	-80926	64456·	892347	·95054	·57204	3.73
88	31	·64228	·14591	∙78819	61403.	827891	·91797	·57489	3.75
39	32	61561	·14638	∙76199	57808-	766488	-88451	·57743	8.77
40	33	•60069	·14669	74738	55696	708680	·85945	-57988	3.80
41	34	-58472	·14672	·731 44	53882	652984	·81490	-58141	8.81
42	35	-56649	·14635	·71284	51623.	599102.	·77750	·58191	8.81
48	36	•54767	·14554	-69321	49341.	547479-	·73837	·58125	8.81
44	37	•52623	·14423	⋅67046	46823-	498138-	·69735	•57955	3.79
45	38	-50429	·14242	-64671	44331.	451315	·65448	·57660	3.77
46	39	46576	·14001	-60577	40343	406984	⋅60957	·57248	3.73
47	40	·42474	·13694	-56168	36449·	366641	·56424	·56815	3.70
48	41	-38921	·13332	-52253	33307	330192	-51876	·56408	3.66€

. No. 27 (continued).

		·	 		,				
	ge • 7.	(1) Log. (d _m , s _m -7. v ^m).	(2) Log. P m = 7.	Sum of (1) + (2).	P m + 100.	= Pm + Pm + 1	Log. K m.	Log. $ \begin{pmatrix} \mathbf{K} \mathbf{m} \\ \mathbf{D} \mathbf{m} \cdot \mathbf{m} - 7_{j} \end{pmatrix} $	Value of Survivor- ship Annuity to Wife after Husband.
40	40	00000	10017	40015	00000	296885	·47260	-55971	3.628
49	42	•33298	·12917	·46215	28983.	267902	42797	-55688	3.605
50 51	43 44	·28278	·12460	•40738 •34932	25549· 22352·	242353	38444	-55541	3.593
51 52	45	·22950 ·18048	·11982 ·11 444	·3+932 ·29492	19721.	220001	34242	-55536	3.592
53	46	13663	10857	·24520	17587	200280-	-30164	•55690	3.605
54	47	.09671	10264	·19935	15825.	182693	-26171	-55950	3.627
55	48	-06129	09656	15785	14383-	166868-	-22238	·56301	3.656
56	49	-02980	•09050	12030	13192.	152485-	·18324	-56719	3.691
57	50	.00353	-08458	-08811	12249-	139293	.14392	.57212	3.734
58	51	4.97955	-07860	-05815	11433.	127044.	·10394	-57719	3.777
59	52	·95894	-07247	.03141	10750.	115611.	-06300	-58261	3.825
60	53	-93977	-06588	·00565	10131.	104861	-02061	∙58773	3.870
61	54	-92213	-05896	5.98109	9573.9	94729-6	6.97649	·59246	3.913
62	55	•90340	∙05181	.95521	9020-1	85155.7	93022	•59655	3.950
63	56	-88250	04423	·92673	8447.5	7 6135⋅ 6	·88159	.59992	3.980
64	57	-86036	-03575	·89611	7872.5	67688-1	-83051	·60261	4.005
65	58	·83595	-02670	·86265	7288.7	59815-6	·77682	·60457	4.023
66	59	-80883	·01695	-82578	6 695·5	52526-9	·72038	⋅60583	4.035
67	60	-78087	·0061 7	·78704	612 1 ·1	45831-4	-66116	-60647	4.041
68	61	.75153	0.99463	·74616	5573.9	39707.3	•59887	·60646	4·041 4·034
69	62	-71985	.98236	•70221	5037.4	34133.4	-53317	-60570 -60422	4.020
70	63	-68535	•96951	-65486	4517.1	29096-0	·46383	-60199	3.999
71	64	-64780	-95622	·60402	4018-1	24578-9	-39056 -31304	-59897	3.972
72	65	-60762	•94240	-55002	3548-3	20560-8	23078	-59510	3.936
73	66	•56430	·92809	·49239	3107.3	17012.5	.14317	·59016	3.892
74	67	-51697	·91334	·43031	2693·5 2305·6	13905·2 11211·7	-04968	-58408	3.838
75 76	68 69	·46471 ·40596	•89807 •88224	·36278 ·28820	1941.8	8906-1	5.94969	-57673	3.773
77	70	• 4 0596 •34211	-86587	·20798	1614.3	6964-3	-84288	56901	3.707
78	71	-26907	-84899	·11806	1312.4	5350.0	•72835	55991	3.630
79	72	19004	·83161	.02165	1051-1	4037-6	60612	-55001	3.548
80	73	10117	·81371	4.91488	822.0	2986.5	-47516	-53895	3.459
81	7 4	00418	•79532	•79950	630.2	2164.5	-33536	-52735	3.368
82	75	3.89760	•77648	·67408	472.2	1534.3	⋅18591	-51415	3.267
83	76	.78200	.75717	-53917	846-1	1062-1	-02617	-50063	3.167
84	77	65366	.73751	-39117	246.1	716.0	4.85491	·48545	3.058
85	78	.51433	-71759	•23192	170.6	469.9	-67201	·46949	2.948
86	79	36284	69732	.06013	114.8	299.3	·47611	·45256	2.835
87	80	.19599	-67688	3.87287	74.62	184.50	-26600	·4349 4	2.722
88	81	·01464	·65619	.67983	46.86	109.88	-04092	·41514	2.601
89	82	2.81387	·63518	·44905	28.12	63.02	3·79948	·39528	2.485
90	83	-59883	-61395	·21278	16.32	34.90	-54283	·37604	2.377
91	8 4	-35804	-59240	2.95044	8.922	18.580	-26905	•35736	2.277
92	85	·12043	·57066	·69109	4.910	9.658	-98489	-34851	2.231
93	86	1.87257	-54900	·42157	2.640	4.748	-67651	-34284	2.202
94	87	58982	-52711	·11693	1.309	2.108	-32387	-33141	2.145
95	88	·25184	-50529	1.75713	.5716	.7986	•90233	-30188	2.004
96	89	0.87216	·48387	-35603	.2270	-2270	∙35603	-21221	1.630
l		1	1		1	1	1		

No. 28.—New Rules. Sons' Reversionary Benefits. Value of Reversionary Benefits (by No. 21) to Sons after Father's Death.

	ge +85.	(1) Log. s _m , d _{m+35} vm+35.	(2) Log. p _{m+1} .	Sum of (1) + (2).	P _m ÷100,000	K _m = P _m +P _{m+1}	Log. Km.	Log. Dm.m+85.	$\left(\frac{\underset{\text{M}}{\text{Log.}}}{\underset{\text{M}, m+35}{\text{Log.}}}\right)$	Value of Reversion- ary Benefits to Son after Father's Death.	Ditto at Mean Age m + ½.
0	35	7-39358	2.94978	10-34336	220475	2749752	11-43929	9-15501	2.28428	192.4	207-2
1	36	·32308	.99756	-32064	209238	2529277	·40300	.05694	-34606	221.9	227.0
2	37		3.02144	-30217	200526-	2320039-	·36550	8.99974	·36576	232.1	233.6
3	38		-03786	-28991	194944.	2119513.	·32624	-95509	·87115	235.0	234.7
4	39	·22228	·05146	•27374	187819	1924569	·28433	.91457	·36976	234.3	232.5
5	40	$\cdot 20701$	·06348	27049	186419-	1736750	·23974	·87663	-3 6311	230.7	227.5
6	41	·19193	∙07085	•26278	183139-	1550331.	·19042	-83981	·35061	$224 \cdot 2$	219.5
7	42		.07379	24976	177730.	1367192.	·13583	80370	·33213	214.8	208.9
8	43	·16012	·07649	·23661	172429	1189462.	·07535	·76802	·30733	202.9	195.7
9	44	·14247	.07922	·22169	166606.	1017033.	·00733	·73207	· 2 7526	188.5	179.9
10	45	$\cdot 12439$	∙06959	•19398	156308	850427	10.92964	⋅69585	$\cdot 23379$	171.3	161.7
11	46		·04591	13630	136867	694119.	·84143	-65935	·18208	152-1	142.4
12	47	05432	·0190 3	·07335	118400	557252 •	·74605	·62311	·12294	132.7	$123 \cdot 2$
13	48		2.98851	∙00413	100956	438852•	·64232	-58711	·05 521	113.6	104.3
14		6.97448	∙95361	9.92809	84740	337896 .	•52878	55132	1.97746	94.9	86.1
15	50	·9 3 080	-91350	•84430	69871	253156.	· 4 0339	.51571	·88768	77.2	69.0
16	51	·88 3 79	⋅86682	75061	56313.	183285	·26313	·48021	$\cdot 78292$	60.7	53.2
17	52	·84162	·81151	•65313	44991	126972 ·	10371	44479	·65892	45.6	88.8
18	53		·74429	•54898	35398	81981	9.91371	•40934	·50437	31.9	25.8
19	54		·65982	· 4 3157	27013.	46583	·66823	·37376	·29447	19.7	14.4
20	55	·74345	-54814	•29159	19570	19570.	· 2 91 5 9	-33796	0·9536 3	9.0	4.5

5 PER CENT.

No. 29.—New Rules. Daughters' Reversionary Benefits. Value of Reversionary Benefits (by No. 25) to Daughters after Father's Death.

Daugh- ters' Age.	(1) Log. (d _{m+35} . s _m).	(2) Ditto + Log. y = + 35.	(3) + log. p=+4.	(2) + (3) = Log. P m.	Pm + 1,000,000.	K m = P m + 1	Log. K _m .	$\frac{\text{Log.}}{\left(\frac{\text{K}m}{\text{D}m.m+35}\right)}$	Value of Reversion- ary Benefits to Daughter after Father's Death.	Ditto at Mean Ag m + 1.
0	8-13521	7.39358	3.00475	10-39833	25022•	896903-	11.59868	2.44367	277.8	802-0
1	∙08589	•32308	.05335	·37643	23793	371881	-57040	-51346	326.2	337-3
2	·06473	-28073	∙07769	35842	22825-	348089-	•54169	·54195	348.3	354.5
3	·05724	•25205	09433	•34638	22201.	325264.	-51223	-55714	360.7	364.9
4 5	·04866	•22228	10799	•33027	21393.	303063	·48153	·56696	369.0	371-6
5 6	-05458 -06069	•20701	-11988	·32689 ·31939	21227	281670	•44974	.57311	374.2	375·4 376·6
7	.06593	·19193 ·17398	·12746 ·13094	·31939 ·30702	20864	260443. 239579-	·41571 ·37945	·56591 ·57575	376-6 376-5	375·8
8	.07126	·16012	13427	-29439	20278 · 19697 ·	219301.	·34104	.57373	374-1	372-0
9	-07480	14247	13758	28005	19057	199604	·30016	-56809	369.9	366.8
10	.07791	.12439	13427	25866	18141.	180547	25660	.56075	363.7	359.7
11	-06510	-09039	·12395	·21434	16381	162406	•21061	-55126	355-8	351.8
12	-05022	-05432	11277	·16709	14692	146025	·16444	-54133	3 1 7-8	343.8
13	-03271	·01562	-10065	-11627	13070	131333-	-11836	-53125	339.8	336.0
14	·01057	6.97229	-08916	·06145	11520-	118263.	·07284	·52152	332.3	330.6
15	7.98148	·92202	•08009	4.00211	100 1 9-	106743	-02833	51702	328.9	329-4
16	•94352	⋅86287	·07±67	9.93754	8660-4	96694	10.98540	.51842	329.9	333-9
17	•90361	·80177	.07419	·87596	7515.5	88034	•94465	-52867	337.8	345-4
18 19	-86127 -81909	-73824	.07969	-81793	6575-5	80518-	•90589	·54780	353.0	365.5
20	·78302	·67487 ·61761	-08870 -09930	·76357 ·71691	5801.9	73942. 68140.	-86889 -83340	·57745 ·60751	378⋅0 405⋅1	391·6 419·5
21	75294	•56634	.10779	-67413	5210·9 4722·0	62929-	•79885	63729	433.8	448.9
22	-72965	-52186	11404	-63590	4324-1	58207	·76498	-66647	464.0	479-6
23	-71141	-48243	·12140	-60383	4016-3	53883-	·73145	-69479	495.2	511.2
24	-69899	·44882	.12772	.57654	3771.7	49867	-69781	·72190	427.1	542.7
25	•69059	·41923	·13293	-55216	3565-8	46095	-66365	·74680	558.2	573.5
26	⋅68582	-39327	·13729	·53056	3392-8	42529.	·62869	·76992	588.7	603.7
27	-68165	·36791	·14107	-50898	3228.3	39136-	•59258	·79153	618.8	633.7
28	•67671	·34178	·14439	•48617	3063-2	35908-	•55519	·81198	648.6	663.7
29	•67131	•31519	·14792	•46311	2904-8	32845.	·51647	·83165	678.7	694.5
30 31	·66413 ·65509	·28683 ·25660	15189	·43872 ·41169	2746·1	29940	·47625	·85135	710.2	726·5
32	·64628	•22660	15095	·41109 ·38695	2580.4	27194. 24614.	·43447 ·30118	·87087	742·8 776·4	759·6 793·2
33	63744	19657	·16035 ·16438	-36025	2437·5 2295·9	22176	·34588	·89007 ·90846	810.0	826-6
34	-62784	16578	16808	·33386	2253.9 2157.0	19880-	29842	-92590	843·1	859.2
35	7.61723	.13398	3.17117	-30515	2019-1	17723	·24854	.94209	875.2	890-5
36	-60543	·10099	·17357	·27456	1881-7	15704	·19601	∙95697	905.7	920-0
37	∙59294	∙06731	·17525	·24256	1748-1	13822-	·14057	·97050	934.3	947-6
38	.57933	.03251	·17615	∙20866	1616-8	12074	-08185	98265	960-8	972.9
39	•56385	5.99584	·17624	·17208	1486-2	10457-5	.91945	•99338	984.9	995.2
40	•54575	•95655	17537	·13192	1354.9	8971.3	9.95286	3.00234	1005-4	1014-1
41 42	-52401 -49861	91362	17199	·08727 ·03835	1222-6	7616-4 6393-8	·88175	-00978	1022-8	1030-1
42 43	·46773	·86703 ·81496	·17132 ·16838	8.98334	1092·3 962·37	5301.5	·80576 ·72440	·01595 ·02089	1037.4	1043-4 1054-2
44	43159	.75764	16492	92256	836-68	4339.1	·63740	-02488	1049.3 1059.0	1002.7
45	88996	69482	16100	85582	717.50	3502.4	•54437	-02788	1066-3	1069.0
46	-34104	-62471	.15682	•78153	604-69	2784-9	·44481	-03003	1071-6	1073-7
47	⋅28537	.54785	-15247	·70032	501.56	2180-2	·33850	-03169	1075.7	1077-4
48	-22281	·46410	.14799	-61209	409.35	1678-6	·22495	∙03301	1079-0	1080-2
49	-15103	·37113	·14380	•51493	327-29	1269-24	·10353	∙03394	1081.3	1083-2
50	.07108	•26999	·13994	·40993	257.00	941.95	8-97403	·03548	1085-1	1087-0
51	6.98121	⋅15893	⋅13615	-29508	197-28	684.95	·83566	·03695	1088-8	1090-5
52	·88099	.03752	13194	·16946	146.73	487-67	-68813	•23828	1092-1	1093.5
53	·77068	4.90602	12782	03384	108-10	339-94	·53140	·03938	1094.9	1095.3

No. 29 (continued).

Daugh- ters' Age.	(1) Log. (d _{m+35} . s _m).	(2) Ditto + Log. y ≈ + 35.	(3) Log. pm+4.	(2) + (3) = Log. P _m .	P™ ÷ 1,000,000.	K m = P m + P m + 1	Log. K m.	Log. (Km) (1) m.m + 35)	Value of Reversion- ary Benefits 'to' Daughter, after Father's Death.	Ditto at Mean Age m + 1.
. 54	-65136	·76551	·12297	7-88848	77.354	231.84	·36519	·03964	1095-6	1095-9
55	-51899	-61195	·11797	.72992	53.693	154.49	-18890	-03987	1096-2	1097.3
56	-37654	•44831	·11237	-56068	36.365	100.795	·00346	.04072	1098-3	1100-6
57	-24102	-29160	·10595	-39755	24.978	64.430	7.80909	·04249	1102.8	1105.6
58	-10269	·13209	·09830	-23039	16.998	39.452	•59607	·54465	1108-3	1108-2
59	5.94394	3.95215	·08938	-04153	10.978	22.454	·35129	.04456	1108-1	1104.0
60	7.3772	-72474	·07943	6.80417	6.3704	11.4764	.05979	.04135	1099.9	1097-2
61	·47823	·44406	⋅06852	-51258	3.2552	5-1060	6.70808	-03920	1094.5	1089-3
62	-13041	∙07505	·05660	·13165	1.3541	1.8508	·26736	·03508	1084-1	1060-9
63	4.64048	2.56393	·04379	5.60772	· 4 0525	· 4 9672	5.69611	∙01606	1037.7	1019-8
64	-02465	1.92691	·03435	4.96126	·091 4 7	∙09147	4.96126	-00088	1002.0	
-	1			ļ į						

5 PER CENT.

No. 30.—New Rules. Husband and Wife. Value of Joint Life Annuity to end of Sixteenth Year of Service.

Age of Husband m.	(1) N _m .m-7 +10,000.	$ \begin{array}{c} (2) \\ \frac{11}{24} \begin{pmatrix} (D_{m \cdot m - 7} \\ -D_{86 \cdot 29}). \end{pmatrix} \end{array} $	(1) + (2) K ss.	Log. of Ditto.	$\log \left(\frac{K_m}{D_{m,m-7}}\right)$	Value of Temporary Joint Life Annuity.
20	77334	2657-8	79992-	8-90305	0.97931	9.535
21	69488	2408.7	71897-	·85671	·96205	9.163
22	62160-	2171.1	64331·	·808 1 2	·94345	8.779
23	55327.	1944.5	$57272 \cdot$	·7579 4	•92330	8.381
24	48957-	1732.0	50689.	·70 4 91	-90079	7.958
25	43025	1531.2	44556.	·6 1 891	-87573	7.512
26	37506.	1341.9	38848.	•58937	·84755	7.040
27	32374.	1164.9	33539.	-52555	-81522	6.535
28	$27604 \cdot$	998.7	28602.	·45640	·77791	5.997
29	23173.	843.5	24017.	-38052	·73491	5.420
30	19061	697.3	19758.	.29574	-68167	4.805
31	15246-	561.9	15807-	19885	-61738	4.144
32	11708-	433.9	12141.9	.08429	-53558	3.432
33	8429.7	315-1	8744.8	7.94175	·42609	2.667
34	5395.8	203.1	5598.9	.74810	·26610	1.845
35	2590.8	98.1	2688.9	·42957	1.98164	.959

5 PER CENT.

No. 30 (continued).—New Rules. Husband and Wife. Value of Joint Life Annuity to end of Twenty-fifth Year of Service.

Age of Husband m.	(1) N m ⋅ m − 7 ÷ 10,000.	$ \begin{array}{c} (2) \\ 11 \\ \bar{24} \begin{pmatrix} (D_{m} \cdot m - 7) \\ - D_{45} \cdot 38 \end{pmatrix}. \end{array} $	(1) + (2) K m.	Log. of Ditto.	$Log.\left(\frac{K_{m}}{D_{m.m-7}}\right)$	Value of Temporary Joint Lafe Annuity.
20	93045-	3296.9	96342	8-98382	1.06008	11.484
21	85199.	3047.9	88247	.94570	-05104	11.247
22	77871.	2810.2	80681	-90677	·04180	11.011
23	71038-	2583.7	73622	-86701	.03237	10.774
24	64668	2371.1	67039	-82633	.02221	10.525
25	58736.	2170.3	60906	·78466	-01148	10.268
26	53218-	1981-0	55199.	.74193	-00011	10.002
27	48085	1804-1	49889	-69800	0.98767	9.720
28	43315.	1637-8	44953.	-65276	.97427	9.425
29	38884	1482-6	40367	-60603	95952	9.110
30	34772.	1336.5	36109.	-55762	94355	8.781
31	30957.	1200-1	32157.	-50728	.92581	8.430
32	27419.	1073-1	28492.	.45472	•90601	8.054
33	24141.	954.3	25095.	39959	-88393	7.655
34	21107.	842.2	21949.	-34141	-85941	7.235
35	18302.	747.3	19049.	-27987	·8319 4	6.791
36	15711.	639-1	16350.	.21352	-80008	6-311
37	13320-	547.4	13867	·14198	·76348	5.801
38	11117.	461.5	11579.	-06367	.72059	5.255
39	$9089 \cdot 2$	381.3	9470.5	7.97637	-66929	4.670
40	7224.7	306-2	7530.9	87685	-60628	4.039
41	5512.7	236.4	5749-1	.75960	-52611	3.358
42	3943.8	170.8	4114.6	-61433	·41874	2.623
43	2507.9	109.8	2617.7	.41792	-26080	1.823
44	1196-3	52.8	1249-1	.09660	1.97880	.952

5 PER CENT.

No. 31.—New Rules. Members' Single Life. Value of Annuity to end of Sixteenth Year of Service.

Age m.	(1) N _m ,	(2) $\frac{11}{24} (D_{m} - D_{36}).$	(1) + (2) K _m ,	Log. of Ditto.	Log. $\left(\frac{K_m}{D_m}\right)$	Value of Temporary Annuity.
20	366471.	11153.	377624	5.57706	1.00085	10.020
21	231000	10136	341136.	53293	0.98306	9.618
22	297661	9159-	306820-	·48688	•96393	9.203
23	266358-	8226-	274584	·43867	-94308	8.772
24	236977	7345.	244322.	·38796	.91990	8.316
25	209413.	6513.	215926-	-33431	-89397	7.834
26	183565.	5726	189291	.27713	-86471	7.323
27	159332.	4986.	164318	•21569	-83129	6.781
28	136619.	4289-	140908.	·14894	·79267	6.204
29	115336.	3634.	118970.	·07544	.74741	5.590
30	95403.	3015	98418.	4.99307	·69350	4.937
31	767 4 0·	2433.	79173.	·89858	-62759	4.242
32	$59271 \cdot$	1886-	61157.	·78645	.54417	3.501
33	42928.	1370-	44298.	·64638	·43305	2.711
34	27644	884-	28528-	·45527	.27103	1.867
35	13355-	428-	13783.	·13934	Ī·98433	-965
36	• •	• •	• •	••	• •	• •

5 PER CENT.

No. 31 (continued).—New Rules. Members' Single Life. Value of Annuity to end of Twenty-fifth Year of Service.

	(1)	(2)	4.5 . 4.5	1	(1)	Value of
Age m.	Nm.	11 (Dm - D45).	(1) + (2) K _m .	Log. of Ditto.	$\log \left(\frac{K_m}{D_m}\right)$	Temporary Annuity.
20	452700-	14043-	466743.	5-66908	1.09287	12.384
21	417229.	13026	430255.	-63373	-08386	12.130
22	383890.	12049	395939.	•59763	-07468	11.876
23	352587	11116-	363703	-56074	-06515	11.618
24	323206.	10235.	333441.	•52302	.05496	11.349
25	295642	9402.	305044	·48436	.04402	11.067
26	269794	8616-	278410-	·44468	-03226	10.771
27	245561 .	7876-	253437.	·40388	·01948	10.459
28	222848	7199-	230047	·36182	∙00555	10-129
29	201565	6524⋅	208089	-31825	0.99022	9.777
30	181632.	5905⋅	187537.	·27309	.97352	9.409
31	162969.	5323-	168292	·22606	•95507	9.017
32	145500.	4775-	150275-	·17690	·93462	8.602
33	129157.	4259-	133416.	·12522	·91189	8·16 4
34	113873.	3774.	117647.	·07059	·8863 5	7.698
35	99584.	3318-	102902	-01242	·85741	7.201
36	86229 ·	2890-	89119-	4.94997	·82433	6.673
37	73752	2487.	76239 .	-88218	·78608	6-111
38	62100 ·	2109.	64209.	·80760	·74121	5.511
39	51226-	1753.	52979 .	·72410	∙68770	4.872
40	41082.	1418-	42500-	·62839	·62217	4.190
41	31629	1101.	32730.	·51 4 95	·53938	3.462
42	22830	802.	2 3632·	·37350	·42906	2.686
43	14649.	518.	15167-	.18090	-26806	1.854
44	14649.	252-	7302⋅	3.86344	1.98268	-961
45 ;	7050-2	••	••	• •	••	• •

5 PER CENT.

No. 32.—New Rules. Members' Single Life. Value of Life Annuity. (From Neison, Table II.)

Age m.	Log. D _m .	D 186.	N m = (D m + 1 + D m + 2)	Log. N m.	$Log.\left(\frac{N_m}{D_m}\right)$	Value of Life Annuity.
20	4.57621	37689-	532831.	5.72659	1.15038	14.138
21	·54987	35471.	497360	·69667	·14680	14.022
22	•52295	33339•	464021.	-66654	14359	13.919
23	· 4 9559	31303.	432718	·63621	·14062	13.824
24	·46806	29381	403337	·60567	·13761	13.728
25 26	·44034	27564	375773	·57492	·13458	13.633
26	•41242 •38440	25848	349925	·54398	·13156	13.538
28	·35440 ·35627	24233· 22713·	325692	·51280	·12840	13- 44 0
29	·32803	21283	302979- 281696-	·48141	·12514	13.340
30	•29957	19933	261763	·44979	12176	13.236
31	27099	18663	243100	·41790	-11833	13.132
32	·24228	17469-	225631	∙38579 •35340	·11480 ·11112	13-026 12-916
33	·21333	16343	209288-	·32075	10742	12.806
34	·18424	15284	194004	·28780	10356	12.693
35	·15501	14289.	179715	·25460	-09959	12.577
36	·12564	13355.	166360	·22105	-09541	12.457
37	·09 6 10	12477.	153883.	·18718	-09108	12.333
38	.06639	11652	142231.	·15299	-08660	12.207
39	·03640	10874	131357.	·11846	∙08206	12.080
40	.00622	10144.	121213-	·08354	∙07732	11.949
41 42	3.97557	9453.0	111760-	·0 1 829	-07272	11.823
43	•9 1444 •9128 4	8799.1	102961	·01267	-06823	11.701
44	·88076	8181.6	94779-	4.97671	∙06387	11.585
45	·84820	7599·1 7050·2	87180	·94042	·05966	11.473
46	·81515	6533.6	80130- 73596-	•90380 •86685	·05560	11.366
47	·78204	6054.0	67542	·82957	·05170 ·04753	11.264
48	·74898	5609-6	61932	·79192	04299	11·157 11·0 4 1
49	·71589	5198-6	56734.	·75384	-03795	10.913
50	·68301	4819-6	51914.	·71528	03227	10.771
51	·6503 4	4470.3	47444.	·67618	02584	10.613
52	•61797	4149.3	43295	·63644	-018 1 7	10.434
53	•58577	3852.7	39442	·595 9 6	-01019	10.237
54	•55361	3577.7	35864	·55466	-00105	10.024
55 56	•52138 •48895	3321.8	32542	·51244	0.99106	9.796
57	·45619	3089·9 2858·8	29452- 26593-	·46911	-98016	9.553
58	·42295	2648.2	23945	•42477	·96858	9-302
59	·38908	2449.5	21496	·37921 ·33236	95626	9.042
60	•35442	2261.6	19234.	·33236 ·28407	·94328 ·92965	8·776 8·505
61	-31882	2083-6	17151.	·23429	·91547	8·231
62	-28213	1914-8	15236.	·18287	90074	8·231 7·957
63	·24424	1754.9	13481.	12972	-88548	7.682
64	·20506	1603.5	11877.	.07471	-86965	7.407
65	16450	1460.5	10416-	-01770	·85320	7.132
66	·12244	1325.7	9090-6	3.95859	-83615	6.857
67	-07880	1199.0	7891.6	-89717	81837	6.582
68 69	·03337	1079.9	6811.7	·83326	-79989	6.308
70	2∙98596 •93637	968·19 863·71	5843.5	·76667	·78071	6.036
70	·93037 ·88440	766·30	4979.8	·69721	·76084	5.766
72	·8298 1	675.83	4213.5 3538.7	·62464 ·54884	·74024	5·498
73	·77236	592.05	2946·6	·34884 ·46932	·71900	5.236
74	·71165	514.81	2431·8	·46932 ·38593	·69696 ·67428	4.977
75	·64737	443.99	1987.8	·29837	·65100	4·724 4·477
76	•57919	379.46	1608.3	•20637	·62720	4.238
77	.50671	321.15	1287-1	10961	-60290	4.008
78	·42966	268-94	1018-2	-00783	-57817	3.786
79	·3 1 769	222.68	795-58	2.90068	-55299	3.573

No. 32 (continued).

Age m.	Log. D _{m.}	D m.	$N_{m} = (D_{m+1} + D_{m+2}).$	Log. N m.	$Log.\left(\frac{N_m}{D_m}\right)$	Value of Life Annuity.
80	-26043	182.15	613-43	.78777	·5273 4	3-368
81	·16753	147.07	466.36	·6687 2	-50119	3.171
82	∙06862	117-12	349.24	·54312	·47450	2.982
83	1.96325	91.886	257.35	· 4 1052	·44727	2.801
84	-85095	70.950	186.40	·270 4 5	· 4 1950	2.627
85	·73123	53.855	132.54	·12235	-39112	2 ·461
86	-60358	40-140	92.395	1.96565	-36207	2.302
87	·46745	29.339	63.056	· 7 9972	-33227	2.149
88	-32258	21.017	42.039	·62365 .	-30107	2.000
89	·16867	14.746	27.293	·43605	·26738	1.851
90	-00542	10.126	17-167	· 2346 9	·22927	1.695
91	0.83251	6.8000	10·36 73	·01565	-18314	1.525
92	·64961	4.4628	5.9045	0.77118	·12157	1.323
93	·44718	2.8001	3·1044	⋅4 9198	-04480	1.109
94	21431	1.6380	1·466 4	.16625	I-95194	-895
95	1.93769	·86634	·60002	I.77817	-84048	· 693
96	-59975	·39788	·20214	·30565	·70590	-508
97	-17495	·14961	·05253	₹.72041	·54546	·351
98	₹ 63504	-04316	·00937	3.97174	33670	·21 7
99	3.92864	-008484	·00088	4.94884	∙02020	·105
100	4.94884	-000888				

4 PER CENT.

No. 2.—Old Rules. Widows' Benefits. Value of Annuity, payable Half-yearly, in Advance, till Marriage or Death.

	(1)	(2)	(3)	! !	(1)	(2)	(3)
Age m.	Value of Annuity $a_m + .750$.	Value of Annuity at Age m + 1.	Log. of Ditto.	Age m.	Value of Annuity $a_m + .750$.	Value of Annuity at Age m + 1.	Log. of Ditto.
0	12.955	13.787		46	13.702	13.603	-13363
ĭ	14-618	14.870		47	13.504	13.406	-12730
2	15.121	15.170		48	13.308	13.212	12097
3	15.219	15.193		49	13.115	13-033	·11504
4	15.167	15.091		50	12.950	12.875	10975
5	15.014	14.906		51	12.799	12.727	-10473
6	14.797	14.662		52	12.654	12.580	-09968
7	14.527	14.371		53	12.505	12.420	-09412
8	14.214			54	12·303 12·334	12.420	·08824
9	13.878	14.046	• •		12·33 1 12·171	12.233	-08228
		13.698	• •	55			
10	13.518	13.327	• •	56	12.000	11.906	-07577
11	13.135	12.929	• •	57	11.812	11.705	-06837
12	12.723	12.504		58	11.597	11.470	-05956
13	12.285	12.054	1.08113	59	11.342	11.204	-04937
14	11.823	11.639	∙06592	60	11.066	10.918	·03814
15	11.456	11.322	.05392	61	10.770	10.614	02588
16	11.188	11-134	·04665	62	10.458	10.297	-01271
17	11.081	11.116	·04595	63	10.136	9.975	0.99891
18	11.150	11.305	.05327	64	9.814	9-653	·98466
19	11.459	11.617	-06509	65	9.492	9-332	·96997
20	11.775	11.933	∙07675	66	9.171	9-011	·95 4 77
21	12.090	12.243	-08789	67	8.850	8-691	·93907
22	12.396	12.541	-09833	68	8.531	8-372	-92283
23	12.686	12.821	·10792	69	8.212	8-055	-90607
24	12.956	13.067	·11618	70	7.898	7.742	-88885
25	13.178	13.270	12287	71	7.585	7.432	-87111
26	13.362	13.440	12840	72	7.278	7.126	-85285
27	13.518	13.585	13306	73	6.973	6.825	-83410
28	13.652	13.714	13716	74	6.676	6.530	-81491
29	13.775	13.845	·14129	75	6.383	6.241	•79525
30	13.914	13.987	·14572	76	6.098	5.959	.77517
31	14.060	14.133	15023	77	5·819	5.685	-75473
32	14.206	14.276	·15461	78	5·550	5.420	.73400
33	14.346	14.409		11 1	5·289	5.162	-71282
34	14.471	14.522	·15863 ·16203	79 80	5·035	4.916	-69161
35	14.572	14.609		11 1	4.796	4.680	-67025
			·16462	81			
36	14.645	14.667	·16634	82	4.564	4·453 4·234	-64865
37	14.688	14.694	-16714	83	4.341		-62675
38	14.700	14.689	·16699	84	4.127	4.024	-60466
39	14.678	14.647	·16575	85	3.920	3.822	-58229
40	14.616	14.568	·16340	86	3.723	3.629	-55979
41	14.519	14.457	·16008	87	3-535	3.447	·537 44
42	14.394	14.320	·15594	88	3.358	3.274	-51508
43	14.246	14.163	·15116	89	3.190	3.112	· 49304
44	14.080	13.988	·14576	90	3.033	••	• •
45	13.896	13.799	-13985	11		1	

4 PER CENT.

No. 4.—Old Rules. Widows and Children. Value of Life Annuity, payable Half-yearly, in Advance. (From Neison, Table VI.)

Age m.	Log. $\left(\frac{Nm}{Dm}\right)$	Value of Annuity	Ditto + .750.	Ditto at Mean Age m+1.	Age m.	Log. $\left(\frac{N m}{D m}\right)$	Value of Annuity a m.	Ditto + •750.	Ditto at Mean Age m + ±.
0	1.18458	15.296	16.046	17.215	50	-12102	13-214	13.964	13.833
ì	•24635	17.634	18.384	18-840	51	·11233	12.952	13.702	13.567
$\hat{2}$	-26826	18.546	19.296	19.505	52	-10322	12.683	13.433	13.295
3	•27791	18.963	19.713	19.834	53	-09368	12.407	13.157	13.016
4	-28342	19.205	19.955	20.020	54	-08369	12-125	12.875	12.731
5	-28631	19.334	20.084	20.020	55	-07325	11.837	12.587	12.441
6	28768	19.395	20.145	20.113	56	-06240	11.545	12.295	12.147
7	28789	19.333	20.143	20.130	57	.05113	11.249	11.999	
8	28713				58				11.849
9		19-370	20.120	20.097		03943	10.950	11.700	11.548
10	-28612	19.325	20.075	20.046	59	.02721	10.647	11.397	11.243
	•28484	19.268	20.018	19.983	60	-01446	10.339	11.089	10.932
11	•28327	19.199	19.949	19.905	61	.00109	10.025	10.775	10.616
12	-28128	19-111	19.861	19.809	62	0.98710	9.707	10.457	10.296
13	•27894	19-008	19.758	19.701	63	•97249	9.836	10.136	9.975
14	·27633	18.894	19.644	19.584	64	•95734	9.064	9.814	9.653
15	·27355	18.774	19.524	19-463	65	·94162	8.742	9.492	9.331
16	·27073	18.652	19.402	19.343	66	·92534	8.421	9.171	9.010
17	·26800	18.535	19.285	19.228	67	∙90846	8-100	8.850	8.690
18	·26532	18-421	19.171	19-115	68	·89102	7.781	8.531	8.372
19	-26267	18.309	19.059	19.004	69	-87289	7.463	8.213	8.055
20	·26006	18-200	18.950	18.894	70	-85417	7.148	7.898	7.741
21	·25740	18.088	18-838	18.781	71	-83475	6.835	7.585	7.431
22	·25467	17.975	18.725	18.667	72	-81474	6.527	7.277	7.125
23	25188	17.860	18-610	18.551	73	.79403	6.223	6.973	6.825
24	·24902	17.743	18.493	18.433	74	.77274	5.926	6.676	6.529
25	·24609	17.624	18-374	18.313	75	.75074	5.633	6.383	6.240
26	-24309	17.502	18.252	18-190	76	·72817	5.347	6.097	5.958
27	-24000	17.378	18-128	18.065	77	-70496	5.069	5.819	5.684
28	-23683	17.252	18.002	17.937	78	-68127	4.800	5.550	5.419
29	-23357	17.123	17.873	17.806	79	65698	4.539	5.289	5.163
30	23019	16.990	17.740	17.672	80	-63230	4.288	5.038	4.917
31	22671	16.854	17.604	17.534	81	-60707	4.046	4.796	4.680
32	-22311	16.715	17.465	17.393	82	-58143	3.814	4.564	4.452
33	-21938	16.713	17.322	17.333	83	-55519	4.591	4.341	4.234
34	21550		17.175	17.248	84	.52849		4.127	
35	21147	16.425 16.273		16.945	85	.50107	3.377 3.170	3.920	4.023
36	20726		17.023		86				3.822
37	20286	16.116	16.866	16.785	11	·47321	2.973	3.723	3.629
		15.954	16.704	16.619	87	•44486	2.785	3.535	3.446
38	19825	15.785	16.535	16.448	88	•41623	2.608	3.358	3.274
39	·19343	15.611	16.361	16.270	89	-38737	2.440	3.190	3.111
40	.18835	15.429	16.179	16.085	90	-35848	2.283	3.033	2.959
41	-18300	15.241	15.991	15.892	91	•32936	2.135	2.885	2.814
42	.17736	15.044	15.794	15.692	92	-29975	1.994	2.744	2.675
43	.17145	14.841	15.591	15.486	93	-26876	1.857	2.607	2.538
44	.16526	14.631	13.381	15.272	94	-23544	1.720	2.470	2.399
45	.15874	14.413	15.163	15 050	95	·19810	1.578	2.328	2.249
46	15192	14.188	14.938	14.821	96	·15236	1.420	2.170	2.074
47	·14472	13.955	14.705	14.585	97	∙08942	1.229	1.979	1.851
48	-13722	13.716	14.466	14.342	98	T-98793	-9726	1.723	1.531
49	·12930	13.468	14.218	14.091	99	·77556	·5964	1.346	

4 PER CENT.

No. 11.—Old Rules. Wives' Reversionary Benefits. Value of Annuity after Husband's Death to Wife till Re-marriage or Death. (Neison, Table XII., corrected.)

Age m. m – 7.	Log. (d _{m.} s _{m-7.v^m.)}	Pitto + Log. Pm+1.	P _m ÷ 1000.	K :: = P :: + P :: +1	Log. K m.	Log. (Km. Dm.m-7)	Value of Reversion- ary Annuity to Wife after Husband's Death,
	6.07710	7.15832	14399	356159-	8-55165	0.54479	3.506
20 13 21 14	6.07719 .09865	·16457	14607	341760	·53372	•55178	3.563
22 15	10433	15825	14396-	327153	·51475	·55834	3.617
23 16	-08984	·13649	13693.	312757	· 4 95 2 1	·56 1 99	3.673
24 17	-07641	·12236	13254.	299064	·47576	•57190	3.732
25 18	·06204	·11531	13041	285810	·45608	-57900	3.793
26 19	•04145	·10654	12780	272769	·43580	·58593	3.854
27 20	.02073	∙09748 ∙08786	12516· 12242·	259989· 247473·	·41496 ·39352	·59242 ·59866	3.912 3.969
28 21 29 22	5.99997 .98498	·08331	12115.	235231	·37149	-60446	4.022
30 23	96416	.07208	11805.	223116.	·34854	-60979	4.072
31 24	·94259	.05877	11449.	211311.	·32492	-61461	4.117
32 25	·92821	.05108	11248	199862	•30073	·61903	4.159
33 26	•90634	.03474	10833.	188614	·27556	•62275	4.195
34 27	-88413	·01719	10404· 9992·4	177781· 1673 77 ·	·24988 ·22370	·62657 ·63041	4·232 4·270
35 28 36 29	-86251 -84011	6·99967 ·98140	9580.8	15738 5 ·	19698	-63393	4.305
37 30	-81771	96343	9192.4	147804	·16967	-63740	4.339
38 31	-80020	.95043	8921.3	138612-	·14179	·64079	4.373
39 32	·77769	·93230	8556-6	129691	-11291	·64375	4.403
40 33	·76693	92556	8424.8	121134	-08325	-64644	4.430
41 34	.75511	·91714	8263.0	112709	·05196	·64808 ·64877	4.417 4.454
42 35	·74104	∙90566 ∙89272	8047·5 7811·2	104446- 96399-	.01891 7.98407	-64824	4.449
43 36 44 37	·72638 ·70909	·87623	7520.2	88588	•94737	-64671	4.433
45 38	69131	·85830	7216.1	81068-	·90885	-64395	4.405
46 39	-68221	·84796	7046-3	73852	·86836	·64009	4.366
47 40	-62007	·78347	6073.9	66806-	-82482	-63340	4.299
48 41	•58870	·74878	5607.6	60732	·74342	·62925 ·62480	4·259 4·215
49 42	-53663	·69257	4926·9 4382·6	55124· 50197·	.74134 .70068	-62180	4.186
50 43 51 44	·49057 ·44145	.64173 .68721	3865.5	45815.	-66101	-62003	4.169
52 45	-39659	53644	3439.1	41949.	-62272	-61955	4.164
53 46	-35689	·49052	3094.0	38510-	·58557	-62057	4.174
54 47	-32113	·44843	2808-2	35416	.54920	•62257	4.194
55 48	-28987	·41084	2575.4	32608	·51332	•62537	4·221 4·254
56 49	•26253	·37757	2355·8 2239·6	30033- 27648-	•47760 •44166	·62882 ·63297	4.295
57 50 58 51	·24042 ·22060	∙35017 ∙32533	2115.1	25408	·40497	-63717	4.337
59 52	20414	√30382	2012.9	23293.	-36723	·64164	4.382
60 53	-18913	·28325	1919-8	21280-	-32797	·64573	4.423
61 54	·17565	·26389	1836-1	19360	•28691	•64936	4.460
62 55	-16107	•24335	1751.3	17524	·24363	·75229	4.491
63 56	·14433	·22010	1660.0	15772. 14112.	·19789 ·14959	·65439 ·65570	4.512 4.526
64 57	·12635 ·10608	·19472 ·16564	1575·7 1464·3	12546-	.09851	-65613	4.530
65 58 66 59	·08312	·13249	1356.7	11082	.04462	-65578	4.527
67 60	-05932	.09746	1251.6	9725.5	6.98791	-65477	4.516
68 61	-03413	-06001	1148-2	8473.9	·92808	-65307	4.499
69 62	-00661	.01932	1045.5	7325.7	·86485	-65062	4.473
70 63	4.97627	5.97518	944.45	6280.2	·69797	·64744 ·74355	4·441 4·401
71 64	·94287	•92753	846·31	5335.7 4489.4	.72719 .65219	-63889	4.354
72 65	·90685 ·86769	·87682 ·82246	753.04 664.45	3736.4	.57245	-63338	4.299
73 66 74 67	·80709 ·82451	·76358	580.20	3071.9	.48741	-62686	4.235
75 68		69924	500.31	2491.7	-39650	·61920	4.161
76 69		-62789	424-51	1991.4	-29916	·61034	4.077

No. 11 (continued).

	.ge n – 7.	Log. (dm.8m-7.0 m.)	Log. P≈+‡.	P _m ÷ 1000.	K _m .	Log. Km.	Log. $\left(\frac{K_m}{\overline{D_{m.m-7}}}\right)$	Value of Reversion- ary Annuity to Wife after Husband's Death.
77	70	-66212	-55097	355-61	1566-9	·1950 4	-60116	3.992
78	71	-59324	·46435	291.31	1211.3	-08325	·59064	3.896
79	72	-51836	·37121	235.08	919-96	5.96377	·57934	3.796
80	73	·43364	·2677 4	185-24	684.88	-83561	·56693	3.689
81	74	-34081	$\cdot 15572$	143-13	499-64	·69866	∙55402	3 ·581
82	75	·23839	·03364	108-06	256.51	·55207	∙53952	3·464
83	76	·1269 4	4.902i1	79.820	248 ·45	·39524	-52476	3.348
84	77	-00276	·757 1 9	57.212	168-63	·22693	-50837	3.224
85	78	3.86759	•60159	39.957	111.42	·0 4 696	· 4 9118	3.099
86	79	·72022	· 43304	27·104	71.465	4.85409	·47314	2.973
87	80	· 5 5756	·2 4 917	17.749	44.361	·64700	·45437	2.840
88	81	-38037	·050 62	11.236	26.612	· 4 2508	· 4 3356	2.714
89	82	·18375	3.83240	6.7983	15.376	·18684	· 4 1276	2.587
90	83	2.97287	·59 962	3.9776	8.578	3.93339	·39256	2.470
91	84	·73624	·34090	2.1923	4.6004	·66280	·37291	2.360
92	85	·50278	·0850 7	1.2164	2.4081	·38166	·36293	2.306
93	86	-25907	2.81886	-65896	1.1917	07617	·35600	2.270
94	87	1.98048	·51 7 92	∙32955	·53277	2.72654	•34342	2.205
95	88	·64666	·16173	·14512	·20322	∙30797	-31271	2.054
96	89	·27113	1.76417	-05810	∙05810	1.76417	· 2 2138	1.665

4 PER CENT.

No. 12.—Old Rules. Sons' Reversionary Benefits. Value of Reversionary Benefits till Age 19 after Father's Death. (From Neison, XXIII. (a) corrected.)

Sons' Age m.	Log. (d _{m+35} s _m . v ^{m+35}).	Log.	Sum of Ditto (1) + (2).	P _m ÷1,000,000	K _m = P _m + P _m +1	Log. Km.	Log. of D m.m + 35.	Log. (Km (D m . m + 35.	Value of Total Re- versionary Benefits after Father's Leath.	Ditto at Mean Age m+‡
0	7.53904	2.87163	10-41067	25744	319598-	11.50461	9-30047	2.20414	160.0	171.3
1	·47269	.91817	•39116	24613.	293854.	·46813	-20655	-26158	182.6	185.9
2	·43450	·94097	·37547	23739.	269241.	·43014	·15351	·27663	189-1	189-2
3	·40997	-95577	·36574	23213.	245502	-39005	·11301	·27704	189.3	187-8
4	·38436	96747	-35183	22482	222289.	-34692	-07665	·27027	186-3	183.7
5	-37325	.97739	-35064	22420.	199807	·30062	04287	.25775	181.0	177.2
6	•36232	-98154	·34386	22073	177387	.24893	-01020	·23873	173.3	168.3
7	·35053	.98012	·33065	21412.	155314.	-19120	8.97825	·21295	163.3	157.4
8	-33883	.97807	-31690	20744	133902.	12678	·94673	·18005	151.4	144-6
9	·32533	+ .97568	-30101	19999-	113158-	·05369	.91493	·13876	137.7	129-8
10	-31141	96081	+27222	18716-	93159-	10.96922	-88287	∙08635	122.0	113.5
11	-28157	91852	·20009	15852-	74443.	·87182	-85053	-02129	105.0	97-
12	·24965	-88406	-13371	13605-	58591	·76783	·81844	1.94939	89-0	81.3
13	-21511	·85983	·07494	11883-	44986-	-65308	·78660	-86648	73.5	65.9
14	-17813	·81584	9.99397	9862-1	33103.	-51987	·75497	-76490	58.2	51.1
15	-13859	·76453	·90312	8000-5	23241	-36645	·72350	-64295	44.0	37.5
16	-09574	.70352	·79926	6298-8	15240.	-18299	⋅69216	49083	31.0	25.2
17	-05773	-62912	-68685	4862.4	8941	9.95139	·66090	·29040	19.5	14.6
18	-02495	.58557	·61052	4078-7	4078-7	61052	-62960	0.98092	9.6	4.8

4 PER CENT.

No. 13.—Old Rules. Daughters' Reversionary Benefits. Value of Reversionary Benefits till Age 19 after Father's Death. (From Neison, XXVI. (a) corrected.)

Daugh- ters' Age m.	(1) Log. d_{m+35} . $s_{m} \cdot v^{m+35}$.	(2) Log. Pm + 1.	Sum of Ditto (1) + (2).	Pm ÷1,000,000	K _m = P _m + P _m + 1	Log. K m.	Log. D _m . m + 85.	Log. (Km) (Dm)	Value of Reversion- ary Annuity.	Ditto at Mean Age m++
0	7.53904	1 2 ·86599	10.40503	25411.	313308-	11.49597	9.30047	2.19550	156-9	167.9
1	·47269	91258	·38527	24281.	287897-	·45924	.20655	·25269	178-9	182.0
2	·43450	93484	·36934	23407	263616.	·42098	-15351	.26747	185-1	185.2
3	·40997	.94941	·35938	22876-	240409.	·38059	·11301	-26758	185.2	183.7
4	-38436	·96090	·34526	22144.	217333.	-33712	-07665	·26047	182.2	179.5
5	·37325	-97060	-34385	22072.	195189-	·29046	-04387	-24759	176-8	172.9
6	-36232	.97445	·33677	21716.	173117.	·23835	-01020	·22815	169-1	164.2
7	-35053	.97265	·32318	21047.	151401.	·18013	8.97825	·20188	159-2	153.3
8	-33883	.97020	•30903	20372	130354	-11511	-94673	-16838	147.4	140-5
9	·32532	-96738	.29271	19620.	109982.	·04031	·91493	-12538	133.5	125.9
10	·31141	-95181	·26322	18332.	90362.	10.95599	-88287	.07312	118.3	110.0
11	·28157	.92129	-29286	15954.	72030.	-85751	85053	-00698	101.6	93.4
12	-24965	·S8650	·13615	13682	66076	.74878	·81844	1.93034	85.2	77.3
13	-21511	-84671	-06182	11530.	42394.	-62730	·78660	-84070	69.3	61.8
14	·17594	-80192	9.97786	9503.0	30861.	·48945	.75497	.73448	54.3	47.6
15	·12981	-75183	-88164	7614.5	21361.	-32962	.71910	-61052	40.8	34.8
16	-07482	-69410	·76892	5873-8	13746	-13818	·67893	·45925	28-8	23.6
17	-01788	-62141	.74229	4388-2	7872-8	9-89613	-63200	·26404	18.4	13.8
18	6.95850	-58365	-54215	3484.6	3484-0		-57835	0.96380	9.2	4.6

A PER CENT.

No. 16.—New Rules. Widows' Pensions. Value of Life Annuity, payable Half-yearly, in Advance, but reducible to one-half on Re-marriage.

Age m.	Value of Half Annuity till Death at Mean Age m + 1.	Value of Half Annuity till Marriage or Death at Mean Age m+1.	Value of Annuity, Reducible on Re-marriage.	Log. of Ditto.	Age m.	Value of Half Annuity till Death at Mean Age m+1.	Value of Half Annuity till Marriage or Death at Mean Age m + ½.	Value of Annuity, Reducible on Re-marriage.	Log. of Ditto.
13	9.851	6.027	15.878	1.20080	57	5.925	5.853	11.778	-07107
14	9.792	5.820	15.612	·19346	58	5.774	5.735	11.509	·06104
15	9.732	5.661	15.393	·18732	59	5.622	5.602	11.224	·05015
16	9.672	5.567	15.239	18296	60	5.466	5.459	10.925	03842
17	9.614	5.558	15.172	·18104	h 61	5.308	5.307	10.615	-02592
18	9.558	5.653	15.211	18216	62	5.148	5.149	10.297	01271
19	9.502	5.809	15.311	·18500	63	4.988	4.988	9.976	0.99896
20	9.447	5.967	15.414	.18792	64	4.827	4.827	9.654	•98471
21	9.391	6.122	15.513	.19070	65	4.666	4.666	9.332	•96997
22	9.334	6.271	15.605	·19326	66	4.505	4.506	9.011	•95477
23	9.276	6.411	15.687	·19554	67	4.345	4.346	8-691	-93907
24	9.217	6.534	15.751	·19731	68	4.186	4.186	8.372	92283
25	9.157	6.635	15.792	·19844	69	4.028	4.028	8.056	·90612
26	9.095	6.720	15.815	-19907	70	3.871	3.871	7.742	-88885
27	9.033	6.793	15-826	19937	71	3.716	3.716	7.432	-87111
28	8.968	6.857	15.825	·19934	72	3.563	3.563	7.126	-85285
29	8.903	6.923	15.826	·19937	73	3.413	3.413	6.826	-83417
30	8.836	6.994	15.830	19948	74	3.265	3.265	6.530	-81491
31	8.767	7.067	15.834	-19959	75	3.120	3.121	6.241	•79525
32	8-697	7.138	15.835	19962	76	2.979	2.980	5.959	.77517
33	8.624	7.205	15.829	19945	77	2.842	2.843	5.685	.75478
34	8.550	7.261	15.811	19896	78	2.710	2.710	5.420	·73400
35	8.473	7.305	15.778	·19805	79	2.582	2.581	5.163	·71260
36	8.393	7.334	15.727	19665	80	2.459	2.458	4.917	69170
37	8.310	7.347	15.657	19471	81	2.340	2.340	4.680	•67025
38	8.224	7.345	15.569	.19226	82	2.226	2.227	4.453	-64865
39	8.135	7.324	15.459	.18918	83	2.117	2.117	4.234	•62675
40	8.043	7.284	15.327	·18546	84	2.012	2.012	4.024	-60 4 6€
41	7.946	7.229	15.175	.18113	85	1.911	1.911	3.822	•58229
42	7.846	7.160	15.006	.17626	86	1.815	1.815	3.630	•55991
43	7.743	7.082	14.825	.17099	87	1.723	1.724	3.447	-53744
44	7.636	6.994	14.630	·16524	88	1.637	1.637	3.274	-51508
45	7.525	6.900	14.425	-15912	89	1.556	1.556	3.112	·4930
46	7.411	6.802	14.213	-15269	90	1.480	1.480	2.960	-47129
47	7.293	6.703	13.996	-14600	91	1.407	1.407	2.814	·44931
48 49	7.171	6-606	13.777	·13915	92	1.338	1.338	2.676	·42749
50	7.046	6.517	13.563	·13236	93 94	1.269 1.200	1.269 1.200	2.538 2.400	-40449 -38021
51	6.917 6.784	6.438	13.355	·12564		1.125	1.125	2·400 2·250	-35218
52	6.648	6-364 6-290	13.148	·11886	95	1.125	,	2.230 1 2.074	-33218
53	6.508		12.938	-11187			1.037	1.852	26764
54	6.366	6.210 6.127	12.718 12.493	10442	97 98	·926 ·797	·926 ·767	1.534	1858
55	6.221	6.043	12.493	-09667 -08863	99	337	337	674	.1000
56	6.074	5.953	12.201	·08803	100	.001	991	.0/#	1

4 PER CENT.

No. 17.—New Rules. Sons' Benefits. Value of Temporary Annuity till Age 6, 10, and 21.

Age m.	Value of Annuity	Value of Annuity	Log. D ₂₁ + Log. a ₂₁ + .750	Value of Life Annuity	Value of	Temporary A	nnuity at	Value of Temporary Annuity	Value of Temporary Annuity from
	after Age 6.	after Age 10.	= 5 · 73022 - Log. D _m .	after Age 21.	Till Age 6.	Till Age 10.	Till Age 21.	from Age 6	Age 10 till
0	11.647	9.522	0.73022	5.373	4.399	6.524	10-673	6.274	4.149
i	14.189	11.600	·81595	6.546	4.195	6.784	11.838	7.643	5.054
2	15.727	12.858	-86065	7.255	3.569	6-438	12.041	8.472	5.603
3	16.928	13.840	-89262	7.809	2.785	5.873	11.904	9.119	6.031
4	18.037	14.747	-92018	8-321	1.918	5.208	11.634	9.716	6.426
5	19.097	15.613	·94498	8.810	-987	4.471	11.274	10.287	6.803
6		16-470	·96818	9.294	• •	3.675	10.851	••	7.176
7		17.326	-99019	9.777	• •	2.828	10.377	• •	7.549
8		18-190	1.01131	10.264	• •	1.930	9.856	••	7.926
9		19.087	-03221	10.770	• •	-988	9.305	• •	8.317
10			·05290	11.295	• •	• • •	8.723	• • •	• •
11			·07339	11.841	••	••	8.108	• •	• •
12			-09355	12.404	• •	••	7.457	• •	• •
13			-11347	12.986		••	6.772	• •	• •
14			·13326	13.591	• •	••	6.053	• •	• •
15	••	· • • •	·15302	14.224		••	5.300	• •	
16			-17288	14.890		••	4.512	• •	• •
17			·19297	15.594	j ••	••	3.691	• •	• •
18			-21325	16·3 4 0		••	2.831	••	
19		•••	·23370	17.128	••		1.931	• •	• •
20			·25431	17.960		••	-990	• •	

4 PER CENT.

No. 18.—New Rules. Sons' Benefits. Value of £300 at Age 21.

Age m.	Log. D ₂₁ Log. D _{m.}	Value of Endowment of £1 at Age 21.	Value of Endowment of ±300 at Age 21.
0	T-45519	-2852	85.56
1	·54092	-3475	104.25
2	·58562	-3851	115.53
3	•61759	·4146	124.38
4	·64515	·4417	132.51
5	·6699 5	4677	140.31
6	<i>-</i> 69315	· 493 3	147.99
7	·71516	·5190	155.70
8	·73628	·5449	163.47
9	·75718	-5717	171.51
10	-77787	-5996	179.88
11	·79836	-6286	188.58
12	-81852	-6585	197.55
13	-83844	-6894	206.82
14	·85823	.7215	216-45
15	·87799	-7551	226.53
16	-89785	7904	$237 \cdot 12$
17	.91794	-8278	248.34
18	.93822	-8674	260.22
19	-95867	9092	272.76
20	.97928	9534	286.02

4 PER CENT.

No. 19.—New Rules. Sons' Benefits. Value of £10 Annuity till Age 10.

Age m.	Value of £10 Annuity till Age 10.	Value at Mean Age m + ‡ P m + ‡.	Log. of Ditto.
0	65.2	66-5	1.82282
1	67.8	66-1	-82020
2	64.4	61.5	·78888
3	58.7	55-4	·74351
4	52.1	48-4	-68485
5	44.7	40.7	•60959
6	36.8	32.5	-51188
7	28.3	23.8	-37658
8	19.3	14.6	·16435
9	9.9	5.0	0.69897

4 PER CENT.

No. 20.—New Rules. Sons' Benefits. Value of Total Benefits if both Parents are Dead or Mother Re-married.

Age m.	(i) Value of £125 Annuity till Age 21.	(2) Value of £65 An- nuity till Age 10.	(3) Value of £20 Annuity till Age 6.	(1) - (2+3)	Value of ±300 at Age 21.	Total Value of Benefits.	Value at Mean Age m + j.	Value of £10 a Year Increased Pension till Age 10 after Mother's Marriage or Death.	Value of Total Bene- fits if both Parents are Dead or Mother Re-married.
0	1334-1	424-1	88.0	822.0	85-6	907-6	983.4	66.5	1049-9
1	1479-7	441.0	83.9	954-8	104.3	1059-1	1094.9	66-1	1161.0
2	1505-1	418.5	71.4	1015-2	115.5	1130.7	1152.8	61.5	1214.3
3	1488-0	381.8	55.7	1050-5	124.4	1174.9	1192.4	55.4	1247.8
4	1454-2	338.5	38.4	1077-3	132.5	1209.8	1224.5	48.4	1272.9
5	1409-2	290.6	19.7	1098.9	140.3	1239-1	1252.4	40.7	1293-1
6	1356-4	238.9	• •	1117.5	148.0	1265.5	1267.3	32.5	1299-8
7	1297-1	183.8	• •	1113.3	155.7	1269.0	1269.5	23.8	1293.3
8	1232.0	125.5		1106.5	163.5	1270-0	1270-2	14.6	1284.8
9	1163-1	$64 \cdot 2$		1098-9	171.5	$1270 \cdot 4$	1270.4	5.0	1275-4
10	1090-4	• •		1090.4	179.9	1270.3	1236-2	• •	1236-2
11	1013-5	• •	• •	1013.5	188-6	1202-1	1165.9		1165-9
12	932-1	• •		932.1	197.6	1129.7	1091.5	• •	1091.5
13	846.5	• •	• •	846.5	206.8	1053.3	1013-2	• •	1013-2
14	756-6	• •	• •	756.6	216.5	973-1	931.0	• • •	931.0
15	662.5	• •	• •	662.5	226.5	889-0	845.0	••	845.0
16	564.0	• •		564.0	237.1	801.1	755.4	• •	755-4
17	461.4	• •	• •	461.4	248.3	709.7	661.9		661.9
18	353.9	• •		353.9	260.2	614.1	560-1	· • •	560-1
19	241.4	• •	• •	241.4	27 2.8	514.2	462.0	• •	462.0
20	123.8	• •	• •	123.8	286 ·0	409.8	854.9	• •	354.9
21	••	• •			300⋅	300.0			

No. 21.—New Rules. Sons' Benefits. Value of Total Benefits if Mother Living and not Re-married.

Age	Log. s_m . $(d+\mu)_{m+28}$. v_m+28 .	Ditto + Log. Pm+4.	P _m ÷ 100,000.	K m = P m + P m +1	Log. K m.	Log. D _{m.m+28} ,	Log.	Value of Increased Pension of £10 till Age 10.	Ditto at Mean Age m + t.	Total Value of Benefits if Mother Living, and not Re- married.
0 28	7-62489	9.44771	28036.	115621	10.06303	9-02204	1.04099	10.990	10.795	994.2
1 29	.54331	-36351	23095.	87585	9.94243	8.91709	·02534	10.601	10.323	1105-2
2 30	•48214	·27102	18665.	64490.	·809 4 9	·85304	0.95645	9.046	8.139	1160-9
3 31	-42474	·16825	14732.	45825-	-66110	-80183	-85927	7.232	6.346	1198.7
4 32	·36627	-05112	11249.	31093.	· 4 9266	-75541	.73725	5.461	4.654	1229-2
5 33	30567	8.91526	8227.4	19844.	-29763	·71236	-58527	3.848	3.161	1255-6
6 34	.23976	·75164	5644.7	11617.	•06509	-67167	-39342	2.474	1.932	1269-2
7 35	.17433	-55091	3555.6	5972.5	8.77616	-63317	·14299	1.390	1.001	1270.5
8 36	-10869	·27304	1875.2	2416.9	-38326	-59662	I.78664	-612	-380	1270.6
9 37	-03484	.73381	541.76	541.76	7.73381	-56131	.17250	.149	-075	1270.5

4 PER CENT.

No. 23.—New Rules. Daughters' Benefits. Value of £300 Donation on Marriage.

(From Grant, Table XVI.)

lge m.	Log. l _{mμm} ·v ^m .	Natural Number of ditto	K _m = P _m + P _{m+1}	Log. Km.	$\log \left(\frac{K_m}{D_m}\right)$	Value of £1	Value o £300 or
	From Grant, XVI.	= P=.			(Dm)	on Marriage.	Marriag
0				4.23355	Ī-23355	-1712	51.36
1	••		• •	•23355	-31928	-2086	62.58
2				·23355	-36398	2312	69.36
3			l i	·23355	39595	-2489	74.67
4	••			·23355	•42351	2652	79.56
5	• •			·2335 5	-44831	-2807	84.2
6	••		1	·23355	·47151	-2962	88-86
7	1			·23355	·49352	·3116	93.48
8				·23355	·51464		98-18
9				·23355		·3271 ·3432	
10		::		·23355	•53554		102.96
ii		::			-55623	•3599	107.97
12				•23355	•57672	3773	113.2
13			••	.23355	-59688	•3953	118.6
14	2.59696	395.33	17122.	·23355	·61680	-4138	124.1
15	·87383			•23355	•63659	•4331	129.9
16	3.08818	747-88 1225-1	16727.	•22342	•65062	·4473	134.2
17	20741		15979.	·20355	•65944	•4565	137.0
18		1612.2	14754.	·16891	·660 1 7	·4576	13 7 ·3
	-30135	2001.5	13142.	·11866	65294	·4497	134.9
19	-23143	1703.9	11140.	.04689	·63269	•4292	128.8
20	-15889	1441.8	9436.5	3.97481	·6109 7	·4083	122.5
21	·08414	1213.8	7994.7	·90280	•58789	⋅3572	116.2
22	.00763	1017.7	6780.9	·83129	•56370	·3662	109.9
23	2.92968	850.51	5763.2	·76066	-53872	·3457	103.7
24	·83566	684.95	4912.7	·69132	•51329	-3261	97.8
25	·75002	562.37	4227.7	-62610	·48950	-3087	92.6
2 6	·67319	471-18	3665.3	-56411	·46703	•2931	87.9
27	•60483	402.56	3194.1	•50435	·44533	.2788	83.6
28	.54435	350.23	2791.5	·44584	·42380	•2653	79.6
29	•51019	323.74	2441.3	·38762	·40183	•2522	75.7
30	·46765	293.53	2117.6	·32584	·37644	.2379	71.4
31	·41760	261.58	1824-1	·26105	-34792	.2228	66.8
32	-36083	229.53	1562.5	19382	31658	-2073	62.2
33	·29786	198.55	1333.0	12483	-28288	1918	57.5
34	22507	167.91	1134.4	·05 1 77	24734	1767	53.0
35	·14866	140.82	966.52	2.98521	21130	1627	48.8
36	-06880	117-17	825.70	·91682	·17538	1498	44.9
37	1.98509	96-625	708.53	·85036			41.5
38	·89784	79.039	611.90	·78668	·14036	1382	
39	.78968	61.614	532.86		·10711	11280	38.4
40	-68703	48-644	471·25	·72661	-07649	·1193	35.8
41	•59269			·67325	.05143	·1126	33.8
42		39.146	422.61	·62594	.03151	·1075	32.3
43	-51120	32.449	383.46	.58372	.01602	·1037	31.1
44	•44559	27.899	351.01	·54532	-00390	·1009	30.3
	•37390	23.654	323-11	50935	2.99399	∙0987	29.6
45	-33528	21.641	299.46	·47634	·98678	∙0970	29.1
46	·32585	21.176	277-82	·44376	·9800 4	∙0955	28.7
47	·33524	21.639	256.64	·40932	.97170	∙0937	28-1
48	•35409	22.599	235.00	·37107	-95998	-0912	$27 \cdot 4$
49	•43245	27.068	212-40	$\cdot 32715$	·94314	-0877	26.3
50	·45774	28-691	185.33	-26795	-91230	-6817	24.5
51	·45028	28.202	156-64	·19490	·86847	.0739	$22 \cdot 2$
52	· 4 1855	26.215	128-44	·10870	-81203	•0649	19.5
53	·36669	23.264	102-22	00954	.74287	∙0553	16.6
54	·33120	21.439	78-959	1.89740	·66032	-0457	13.7
55	·27385	18.787	57.520	.75982	•55304	-0357	10.7
56	-18539	15.325	38.733	-58808	-41172	.0258	7.7
57	-04537	11.101	23.408	·36936	•22327	·0258	5.0
58	0.78933	6.1564	12.307	·09015	3.97884	-0094	2.8
59	.57032	3.7181	6.1507	0.78894	·70149	0054	
60	-26557	1.8432	2.4326	·38507	·70149 ·32632		1.5
61	I-77046	-58947	58947	1.77046		-0021	•6
O.	1 2.11010	JOOE !	12001	7.11030	4.74036	-0005	.2

4 PER CENT.

No. 24.—New Rules. Daughters' Benefits. Value of Increased Pension £10 till Age 10, and £25 from 10 till Marriage or Death, after Mother's Marriage or Death.

A ge m. m+28.	(1) Log. sm. (d+#)m+28. vm+28.	(2) Log. Pm+1.	(1) + (2).	P ∞ ÷ 100,000.	K = P = + P = + 1	Log. Km.	Log. Dm. m+28-	Log. Km_ Dm.m+28	Value of Increase of Pension to Daughter after Mother's Death or Marriage.	
0 28	7.62489	2.38881	10.01370	103205-	963299•	10.98376	9.02204	1.96172	91.6	97.9
1 29	•54331	· 4 3537	9.97868		860094	·93454	8.91709	2.01745	104-1	105.7
2 30	-48214	·45773	·93987	87070	764885	·88360	·85304	·03056	107.3	107-1
3 31	•42474	·47246	-89720		677815	-83111	-80183	.02928	107.0	106.1
4 32	·36627	-48387	-85014		598893.	•77735	.75541	·02194	105.2	103.8
5 33 6 34	·30567 ·23976	·49346 ·50215	·79913 ·74191		528076 465107	·72270 ·66756	·71236 ·67167	·01034 1·99589	102·4 99·0	100.7 97.2
6 34 7 35	·17433	·51001	•68434		409911	-61269	.63317	97952	95.4	93.4
8 36	10869	.51746		42281	361567	-55819	-59662	-96157	91.5	89.6
9 37	.03484	·52504	·55988		319286.	•50419	-56131	-94288	87.7	85-9
10 38	•97609	·52257	· 4 9866		282988	·45177	·52722	92455	84.1	82.3
11 39	6.90097	-50947	•41044		251463	•40047	•49432	•90615	80.6	79.2
12 40	•83316	·49499	•32815		225733.	•35359	46289	·89070	77.8	76·6 7 4 ·6
13 41 14 42	•77593 •72394	·47900 ·46389	·25493 ·18783		204444 186458	·31057 ·27059	·43261 ·40313	·87796 ·86746	75·5 73·7	73.4
15 43	·67667	·45179		13442.	171047	•23312	•36972	·S6340	73.0	73.2
16 44	-62381	.44451	-06832		157605	·19758	-33200	-86558	73.4	74.3
17 45	-57756	·44389	-02145	10506-	145901.	·16406	⋅28757	·87649	75-2	76-9
18 46	-53418	·45117	8.98535	9668· 3	135395	·13162	·23604	·89558	78-6	81.3
19 47	•49379	·46315	95694	9056-1	125727	•09944	·17545	•92399	83.9	86.7
20 48	46013	•47465	93478	8605-6	116671	•06696	·11560 ·05662	•95136	89.4	92·2 97·4
21 49 22 50	•45153 •42591	·48586 ·49624	·93739 ·92215	8657.4 8358.9	108065• 99408•	·03371 9·99742	7.99797	·97709 ·99945	94·9 99·9	102.2
23 51	-38788	.50583	-89371	7829-1	91049	-95928	.94014	2.01914	104.5	106.7
24 52	-33939	.51415	·8535 t	7137.4	83220-	·92023	-88350	∙03673	108-8	110-8
25 53	·27285	·52075	·79360	6217.3	76083-	-88129	-82910	.05219	112.8	114.8
26 54	24525	·52634	•77159	5910-0	69866	·84427	•77703	·06724	116-8	118.6
27 55	·19753	-53097	•72850	5351.8	63956	·80588	•72570	·08018	120.3	122.1
28 56 29 57	·14306 ·07793	·53517 ·53920	·67823 ·61713	4766·8 4141·2	58604	·76793 ·73108	·67533 ·62585	·09260 ·10523	123·8 127·4	125·6 129·6
30 58	5.99698	.54370	54068	3471.2	53837· 49696·	·69632	-57671	11961	131.7	134.3
31 59	.94275	-54814	·49089	3096-6	46225	-66488	-52861	·13627	136-9	139.7
32 60	-89371	·55255	·44626	$2794 \cdot 2$	43128-	·63476	·48106	·15370	142.5	145.5
33 61	-85330	-55654	·40984	2569.4	40334	•60567	·43415	17152	148-4	151.5
34 62	·82612	·56003	38615	2433.0	37765	•57709	•38782	·18927	154.6	157.7
35 63		2.56253	·37562 ·36327	$2374.8 \\ 2308.2$	35332	·54817 ·51795	·34199 ·29625	·20618 ·22170	160·8 166·6	163-7 169-4
36 64 37 65	·79896 ·78633	·56431 ·56514	35147	2246·3	32957· 30649·	48642	·25053	23589	172.1	174.7
38 66	·77398	.56490	•33888	2182.1	28403	·45336	•20467	-24869	177.3	179-7
39 67	·76198	·56360	·32558	2116.3	26221	·41865	·15858	-26007	182-0	184-1
40 68	·74934	·56134	·31068	2044.9	24105.	-38211	·11224	-26987	186.2	188-0
41 69	·73593	•55799	•29392	1967.5	22060	•34361	·06540	·27821	189.8	191.4
42 70	·72366	·55876	.93794	1894·2	20092	·30302 ·26002	01756	·28546 ·29160	193.0	194·4 197·0
43 71 44 72	•7083 1 •69301	·54900 ·54370	·25734 ·23671	1808-6 172 4- 7	18198- 16389-	·20002	6.96842 .91751	·29704	195·7 198·2	199.2
45 73	-67662	.53769	21431	1638.0	14664	·16625	-86474	30151	200.2	201.1
46 74	•65529	-53148	·18677	1537.3	13026	·J1481	-80950	-30531	202.0	202.8
47 75	·63356	·52517	·15873	1441.2	11489-	∙06028	·75147	-30881	203.6	204.4
48 76	•60767	$\cdot 51891$	-12658	1338.4	10048-	•00208	·69009	-31199	205.1	205.8
49 77	•57905	·51295	•09200	1236.0	8710.0	8-94002	-62505	31497	206.5	207.3
50 78	•54383 •50500	·50759 ·50256	·05142 ·00756	1125·7 1017·6	7474·0 6348·3	·87355 ·80266	·55525 ·48087	·31830 ·32179	208·1 209·8	208·9 210·6
51 79 52 80	-46069	·30236 ·49748	7.95817	908.18	5330.7	·72678	·40179	·32179 ·32499	209.8	212.0
53 81	·41191	·49192	90383	801.36	4422.5	-64567	-31815	32752	212.6	212.9
54 82	-35671	·48615	84286	696-40	3621.1	-55884	-23013	-32871	213.2	213.7
55 83	-29607	·48015	.77622	597.34	2924.7	·46608	13639	-33069	214-1	213.9
56 84	·22946	·47363	70309	504.77	2327.4	-36687	-03706	-32981	213.7	213.4

No. 24 (continued).

Age m. m+28.	(1) Log. sm-(d+\(\rho\))m+28. vm+28.	(2) Log. pm+i-	(1) + (2).	P 100,000.	K =s = P =s + P =s +1	Log. Km.	Log. Dm m + 28.	Log. (K m) (D m. m+28)	Value of Increase of Pension to Daughter after Mother's Death or Marriage.	Ditto at Mean Age m+ 1.
57 85	·15701	-46627	·62328	420-03	1822-6	·26069	5.93216	·32853	213.1	212.3
58 86	-07754	·45667	-53421	342.14	1402-6	14693	82135	•32558	211.6	210.4
59 87	4.99388	•44716	44104	276.08	1060-5	.02551	70465	-32086	209.3	207-6
60 88	•90031	·43600	-33631	216.93	784.40	7.89454	58063	·31391	206.0	204.0
61 89	-79771	·42374	22145	166.51	567.47	•75394	·44870	-30524	202.0	199.6
62 90	-68849	·41061	-09910	125.63	400,96	·60310	-30802	•29508	197.3	194.3
63 91	•56394	-39672	6.96066	91.340	275.33	·43985	.15795	∙28190	191.4	198-1
64 92	·42606	-38256	-80862	64.361	183.99	·26479	4.99777	·26702	184.9	181.4
65 93	·28306	-36791	-65097	44.768	109-63	-07784	-82738	·25046	178.0	173.5
66 94	·12505	-35257	.47762	30.034	74.860	6.87425	-64618	·22807	169-1	163.4
67 95	3.94938	·33686	-28624	19.330	44.826	-65158	·45369	19784	157.7	150.4
68 96	.76971	-32077	-09048	12.316	25.496	·40647	-24992	·15655	143-1	132.4
69 97	·56397		5.86781	7.3758	13.180	·11992	-03478	∙08514	121.7	106-0
70 98	·36018	-28668	-64686	4.4347	5.8038	5.76371	3.80805	1.95566	90.3	63.6
71 99	·15964	1.97681	-13645	1.3691	1.3691	·13645	-56997	·56648	36.9	18.5

4 PER CENT.

No. 25.—New Rules. Daughters' Benefits. Value of Total Benefits if Mother Living and not Re-married.

Age m.	(1) Value of £100 per Annum till Marriage or Death.	(2) Value of £40 per Annum till Age 10.	(3) Value of £20 per Annum till Age 6.	(4) (1)—(2)+(3).	Value of £300 on Marriage.	Total Value of Benefits.	Ditto at Mean Age m+‡.	Value of Total Benefits if Mother Living and not Re- married.	Log. of Ditto.
0	1295.5	261.0	88-0	946-5	51.4	997.9	1083-5	1181.4	3.07240
ĭ	1461.8	271.4	83.9	1106.5	62.6	1169-1	1210.9	1316-6	-11945
$\tilde{2}$	1512.0	257.5	71.4	1183.2	69.4	1252-6	1279.3	1386-4	·14189
3	1521.9	234.9	55.7	1231.3	74.7	1306.0	1327.8	1433-9	·15652
4	1516-7	208-3	38-4	1270.0	79.6	1349-6	1368-4	1472-2	·16797
5	1501.4	178-8	19.7	1302.9	84.2	1387-1	1404.4	1505-1	·17757
6	1479.7	147.0	• •	1332.7	88.9	1421-6	1427.4	1524-6	.15316
7	1452.7	113.1	• •	1339-6	93.5	1433-1	1437.7	1531-1	·18500
8	1421.4	77 ·2	• •	1344-2	98-1	1442.3	1446-8	1536-4	-18650
9	1387-8	39.5	• •	1348-3	103.0	1451-3	1455-6	1541.5	·18794
10	1351.8	• •	• •	1351.8	108-0	1459-8	1443.2	1525.5	·18341
11	1313.5	• •	• •	1313.5	113.2	1426.7	1408.8	1488.0	·17260
12	1272-3	• •	••	1272.3	118-6	1390-9	1371.7	1448·3	·16086
13	1228-5	• •	• •	1228-5	$124 \cdot 1$	1352-6	1332.4	1407·0	·14829
14	1182-3	• •	••	1182-3	129.9	1312-2	1296.0	1369· 4	·13653
15	1145-6	••	••	1145-6	134.2	1279.8	1267-8	13 4 1.0	·12743
16	1118-8	••	••	1118-8	137.0	1255-8	1250.6	1324.9	·12218
17	1108-1	••	••	1108-1	137.3	1245.4	1247.7	1324.6	·12208
18	1115.0	••	• •	1115-0	134.9	1249.9	1262.3	13 4 3-6	·12827
19	1145.9	••	••	1145-9	128.8	1274.7	1287-4	1374-1	·13802
20	1177.5	••	••	1177.5	122.5	1300-0	1312-6	1404.8	·14761
21	1209.0	••	••	1209-0	116-2	1325-2	1337· 4	1434-8	·15679
22	1239-6	••	••	1239-6	109-9	1349.5	1360-9	1463-1	·16527
23	1268-6	••	••	1268-6	103.7	1372-3	1382.9	1489-6	·17207
24	1295-6	••	• •	1295-6	97-8	1393.4	1401.9	1512.7	·17975

No. 25 (continued).

Age m.	Value of £100 per Annum till Harriage or Death.	Value of £40 per Annum till Age 10.	Value of £20 per Annum till Age 6.	(4) (1) = (2) + (3).	Value of £300 on Marriage.	Total Value of Benefits.	Ditto at Mean Age m + i.	Value of Total Benefits if Mother Living and not Re- married.	Log. of Ditto.
25	1317-8	• •		1317-8	92.6	1410-4	1417-3	1532-1	-18529
26	1336-2		• •	1336.2	87.9	1424.1	1429.8	1548-4	18988
27	1351-8	• •		1351.8	83.6	1435.5	1440-1	1562-2	19374
28	1365-2	• •	••	1365-2	79.6	1444-8	1449.0	1574-6	19717
29	1377.5	• •	••	1377.5	75.7	1453-2	1458-0	1587-6	20074
30	1391.4			1391.4	71.4	1462-8	1467-8	1602.1	-20469
31	1406.0		• • •	1406.0	66-8	1472-8	1477-8	1617.5	·20884
32	1420-6	• •	• •	1420-6	62-2	1482-8	1487.5	1633.0	-21299
33	1434-6	• •	• • •	1434-6	57.5	1492-1	1496-1	1647-6	-21685
34	1447.1	• •	••	1447-1	53.0	1500-1	1503-1	1660-8	-32032
35	1457.2	• •	• •	1457-2	48.8	1506-0	1507.7	1671.4	·22308
36	1464.5	• •	• •	1464.5	44.9	1509-4	1509.9	1679.3	·22513
37	1468-8	• •	• •	1468-8	41.5	1510.3	1509.3	1684.0	·22634
38	1470-0	• •	• •	1470-0	38.4	1508-4	1506.0	1685.7	-22678
39	1467.8	• •	••	1467-8	35.8	1503.6	1499.5	1683-6	·22624
40	1461.6	• •	• •	1461-6	33.8	1495.4	1489-8	1677-8	·22474
41	1451.9	• •	• •	1451-9	32.3	1484.2	1477-3	1668-7	·22238
42	1439.4	• •	• •	1439.4	31.1	1470.5	1462·7	1657-1	·21935
43	1424.6	• •	• •	1424-6	30.3	1454.9	1446·2	1643.2	·21569
44	1408-0	• •	• •	1408.0	29.6	1437.6	1428-1	1627.3	·21147
45	1389-6	• •	• •	1389-6	29-1	1418.7	1408-8	1609.9	·20680
46	1370-2	• •	• •	1370.2	28.7	1398-9	1388.7	1591.5	·20181
47	1350-4	• •	• •	1350-4	28.1	1378-5	1368-3	1572.7	-19665
48	1330-8	• •	• •	1330.8	27.4	1358-2	1348-0	1553-8	·19140
49	1211.5	• •	• •	1311.5	26.3	1337.8	1328-6	1535.9	18636
50	1295.0	• •	• •	1295.0	24.5	1319-5	1310-8	1519.7	.18176
51 52	1279.9	• •	••	1279.9	22.2	1302-1	1298.5	1504-1	·17728
52 53	1265.4	• •	••	1265.4	19.5	1284.9	1276.0	1488-0	·17260
54	1250.5 1233.4	• •	• • • • • • • • • • • • • • • • • • • •	1250·5 1233·4	16∙6 13∙7	1267·1 1247·1	1257-1	1470-0	·16732
55	1235.4	• •		1235.4	10.7	1247-1	1237.4	1451-1	·16170
56	1200.0	• • •		1200.0	7.7	1227.8	1217.7	1431.6	·15582
57	1181.2	• • •		1181.2	5.0	1186.2	1196.9 1174.3	1410.3	·14931
58	1159.7	• • • • • • • • • • • • • • • • • • • •		1159.7	2.8	1162.5	11/4.5	1386-6 1359-5	·14195
59	1134·2	• • • • • • • • • • • • • • • • • • • •		1134.2	1.5	1102.5	1121.4	1329.0	·13338
60	1106.6	• • •		1106.6	·6	1107.2	1092.2	1296.2	·12353
61	1077.0			1077.0	.2	1077.2	1061.5	1261.1	·11267
62	1045.8	• • •		1045.8		1045.8	1001.5	1224.0	·10075 ·08778
63	1013-6			1013.6	• •	1013.6	997.5	1185-6	·06778
64	981.4	• • •		981.4	• •	981.4	965.3	1146.7	·07394 ·05945
65	949.2	• • • • • • • • • • • • • • • • • • • •		949.2	• •	949.2	933.1	1106.6	·05945 ·04399
66	917.1	• •	••	917.1	••	917-1	901.0	1064.4	·0 1 333
67	885.0	• •		885.0	••	885-0	869.0	1019-4	·02710 ·00834
68	853.1	• •		853-1	• •	853-1	837.1	969.5	2.98655
69	821.2	• •	• •	821.2	• •	821.2	805.5	911.5	·95976
70	789.8	• •	• •	789-8	• •	789.8	774.1	837.7	92309
7ĭ	758.5			758.5	• •	758-5	743.1	761.6	-88173

6 PER CENT.

No. 26.—New Rules. Daughters' Benefits. Value of Total Benefits if both Parents are Dead or Mother Re-married.

Daughters' Age m.	(1) Value of £25 a Year till Marriage or Death.	(2) Value of £15 a Year till Age 10.	Value of increased Pension, (1) — (2).	Ditto at Mean Age m + t.	Log. of ditto.	Value of Total Benefit if both Parents are Dead or Mother Remarried at Age m + 1.
0	323.9	97.9	226.0	244.8	2.38881	1328-3
i	365.4	101.8	263.6	272.5	·43537	1483.4
2	378.0	96-6	281.4	286.9	·45773	1566.2
3	380.5	88-1	292.4	296-8	·47246	1624-6
4	379-2	78.1	301.1	304-7	·48387	1673-1
5	375-3	67.1	308-5	311-5	· 4 93 46	1715.9
6	369-9	55.1	314.8	317-8	·50215	1745-2
7	363-2	42.4	320-8	323.6	·51001	1761-3
8	355-3	29.0	326.3	329.2	·51746	1776.0
9	34 6⋅9	14.8	332-1	335.0	·52504	1790-6
10	337.9	• •	337.9	333·1	·52257	1776-3
11	328-4	• •	328-4	323·2	·50947	1732.0
12 13	318-1	• •	318-1	312·6 301·3	·49499 ·47900	1684.3
15 14	307·1 295·6	• •	307-1	291·0	·46389	1633.7
15	286.4	••	295·6 286·4	283·0	·45179	1587·0 1550·8
16	279.7	• • •	279.7	278·3	•44451	1528.9
17	277.0	• •	277.0	277.9	•44389	1525.6
18	278.7	• •	278.7	282.6	·45117	1544.9
19	286.5		286.5	290-5	·46315	1577.9
20	294.4	• •	294.4	298.3	·47465	1610-9
21	302.2	• •	302.2	306-1	·48586	1643.5
22	309.9	• •	309-6	313.5	· 4 9624	1674-4
23	317-1	• •	317·ĭ	320.5	∙50583	1703-4
24	323.9	• •	323.9	326.7	-51415	1728.6
25	329.4	• •	329.4	331.7	-52075	1749.0
26	834.0	• •	334.0	336·0	•52634	1765-8
27	337.9	• •	337.9	339·6	•53097	1779.7
28	341.3	• •	341.3	342·9 346·1	·53515 ·53920	1791.9
29 30	344·4 347·8	• •	344.4	349·7	·54370	1804·1 1817·5
30 31	351.5	• •	347·8 351·5	353.3	·54814	1831-1
82	855·1		351·5 355·1	356·9	-55255	1844.4
32 33	358-6	• •	358-6	360.2	-55654	1856-3
3 4	361.8	• •	361.8	363.1	·56003	1866-2
35	364.3	• •	364.3	365.2	·56253	1872.9
86	366-1	• •	366-1	366.7	·56431	1876-6
37	367-2	• •	367.2	367.4	-56514	1876-7
38	367.5		367.5	$367 \cdot 2$	·56 4 90	1873-2
39	366-9	• •	366-9	366·1	·56360	1865.6
40	365-4	• •	365· 4	864-2	·56134	1854.0
41	363-0	• •	363.0	361.4	•55799	1838-7
42	359 ·8	• •	359-8	357·9	-55376	1820-6
43	356·1	• •	356-1	354·0 349·7	∙54900 •54370	1800-2
44	352.0	• •	352.0	349.7 344.9	• • • • • • • • • • • • • • • • • • •	1777-8
45 46	347·4 342·5	• •	347·4 942·5	840·0	·53148	1753·7 1728·7
46 47	337.6	• •	342·5 337·6	335.1	•52517	1703.4
47 48	332·7	• •	332.7	330-3	·51891	1678-3
49	327.9	• • •	327.9	325-8	-51295	1654.4
50	323.7	• •	323.7	321.8	-50759	1632-6
51	320.0	• •	320.0	318.1	-50256	1611-6
52	316.3	• •	316-3	814.4	·49748	1590-4
53	312.6	• •	312.6	310.4	·49192	1567.5
54	308-3		308.3	306.3	·48615	1543-7
55	304.3	• :	304.3	302.1	·48015	1519.8

No. 26 (continued).

Danghters' Age m.	(1) Value of £25 a Year till Marriage or Death.	(2) Value of £15 a Year till Age 10.	Value of Increased Pension, (1) - (2).	Ditto at Mean Age m + ½.	Log. of ditto.	Value of Total Benefit if both Parents are Dead or Mother Re- married at Age m + 1.
56	300-0		300-0	297-6	·47363	1494.5
57	295.3	• •	295-3	292-6	·46627	1466-9
58	288-9	• •	289-9	286.7	·45667	1435-8
59	283.5	• •	283.5	280.0	·44716	1401-4
60	276-6	• •	276-6	272.9	· 4 3600	1365-1
61	269-2	• •	269.2	265.3	·42374	1326-8
62	261.4	• •	261.4	257· 4	· 4 1061	1287-1
63	253.4	• •	253.4	249.3	·39672	1246.8
64	245.3	• •	245.3	241.3	·38256	1206-6
65	237.3	• •	237.3	233⋅3	·36791	1166-4
66	229.3	• •	229.3	$225 \cdot 2$	·35257	1126.2
67	221.2	• •	221.2	217.2	·33686	1086-2
68	213.3	• •	213.3	209.3	-32077	1046-4
69	205-3	• •	205.3	201.3	·30384	1006-8
70	197-4	• •	197.4	193.5	·28668	967-6
71	189-6		189-6	94.8	1.97681	837.9

'4 PER CENT.

No. 27.—New Rules. Wives' Reversionary Benefits. Value of Reversionary Annuity
(by No. 16) to Wife after Husband's Death.

A. m. 2	ge u—7.	(1) Log. (d _m . s _{m-7} . v ^m).	(2) Log. Pm+1.	(3) Sum of (1) + (2).	Pm + 1,000.	K = = P = + P = + 1	Log. Km.	$(\frac{K_{m}}{D_{m,m-7}})$	Value of Reversion ary Annuity to Wife after Hus band's Death.
20	13	6-07719	1.20080	7.27799	18967-	422394	8-62571	0.61885	4.158
21	14	-09865	·19346	.29211	19593-	403427	•60577	-62383	4.206
22	15	·10433	·18732	·29165	19573-	383834.	-58414	-62773	4.244
23	16	-08984	·18296	·27280	18741-	364261	-56141	-63119	4.278
24	17	-07641	·18104	·25745	18090	345520-	-53847	·63461	4.311
25	18	-06204	-18216	·24420	17547.	327430.	·51512	-63804	4.346
26	19	-04145	·18500	·22645	168 44 ·	309883-	· 4 9119	-64132	4.378
27	20	·02073	·18792	·20865	16168.	293039-	·46693	•64439	4.410
28	21	5.99997	·19070	∙19067	15512-	276871	·44228	·64742	4.440
29	22	•98498	-19326	·17824	15074	261359-	·41724	65021	4.469
30	23	·96416	·19554	∙15970	14444.	246285	·39145	·65270	4.495
31	24	•94259	·19731	·13990	13801	231841	·36519	·65488	4.517
32	25	•92821	·19844	·12665	13386-	218040	·33854	·65684	4.538
33	26	•90634	•19907	·10541	12747	204654	·31101	⋅65820	4.552
34	27	88413	19937	-08350	12120.	191907	·28310	-65979	4.569
35	28	-86251	·19934	-06185	11531.	179787	.25477	-66138	4.586
36	29	-84011	19937	·03948	10952	168256	•22598	•66293	4.602
37	30	-81771	·19948	-01719	10404	157304	·19673	·66446	4.618
38	31	-80020	·19959	6.99979	9995-2	146900	·16702	·66602	4.635
39	32	-77769	19962	-97731	9491.0	136905	·13644	·66728	4.648
40	33	·76693	·19945	·96638	9255-1	127414	·10520	·66839	4-660

No. 27 (continued).

42 43 44	34 35 36	#PP11			÷ 1,000.	Km = Pm + Pm + 1_	Log. Km.	$\left(\frac{K_m}{D_{m.m-7}}\right)$	Annuity to Wife after Hus- band's Death.
43 44		·75511	-19896	·95407	8996-4	118159-	-07247	-66859	4.662
44	36	·74104	-19805	·93909	8691.4	109163.	-03806	-66792	4.655
		·72638	·19665	·92303	8375.9	100472-	·00204	-66621	4.637
4.3	37	•70909	·19471	•90380	8013-1	92096-	7.96424	-66358	4.609
46	38 39	·69131	19226	·88357	7648-4	84083	.92471	-65981	4.569
47	39 40	•68221	·18918	·87139	7436-9	76435-	·88329	·65502	4.519
48	41	·62007 ·58870	·18546 ·18113	-80553 -76983	6390·4 5886·1	68998	-83884	·64742	4.440
49	42	•53663	·17626	·70985 ·71289	5162.9	62608. 56722.	·79663 ·75375	·64246	4.390
50	43	·49057	17099	·66156	4587.3	51559·	.71230	·63721 ·63342	4.337
51	44	·44145	·16524	•60669	4042-9	46972.	67184	-63086	4·300 4·274
52	45	·39659	·15912	·55571	3595-1	42929	63275	-62958	4.262
53	46	-35689	·15269	•50958	3232.8	39334.	.59477	-62977	4.264
54	47	·32114	·14600	·46713	2931.8	36101.	.55752	-63089	4.275
55 56	48	-28987	·13915	· 42902	2685.5	33169-	∙52073	-63278	4.293
57	49 50	·26253	·13236	-39489	2482.5	30483	·48406	-63528	4.318
58	51	·24042 ·22060	·12564 ·11886	·36606	2323.1	28001	•44717	-63848	4.350
59	52	·22000 ·20414	·11000 ·11187	-33946 -31601	2185·0 2070·2	25678.	·40956 ·37094	-64176	4.383
60	53	18913	10442	·29355	1965-8	23493. 21423.	-33088	·64535 ·64864	4.419
61	54	.17565	-09667	27232	1872-1	19457	28908	-65153	4·453 4·483
62	55	-16107	-08863	·24970	1777-1	17585	-24514	-65380	4.506
63	56	·14433	∙08016	.22449	1676-8	15808-	-19888	-65538	4.523
64	57	·12635	-07107	·19742	1575.5	14131.	·15017	-65628	4.532
65 66	58 59	·10608	·06104	·16712	1469.3	12555.	09882	·65644	4.533
67	60	·08312	•05015	·13327	1359-2	11086-	·04477	·65593	4.528
68	61	·05932 ·03413	·03842 ·02592	·09774 ·06005	1252-4 1148-3	9726-7	6.98797 -92810	·65483	4.517
69	62	·00661	01271	·01932	1045.5	8474·3 7326·0	-86487	·65309 ·65064	4·499 4·473
70	63	4.97627	0.99896	5.97523	944.56	6280.5	.79799	•64746	4.441
71	64	.94287	-98471	·92758	846-41	5335-9	·72721	-64357	4.401
72	65	-90685	·96997	-87682	753.04	4489.5	·54220	·63890	4.354
73 74	66	-86769	·95 4 77	·82246	664-45	3736-5	-57247	·63340	4.299
75	67 68	-82451	-93907	·76358	580-20	3072.0	·48742	·62687	4.235
76	69	.77641 .72182	·92283 ·90612	·69924 ·62794	500·31	2491.8	•39651	·61921	4.161
77	70	-66212	·90012 ·88885	·6279 4 ·55097	424·56 355·61	1991.5 1566.9	·29918 ·19504	•61036	4.077
78	71	-59324	·87111	·46435	291.31	1211.3	·08325	-60116 -59064	3.992 3.896
79	72	.51836	-85285	37121	235.08	919.97	5.96377	•57934	3.796
80	73	·43364	-83417	26781	185.27	684.89	83562	-56694	3.689
81	74	·34081	-81491	.15572	143-13	499.62	-69864	-55400	3.581
82 83	75 70	-23839	·79525	·03364	108-05	356-49	·55205	-53950	3.463
84	76	12694	•77517	4.90211	79.820	248-44	•39522	•52474	3.348
85	77 78	.00276 3.86759	·75473	·75749	57.212	168-62	•22691	-50835	3.224
86	79	72022	·73400 ·71260	·60159 ·43282	39·957 27·091	111.41	·04692 4·85404	·49114	3.098
87	80	-55756	-69170	·24926	17.753	71·457 44·366	•64705	·47309 ·45442	$2.972 \\ 2.847$
88	81	-38037	·67025	05062	11.236	26.613	·42509	·43358	2.714
89	82	.18375	·64865	3.83240	6.7983	15.377	⋅18687	41279	2.578
90	83	2.97287	0.62675	•59962	8.9776	8.5782	3.93340	-39257	2.479
91	84	·73624	-60466	·34090	2.1923	4.6006	-66281	.37292	2.360
92	85 ec	-50278	-58229	-08507	1.2164	2.4083	⋅38171	36298	2.306
93	86 87	25907	·55991	2.81898	•65914	1.1919	0.7624	⋅35607	2.270
95	88	1.98048 64.665	·53744 ·51508	.51792 .16172	·32955 ·14512	•53277	2·72654 ·30799	34342	2.205
96	89	27113	·49304	1.76417	·14512 ·05810	·20323 ·0581	1.76417	·31273 ·22138	2.054 1.665

6 PER CENT.

No. 28.—New Rules. Sons' Reversionary Benefits. Value of Reversionary Benefits (by No. 21) to Sons after Father's Death.

Age 1. m + 3.	(1) Log. $\begin{pmatrix} d_{m+35} \cdot s_{m} \\ v = +85 \end{pmatrix}$	(2) Log. pm+t.	Sum of (1) + (2)	P⇔ + 100,000.	K == ==P=++P=+1	Log. K m.	Log. D m .m + 35.	$\frac{\text{Log.}}{\left(\frac{\text{K m}}{\text{Dm. m} + 36}\right)}$	Value of Reversion- ary Benefits to Sons after Father's Death.	Ditto at Mean Ages m + 1.
0 35			10.53561	34396-	441449-	11.64488	9.30047	2.34441	221.0	237.0
1 36	•47269	3.04344	-51613	32819.	4070.33	·60965	⋅20655	·40310	253.0	257.9
2 37	·43450	-06479	49929	31571	874234	·57314	15351	·41963	262.8	263.5
3 38	·40997	.07871	·48868 ·47398	30809	342663· 311854·	·53486 ·49395	·11301 ·07665	·42185 ·41730	264·2 261·4	262.8
4 39 5 40	·38436 ·37325	·08962 ·09885	·47210	29784 · 29655 ·	282070	·45036	.04287	.40749	255.6	258·5 251·1
6 41	36232	10353	·46585	29033· 29231·	252415·	·40212	·01020	-39192	246.6	240.6
7 42	·35053	10397	•45450	28477	223184	·34866	8.97825	-37041	234.6	227.4
8 43	-33883	10400	•44283	27722	194707	-28939	94673	34276	220.2	211.6
9 44	-32533	10397	·42930	26872	166985	-22269	-91493	-30776	203.1	193.3
0 45	-31141	.09209	•40350	25322	140113.	-14647	-88287	-26360	183.5	172.7
1 46	-28157	·66666	-34823	22296-	114791-	-05990	85053	-20937	161.9	151.2
2 47	24965	∙03802	-28767	19394.	92495.	10.96612	·81844	-14768	140.5	130-0
3 48	-21511	∙00570	-22081	16627	73101.	·86392	·78660	.07732	119.5	109.4
4 49	-17813	2.96895	-14708	14031	56474.	·75185	·75497	1.99688	99.3	89.7
5 50	-13859	92686	-06545	11627	42443.	.62781	·72350	·90431	80.2	71.4
6 51	∙09574	-87818	9.97392	9417.2	30816.	· 48878	-69216	.79662	62.6	54 ·6
7 52	-05773	⋅82079	⋅87852	7560-0	21399.	•33039	-66090	· 6694 9	46.7	39.5
8 53	-02495	.74827	.77322	5932.3	13839.	·14110	62960	-51150	32.4	26-1
9 54	6.99617	·66464	-66081	4579.4	7907.	9.89801	-59818	·29983	19.9	14.4
0 55	•97203	-55011	•52214	3327.7	8327.7	·52214	·56654	0.95560	9.0	4.5

4 PER CENT.

No. 29.—New Rules. Daughters' Reversionary Benefits. Value of Reversionary Benefits (by No. 25) to Daughters after Father's Death.

Daughters' Age. n. m + 35.		Log. (d _{m+35.8} m).	Ditto + Log. vm+35.	Ditto + Log. Pm+4		= P m + P m + 1	Log. K ss.	Log. Dm.m+85.	Log. (Km / Dm.m+35.)	Value of Reversion- ary Benefits to Daughter after Father's Death.	Ditto a mean Ag m + 1.
0 :	85	8·13521	7.53904	10.61144	40873	704552	11.84791	9.30047	2·54744	352.7	382.6
	36	.08589	47269	-59214	39097	663679-	-82196	·20655	-61541	412.5	425.6
	37	.06473	·43450	.57639	37704·	624582	· 7 9558	·15351	·64207	428.6	445.5
	38	-05724	·40997	-56649	36854.	586878	·76855	·11301	·65554	453.4	456.7
	39	·04866	·38436	•55233	35672	550024	·74038	•07665	·66373	461.0	463.5
	40	·05458	•37325	•55082	35548-	514352	·71126 ·68015	·04287 ·01020	·66839 ·66995	466.0 467.7	466.8
	41	•06069	•36232	•54548	35114.	478804· 443690·	·64708	8.97825	·66883	466.5	467·1
	42	·06593	·35053 ·34883	•53553	34319. 34303.	409371	-61212	94673	•66539	462.8	459.
	43 44	-07126 -07480	•32533	·53533 ·51327	32604.	375068	.57411	.91493	-65918	456.2	452.5
	45	.07791	31141	49482	31248	342464	-53461	-88287	-65174	448.5	443.8
	46	-06510	-28157	•45417	28456.	311216.	·49307	·85053	·64254	439.1	434
	47	-05022	-24965	·41051	25734.	282760-	·45142	·818 14	·63298	429.5	424
3	48	.03271	·21511	·36340	23089-	257026	·40998	·78660	·62338	429.1	415.
4	49	·01057	·17594	·31247	20534.	233937	-36910	·75497	.61413	411.3	409
		7-98148	·12981	.25724	18082.	213403	•32919	•71910	·61009	40705	408
	51	·94352	.07482	·19700	15740-	195321	·29075 ·25426	·67893 ·63209	·61182 ·62217	409·1 416·0	414. 428.
• •	52	·90361	01788	·13996	13803. 12212.	179581 · 165778 ·	·23420 ·21953	•57835	-64118	437.7	453.
	53 54	∙86127 ∙81909	6.95850 89929	·08677 ·03731	10897	153566	18631	•51586	-67045	468.2	484.
	55	·78302	·84619	9.99380	9858-3	142669	15433	·45457	-69986	501.0	518-
	56 ·	75294	.79907	95586	9033-6	133811.	.12323	-39429	.72894	535.7	553.
	57	·72965	·75875	•92402	8395.0	123777	∙09265	·33540	.75725	571.8	590
	58	·71141	·72348	·89555	7862-3	115382-	06213	•27771	·78442	608.7	$627 \cdot$
4	59	· 69899	-69402	87377	7477.7	107520-	.03149	·22111	·81038	646.2	664
	60	·69059	-66859	·85388	7143-0	100042	·00017	·16621	-83396	682.3	699
	61	·68582	·64679	·83667	6865.5		10.96801	11229	·85572	717.3	734
	62	·68165	•62558	·81932	6596.6	86033	·93467 ·90002	·05872 ·00504	·87595 ·89498	751·5 785·2	768. 811.
	63	·67671	-60361	-80078	6320·9 6052·3	79436. 73115.	-86401	7.94081	92320	837.9	846
	64 65	·67131 ·66413	·58118 ·55696	·78192 ·76165	5776-3	67063	82648	·89503	93145	854.0	872
	66	·65509	•53089	73973	5493.0	61287	.78737	-83789	•94948	890.2	908-
	67	·64628	-50505	71804	5224.4	55695	·74660	.77956	.96704	926.9	945
	68	·63744	·47917	69602	4966-2	50571.	·70390	.72002	98388	963-6	981
	69	62784	·45254	-67286	4708-3	45605.	· 65 901	-65928	·99973	999.4	1016-
	70 ¦	61723	·42490	-64798	4446·1	40897	·61169	-59737	3.01432	1033.5	1049
	71	-60543	·39606	62119	4180-1	36451	-56171	•53411	-02760	1065-6	1080
	72	-59294	·36654	-59288	3916.3	32271.	·50881 ·45263	·46930 ·40259	·03951 ·05004	1095·2 1122·2	1108
	73	·57933	·33590	·56268	3653.3	28355. 24702.	39273	·40239 ·33361	·05004 ·05912	1145.8	1134 · · · · · · · · · · · · · · · · · · ·
	74	•56385	·30338	-52962	3385.5 3111.6	21316-	•32871	•26220	-06651	1165.5	1173.
	75 76	·54575 ·52401	·26825 ·22948	·49299 ·45186	2830.5	18204	-26017	18783	.07234	1181.2	1187
	77	·49861	·18704	40639	2549.1	15373	-18676	-10982	∙07694	1193.8	1198
	78	·46773	13913	-35482	2263.7	12824	-10802	.02768	-08034	1203-2	1206-
	79	·43159	-08596	29743	1983.5	10560-	.02366	6-94084	∙08282	1210-1	1212
	80	· 3 89 9 6	-02729	23409	1714-3	8576.7	9.93332	·84896	·04436	1214.4	1215.
	81	·84104	5.96134	-16315	1456.0	6862-4	-83648	·75141	∙08507	1216-4	1216
7 8	82	$\cdot 28537$	·88864	-08529	1217.0	5406.4	·73291	·64760	∙08531	1217-1	1217
	83	·22281	·80904	·00044	1001.0	4189.4	·62215	·53688	-08527	1216.9	1216
	84	·15103	·72023	8.90659	806-47	3188-4	50357	·41869	.08488	1215.9	1216
	85	.07108	-62325	-80501	638-28	2381.9	·37692 ·24145	·29181 ·15612	·08511 ·08533	1216·5 1217·1	1216-8 1217-9
		6.98121	·51634	·69362	493-88 372-98	1743-6 1249-7	·09681	-01142	-08539	1217.1	1216
	87 88	·88099 ·77068	·39909 ·27175	·57169 ·43907	274·83	876-70	8.94285	5.85775	∙08510	1216.5	1215.0

No. 29 (continued).

Ā	ghters' ge s.+35.	Log. (d _{m+85.} 5 ^m).	Ditto + Log. v = + 25.	Ditto + Log. p ** + \$	P _{sm} ÷ 1,000,000.	K _m = P m + P m + 1	Log. Km.	Log. D m.m + 35.	Log. (Km.) (Dm.m+85)	Value of Reversion- ary Benefits to Daughter after Father's Death.	Ditto at mean Age m + 1.
54	89	-65136	·13539	·29709	198-20	601.87	·77950	-69543	-08407	1213-6	1212-0
55	90	.51899	4.98599	.14181	138-61	403.67	-60603	.52307	·08296	1210-5	1209.7
56	91	·37654	·82651	7.97582	94.584	265-06	· 42334	·34094	-08240	1208.9	1209.4
57	92	·24102	·67395	-81590	65.449	170.48	·23167	-14895	-08272	1209.8	1210-8
58	93	·10269	·51859	-65197	44.871	105.03	-02131	4.93792	-08339	1211.7	1209.7
59	94	5.94394	·34281	·46634	29.264	60-160	7.77931	•69739	∙08192	1207.7	1200.3
60	95	·73772	-11955	·23222	17.070	30.896	·48990	·41325	·07665	1193.0	1187-8
61	96	·47823	3.84303	6.94378	8.7858	13.826	·14070	.06785	-07285	1182-6	1174-8
62	97	·13041	·47818	·56596	3.6810	5.0405	6.70247	3.63541	-06706	1167.0	1139.4
63	98	4.64048	2.97121	·04515	1.1096	1.3595	.13338	-08733	·04605	1111.9	1086-7
64	99	-02465	·33835	5.39780	·24992	·2499	5.39780	2.37182	·02598	1061.6	• •

. 4 PER CENT.

No. 32.—New Rules. Members' Single Life. Value of Life Annuity.
(From Neison, Tables II. and IX. (a).

Age.	$\log \left(\frac{N_m}{D_m}\right)$	Value of Life Annuity.	Age.	Log. $\left(\frac{N_m}{D_m}\right)$	Value of Life Annuity.	Age.	Log. $\left(\frac{N_m}{\overline{D}_m}\right)$	Value of Life Annuity.
20	1.20953	16-201	47	-09074	12-324	74	-69401	4.943
21	-20545	16-049	48	-08541	12.173	75	-66998	4.677
22	·20175	15-913	49	·07954	12.010	76	-64545	4.420
23	19829	15.787	50	·07304	11.832	77	·620 4 7	4.173
24	-19477	15-659	51	06574	11.634	78	-59504	3.936
25	·19124	15.532	52	.05749	11.415	79	-51916	3.708
26	·18770	15.407	53	-04832	11.177	80	-54287	8.490
27	-18402	15.277	54	-03827	10.921	81	-51608	3.282
28	⋅18022	15.143	55	-02737	10-651	82	·48876	3.082
29	·17629	15-007	56	.01565	10.367	83	·46094	2.890
30	17233	14.871	57	-00315	10.073	84	·43257	2.708
81	-16822	14.731	58	0.98991	9.770	85	·40361	2.533
32	·16398	14.588	59	.97600	9.462	86	·37401	2.366
33	·15969	14.444	60	-96145	9.151	87	·34364	2.206
34	·15526	14.298	61	·94633	8.838	88	-31182	2.050
35	·15069	14.148	62	-93070	8.525	89	.27751	1.895
36	·14593	13.994	63	.91455	8.214	90	-23873	1.733
37	-14099	13-836	64	-89781	7.903	91	-19188	1.556
38	·13590	13.674	65	-88052	7.595	92	12959	1.348
39	·13073	13.512	66	-86258	7.288	93	-05209	1.127
40	-12537	18-347	67	·84393	6.981	94	T-95855	-909
41	-12013	13.187	68	·82460	6.677	95	-84648	.702
42	·11500	13.032	69	·80458	6.376	96	·71135	-514
43	·10996	12.881	70	·78386	6.079	97	-55042	-345
44	-10505	12.737	71	·76245	5.787	98	-34142	.219
45	10029	12.598	72	·74030	5.499	99	02436	·106
46	-09566	12.464	73	·71746	5.218	100		

LONDON:

PRINTED BY CHARLES & EDWIN LAYTON, FLEET STREET AND GOUGH SQUARE.