1936. NEW ZEALAND.

TEACHERS' SUPERANNUATION FUND.

ACTUARIAL EXAMINATION FOR THE QUADRENNIAL PERIOD ENDING 31st JANUARY, 1934.

Laid before Parliament in pursuance of Section 24 of the Finance Act (No. 2), 1935.

REPORT.

BY THE ACTUARY APPOINTED BY HIS EXCELLENCY THE GOVERNOR-GENERAL TO MAKE THE ACTUARIAL EXAMINATION OF THE TEACHERS' SUPERANNUATION FUND FOR THE QUADRENNIAL PERIOD ENDING 31st JANUARY, 1934.

Government Actuary's Department, Wellington, 19th September, 1936.

- 1. I have the honour to submit the following report on the Teachers' Superannuation Fund as at the 31st January, 1934, as required by section 111 of the Public Service Superannuation Act, 1927, as amended by section 24 of the Finance Act (No. 2), 1935.
- 2. The Fund was originally constituted under the Teachers' Superannuation Act, 1905, but has since been varied by legislative enactments, the most important being the Public Service Classification and Superannuation Amendment Acts, 1908 and 1912. The several enactments affecting the Fund were consolidated by the Public Service Superannuation Act, 1927.
- 3. Membership in the Fund is compulsory on all persons who are first permanently employed after the passing of the Act—
 - (i) In the Education service as a teacher in any public school;
 - (ii) In any branch of the Education service which is also a branch of the Government Service;
 - (iii) Under the University of New Zealand, or under the Auckland University College, Victoria University College, the University of Otago, Canterbury University College, or the Canterbury Agricultural College.

Other persons first permanently employed in the Education service not included above have the option of joining the Fund within six months of the date of their appointment.

"Education service" means service in any capacity for not less than twenty hours a week—

- (a) Under an Education Board; or
- (b) Under the governing body of a secondary school; or
- (c) Under the managers of technical schools under Part VIII of the Education Act, 1914; or
- (d) Under the Education Department in the case of Inspectors of Schools, or of Inspectors, Managers, or visiting officers of industrial schools, or of teachers of any schools under that Department; or
- (e) Under the University of New Zealand, or under the Auckland University College, Victoria University College, the University of Otago, Canterbury University College, or the Canterbury Agricultural College.

LEGISLATION.

- 4. Since the date of the last valuation important legislation affecting the Fund has been passed by Parliament. The amendments having a direct bearing on the actuarial position may be briefly summarized as follows:—
- (a) Section 14 of the Finance Act, 1931, as amended by section 42 of the Finance Act, 1931 (No. 4), extended to any existing contributor the benefit of an "actuarial" pension on compulsory retirement within five years of the date when the contributor would have been entitled to retire as of right, or with the consent of the Board and the approval of the Minister of Education. In such cases it is provided that "the allowance shall not in any case be of an amount greater than the maximum amount which the Government Actuary certifies can be granted by way of such retiring-allowance without imposing on the Superannuation Fund any additional liability by reason of such retiring-allowance being granted before the earliest date on which the contributor would have been entitled, as of right, to receive a retiring-allowance on his voluntary retirement."

(b) Section 8 of the Finance Act, 1931, gave to all contributors whose salaries were "cut" in accordance with the general reductions the option to protect their superannuation rights by continuing to contribute and receive pensions based on not less than the pre-cut salaries, or, alternatively, to pay contributions and have pensions based on actual salaries, in which latter case contributions paid in the past on any salary in excess of the amount to which the salary was "cut" were in effect refunded to the contributor as they were applied, until exhausted, by the Superannuation Board in reduction of contributions thereafter becoming payable. This latter gesture was too generous inasmuch as some deduction should have been made for the cost of covering the liability in respect of the contributor

retiring medically unfit.

(c) Section 9 of the National Expenditure Adjustment Act, 1932, as amended by sections 24 and 25, Finance Act, 1932-33 (No. 2), dealt with the position caused by the second salary "cuts" in a manner somewhat similar to (b) above, but introduced a new element as regards the contributions paid in the past on "excess" salaries by those officers who elected to contribute in future on actual salaries, as it was provided that such excess payments should be held by the Superannuation Board to the credit of the contributor and paid to him on the date of his retirement or his earlier death. This provision is obviously a compromise, and like most compromises will not stand examination. In effect, it provides that the younger the contributor the more heavily is his refund subjected to the operation of discount. Actually the reverse should be the case, since there need be very little deduction (if any) in the case of the youngest contributors, as the risk to the Fund of having to provide a medically unfit benefit at such ages is negligible, and is offset by the interest on the "excess" contributions. As the member's age increases so does the risk of retiring medically unfit call for a larger deduction from the contributions, till an age is reached where the Fund is liable to make a loss if any portion of the "excess" contributions is refunded. While I am definitely of opinion that the option of a refund of "excess" contributions should never have been allowed, Government granted it in full in 1921 and 1931 and tacitly conceded the principle in 1932, the only difference being that the contributor is in effect deprived of interest on such refund. Under the circumstances, and in view of the protests and representations made by staff organizations that the refunds should be made immediately and applied in reduction of future contributions, I deemed it advisable to make in the valuation a special reserve of £30,000 approximating to the full amount of such "refunds." This overstates the liability, but the amount involved is small compared to the total liability of the State.

(d) The New Zealand Debt Conversion Act, 1932–33, and the Local Authorities Interest Reduction and Loans Conversion Act, 1932–33, had the effect of substantially reducing the interest-yields on Government securities and local-body debentures as from the 1st April, 1933. It is gratifying to note, however, that, for the quadrennium under review, Treasury made a special subsidy to the Fund in

respect of reductions in the interest income from these classes of securities.

PARTICULARS OF VALUATION.

5. The contributions and benefits provided by the Act, together with statements showing the progress of active membership, discontinuance of membership from various causes, the progress of pensions for each year, and the pensions granted during the quadrennium, with the ages at which they were granted, will be found in Tables I to IV of the Appendix to this report. The number of contributors at the date of the valuation, with their ages, salaries, and contributions, are shown in Table V.

PENSIONERS.

6. At the valuation date there were 1,542 pensioners with annual pensions of £289,550 2s., and I submit hereunder an analysis of the pensions under four main headings, namely:—

(a) Normal pensions payable in respect of officers who retired as of right on completion of the statutory period of service or attained the statutory retiring-age.

(b) Medically unfit pensions, payable to those who broke down in service.

(c) Actuarial pensions, payable in respect of those compulsorily retired within five years of normal retirement.

(d) Pensions under the extend	ded pro	ovision	s of the A	et.			Annual A of Pen		
Males—					,	Number.	£	sion.	
Normal pension .		••				369	117,790		0
Medically unfit pension						92	15,792	8	0
Extended provision of the	e Act	• •	• •			100	20,564	18	0
Totals .	•	• •	• •				$\overline{154,147}$	19	0
Females—							brancasine and and manage		
Normal pension .						765	113,312	0	0
Medically unfit pension						84	7,018	15	0
Actuarial pension .						16	1,060	15	0
Extended provision of the	e Act	• •				116	14,010	13	0
Totals	•		• •	• •		981	135,402	3	0
Grand totals	•		, .			1,542	£289,550	2	0

7. Section 75 of the Act sets out the conditions for normal retirement with the following proviso: "Provided that the Board may with the approval of the Minister of Education extend the provisions of this section to any case in which the age of a male contributor is not less than sixty years, or the age of a female contributor is not less than fifty-five years if his length of service is not less than thirty years, or to any case in which the length of service of a contributor is not less than thirty-five years; and in any of those cases the Board may with the like approval impose upon the retiring contributor such terms and conditions as to payments into the Fund or otherwise as the Minister thinks fit."

It seems clear that the original intention of this proviso was to deal with special cases, and that accordingly the power was to be sparingly exercised.

Of the three Government Superannuation Funds, the Teachers' is the only one that made any pretence of so interpreting the section. It is also gratifying to note that the Board safeguarded the Fund by making use of its power to impose terms on contributors so retiring. The Board, in fact, anticipated the "actuarial pension" legislation introduced in 1931, by using an average table of percentage deductions and applying it to the pension that would have been allowed in respect of a medically unfit retirement. Each case was dealt with on its merits by scaling down such deductions to a figure deemed equitable by the Board.

8. The income and outgo of the Fund since the previous valuation were as follow:—

Consolidated Revenue Account of the Teachers' Superannuation Fund from the 1st February, 1930, to the 31st January, 1934.

Members contributions Government subsidy Subsidy Fiji Government Subsidy under section 114 of the Act Transfers from other funds Interest on investments Interest on arrears of contributions	 $\begin{array}{c} \pounds \\ 1,198,711 \\ 485,530 \\ 251,166 \\ 926 \\ 16,019 \\ 1,435 \\ 268,010 \\ 2,007 \\ 1,462 \end{array}$	3 13 16 16 18 3 4	$9 \\ 4 \\ 9 \\ 11 \\ 8 \\ 0 \\ 0$	Contributions refunded Transfers to other funds	 1,074,082 124,173 1,039 1 7,426 7,500	$\begin{array}{c} 9 \\ 0 \\ 3 \end{array}$	8 10
	£2,225,270	3	7		£2,225,270	3	7

9. Strictly speaking, the Fund shown above should be increased by £39,416 13s. 4d., which sum the Board has not brought into the funds, but shows separately in the balance-sheet as a liability. Section 112 of the Act provides that in the month of January in every year the Minister of Finance shall pay into the Fund the sum of £43,000, and as the Fund's financial year ends on the 31st January, the Board takes credit only for one-twelfth of this amount, regarding the balance as unearned subsidy. This would be correct accounting practice if the accounts were designed to show the annual profit or loss of the Fund, but it is quite clear that such considerations do not apply in the case of a superannuation fund. If ordinary rule of thumb accounting methods are to be adopted, the Revenue Account should credit only such portion of the employees' contributions as is necessary or estimated to be necessary to cover the current year's risk in respect of the contributors and reserve the balance in order to meet the appropriate pensions as they emerge. To put it another way, the ordinary balance-sheet of a superannuation fund makes no pretensions to show the real contingent liabilities of the Fund in connection with pensions and other benefits, and accordingly no good purpose can be served by understating the funds year after year by this amount of £39,416 13s. 4d. Under the circumstances, the Board is recommended to bring its accounting methods into line with the world-wide practice of financial institutions controlling life assurance and other funds whose deferred liabilities involve contingencies which cannot be measured by ordinary accountancy standards.

10. Income.—On the income side the chief item requiring comment is the Government subsidy. Compared with the annual subsidies reported as necessary in the last actuarial report, the subsidies paid in during the quadrennium exhibit a shortage of £604,833, apart from the loss of interest thereon.

The effective rates of interest credited to the Fund during each year of the quadrennium are given below, together with those of the previous four years for the purpose of comparison:—

Year.	Rate per Cent.	Year.			Rat r Ce	
	£ s. d.			£	s.	d.
1926-27	 6 1 1	1930-31		 6	1	0
1927 - 28	 6 1 4	1931 - 32		 6	0	1
1928-29	 5 19-11	1932 - 33		 5	7	4
1929-30	 5 19 4	1933 - 34		 6	0	9

The apparent drop in the yield for the year 1932–33 is due to the fact that the accounts were closed prior to the decision of Government to reimburse the Fund the loss in interest sustained under the provisions of the National Expenditure Adjustment Act, 1932. As the amount accrued (£7,335) is identical with the amount accrued but not paid in or taken credit for in the year 1933–34, it will be seen that the interest-yield over the past eight years has been fairly constant.

11. Outgo.—Retiring-allowances are increasing, and will continue to do so for many years to come. It will be noted that the outgo for benefits during the quadrennium exceeded by about 17 per cent. the total income from contributions, interest, Government subsidy, and other sources. This is a sad commentary on the position of the Fund, for, as pointed out in previous valuation reports, the liabilities are essentially of a deferred nature, and at this stage funds should be increasing rapidly.

DATA.

12. The preliminary particulars required for this examination have been obtained from cards supplied by the Sccretary of the Teachers' Superannuation Board—a separate card being compiled for each member who was in Service at the valuation date or who had died or withdrawn since the inception of the Fund—and these particulars form the main basis of this investigation and valuation.

13. It is difficult to avoid the conclusion that sooner or later some reconstruction of the Fund is inevitable, and in order to be in a position to report expeditiously on any such proposals for reconstruction I decided to use Powers Machines to punch special cards and tabulate the data in the form required for valuation. The Post and Telegraph Department very willingly placed its Powers Machines at my disposal, and I am indebted to Mr. A. G. Bowater for his enthusiasm in supervising the work and for many helpful suggestions. It is unnecessary to point out that the assembly of the data by means of such machines permits rapid resorting and tabulation in any number of groupings that may be desired, thereby curtailing the time involved in investigations into the cost of making any modifications of the benefits of the Fund either for the whole Service or for certain Departments or for officers joining on or after any given date.

THE VALUATION.

- 14. The main object of an actuarial valuation is to ascertain whether the current funds, together with the present value of the future contributions, will be sufficient to meet the total liabilities. Before the valuation can be carried out it is necessary to make a careful estimate of the various factors on which the payment of the benefits and contributions is dependent. These factors may be briefly summarized as follow:—
 - (a) Rate of interest;
 - (b) Mortality-rates of pensioners;
 - (c) Average salary scales;
 - (d) Mortality-rates of contributors;
 - (e) Voluntary-withdrawal rates of contributors;
 - (f) Retirement-rates of contributors;
 - (g) Marriage-rates of contributors;
 - (h) Probability of a member leaving children under fourteen years of age, and the average number of such children;
 - (i) Remarriage-rates of members' widows.
- 15. The rate of interest used in valuing benefits and contributions was $4\frac{1}{2}$ per cent., as the Fund is State-guaranteed.
- 16. The mortality-rates adopted for pensioners were those used in the previous valuation, and were based on an investigation of the combined experience of the three Government Superannuation Funds (Public Service, Railways, and Teachers) for the period 1919–27.
- 17. Average salary scales in respect of males and females separately had to be constructed for the year immediately following the valuation date. This presented considerable difficulty, as it was complicated by the salary cuts and the fact that there were two classes of officers, one contributing on hypothetical salaries—i.e., pre-cut salaries as far back in some cases as 1921—and the other on actual salaries. To have constructed average-salary scales based on the heterogeneous contributory salaries, and applied to the contributory salary of each contributor as at the 1st February, 1934, the resulting ratios of increase from age to age would have considerably overestimated the pension liabilities, as, under normal circumstances, the average officer contributing on actual salary would not rise to the hypothetical maximum salaries, and pensions are based on salaries during the three years preceding retirement. Even if actual salaries were used to obtain the ratios of increase from age to age, the prospective salaries would have been divorced from realities in view of the fact that a large number of officers would never by normal promotions bridge the gap between their actual salaries and the hypothetical salaries on which they were contributing. The problem would have been simplified had the options to pay on higher salary been exercised, as one would have expected, only by the older officers, or by those who had been at the top of a grade so long that they took a very conservative estimate of the possibilities of future promotion. In actual fact, while only 915 out of a total of 8,901 contributors elected to pay on the pre-cut salaries, this number included contributors from age twenty-three upwards, many of whom must, except under very exceptional circumstances, have recovered the amount of the salary "cuts" by promotion during the remainder of service. The tacit assumption made by each officer electing to contribute on his salary prior to the cuts was that his actual salary would not

rise to the higher figure prior to retirement (normal or medically unfit), but even a brief glance at the two sets of salaries showed that at the younger ages the disparity between actual and hypothetical salaries was not wide enough to justify the assumption of valuing on the basis that future salary increases would not bridge the gap. It therefore became necessary, not only to separate those contributing on actual and on hypothetical salaries, but also to make two valuations of those contributing on hypothetical salary to make the necessary allowance for the fact that males under age forty-seven and females under age forty-one would, on the average, rise to a higher actual salary than the hypothetical salary on which they were contributing. In making these several valuations it was essential to allow for the fact that all salaries at 1st February, 1934, were automatically increased by 5 per cent. as from 1st April, 1934, and to make some assumption as to an early restoration of portion of the remainder of the salary "cuts." For this purpose I assumed that an immediate all-round increase of 5 per cent. would be forthcoming on 1st February, 1935. Actually, a $7\frac{1}{2}$ -per-cent. increase was subsequently granted in August, 1935, and all salary "cuts" were fully restored as from 1st July, 1936.

5

- 18. The actual deaths among contributors during the quadrennium were 45 males and 32 females, as against 59 and 34 respectively expected by the tables used in the previous valuation. The lighter mortality during service among male members was in evidence for all age-groups, and was due to some extent to an increase in the number retiring medically unfit.
- 19. The withdrawals were 274 males and 1,565 females, as against an expectation of 271 and 1,471 respectively. The reduction in the number of females withdrawing was not unexpected in view of the natural hesitation to exchange remunerative employment for marriage during a period of prolonged economic depression.
- 20. The retirements numbered 200 males and 296 females, as against an expectation of 146 and 227 respectively, the excess being limited to those within ten years of the normal ages of retirement. I am not in a position to say what portion (if any) of this increase in the number of retirements was compulsory, or due to a deliberate use of the Fund to facilitate retrenchment. The number of contributors dropped from 9,614 in 1930 to 8,901 in 1934, while the number of pensioners (exclusive of widows and children) which had increased from 1,003 in 1927 to 1,231 in 1930, grew to no less than 1,542 in 1934.
- 21. In view of the special influences operating during the quadrennium, I decided to regard the experience as abnormal, and to adopt for valuation purposes future rates of mortality, withdrawal, and retirement based on the period 1919 to 1930 and used in the 1930 valuation.
- 22. Males and females were valued separately, and details of the Experience Tables adopted and the Life and Service Tables deduced therefrom are given in Tables VI and VII of the Appendix.
- 23. The factors necessary for the valuation of widows' and children's benefits were built up from population statistics combined with the experience of the Fund itself.

RESULTS OF VALUATION.

24. Section 111 (2) of the Act requires the actuarial report to be so prepared "as to show the state of the Fund at the close of the period, having regard to the prospective liabilities and assets."

The valuation has been made accordingly, and the results are shown in Table IX of the Appendix, but they may be shortly summarized as follow:—

						£	£
Present value of ex							2,975,900
Present value of pr						, ,	
Less present v	alue of members'	contribu	itions	• •	• •	1,323,677	
						-	4,511,101
Total	net liabilities					• •	7,487,001
Fund	s in hand					• •	1,003,185
Present value of to	tal liability of St	ate					6,483,816
Less present v	value of present s	subsidy c	of £43,000) (if treat	ed as		
	ity)						955,556
And less prese	ent value of Sta	te subsid	y under	section 1	14 of		
the Act		• •	• •	• •		• •	156,114
Value of future su	bsidies to be pro	vided for	by the	State ove	r and		
above the pres			•				£5,372,146

25. The above statement shows a total State liability of £6,483,816, as compared with £5,559,202 at the last valuation, giving an increase of £924,614. It should, however, be pointed out that £156,114 of this increase is due to the inclusion of the special widows' and children's subsidy under section 114 of the Act as a permanent liability. In the past this has been treated as a supplementary payment to widows and children, and confusion has at times arisen in endeavouring to reconcile statements made as to the amount of Government subsidies paid to the Fund. The balance of the increase is mainly due to the accumulation at interest of that part of the State's liability which is unprovided for, and to the excessive number of retirements of comparatively young teachers.

26. As regards the first-mentioned source of valuation loss, it is scarcely necessary to point out that if a fund is in deficiency at one valuation, the amount of the deficiency at the succeeding valuation will, in the absence of profit and loss from other sources, increase at compound interest, since, in addition to the shortage in capital, the Fund is deprived of the interest which that capital would have earned during the valuation period.

Reference has been made in previous valuation reports to the serious drain on the Fund due to

early retirements from causes other than medical unfitness.

27. The importance of the ascertainment of the state of the Fund in the form given in paragraph 24 lies in the fact that the deficiency to be made good by the State—viz., £6,483,816—is equivalent to an annual interest income (at $4\frac{1}{2}$ per cent.) of £291,772. It follows that if any less annual sum than £291,772 is paid in by the State as subsidy the total deficiency will increase, and the subsidy must accordingly by way of compensation rise later on to a much higher figure than £291,772 per annum in respect of present contributors alone. If, however, any annual amount in excess of £291,772 is paid in, the Fund would, in respect of present members, attain solvency within a definite period of time. It should be clearly understood that this amount of £291,772 does not cease with the lifetime of the present members but is a perpetuity. Furthermore, it does not include any subsidy to new entrants.

ASCERTAINMENT OF STATE SUBSIDY.

28. The Act, however, does not provide that the subsidy is to be determined from the foregoing actuarial ascertainment required by section 111 (2). The same section directs the Actuary to show in his report "the probable annual sums required by the Fund to provide the retiring and other allowances falling due within the ensuing three years without affecting or having recourse to the actuarial reserve appertaining to the contributors' contributions." As the contributions are insufficient to provide the full benefits for service after joining the Fund, my interpretation of the principle underlying the section is that the State shall postpone till it emerges the liability for pensions arising out of service before joining the Fund, and for such part of the pensions arising out of subsequent service as is not covered by the contributors' contributions.

I estimate the pensions falling due during the financial years 1934-35, 1935-36, and 1936-37, the amounts provided by the contributions, and the subsidies payable on the basis indicated by the Act, to be as follow:—

mentioned (but see also next par					197,165	197,843	199,417
Amount due to be paid by the Stat	e in res	pect of th	e three	vears			
ı .							
Amount provided by contributions					107,118	110,354	114,306
Estimated pensions					304,283	308,197	313,723
					£	£	£
					1934-35.	1935 - 36.	1936-37.

29. The above figures would give for the years 1934-35, 1935-36, and 1936-37 an average subsidy of approximately £198,000 per annum, or £155,000 more per annum than the total of the present statutory subsidy of £43,000.

The following considerations, however, must be taken into account:-

(a) The actuarial recommendations made in the past in pursuance of the Act have not been fully carried out, the actual subsidy payments into the Fund to the 31st January, 1934, as will be seen from Table X of the Appendix, being short by £1,340,084 of the amounts recommended. After making allowance for interest, I consider that at least £66,000 per annum will require to be added to the future subsidies on this account.

(b) The State subsidy should also provide year by year the amount charged to the Superannuation Fund in administration expenses, less possibly the amount of investment commission which might be regarded as a deduction from interest. The payment of expenses from the Fund is a definite departure from the original scope of the superannuation scheme, and my interpretation of section 111 (2) of the Act is that expenses amounting to, say, £2,000 per annum should form part of the subsidy.

30. I have, therefore, to report that in accordance with the system prescribed by the Act the annual subsidy required for each year of the period ending 31st January, 1937, is as follows:-

					£
Subsidy now being paid by	State		 	 	43,000
Further annual subsidy rec	uired-	-		£	
Paragraph 29			 	 155,000	
Paragraph 29 (a)			 	 66,000	
Paragraph 29 (b)			 	 2,000	
					223,000

Annual subsidy required for the years 1934-35, 1935-36, and 1936-37 . . . £266,000

31. I have indicated above that section 111 of the Act specifically sets out that an Actuary shall be appointed by the Governor-General to furnish "a report which shall be so prepared as to show . . . the probable annual sums required by the Fund to provide the retiring and other

allowances falling due within the ensuing three years without affecting or having recourse to the actuarial reserve appertaining to the contributors' contributions." Section 112 (1) reads, "In the month of January in every year the Minister of Finance shall pay into the Fund and out of the Consolidated Fund, without further appropriation than this Act, the sum of forty-three thousand pounds, together with such further amount (if any) as is deemed by the Governor-General in Council, in accordance with the aforesaid report of the Actuary, to be required to meet the charges on the Fund during the ensuing year."

The only interpretation I can place on these two sections is that the responsibility of determining the State's subsidy devolves on the Actuary, and unless the Governor-General in Council disagrees with the figures in the actuarial report, it is mandatory on the Minister of Finance to make the necessary payments.

Up to 1919 the requirements of the Act as to Government subsidy were more or less complied with, the Act being duly amended from time to time to give effect to the actuarial recommendations, although payment of the increased subsidy was on the average two years late, and no extra payment was made during the war period. From 1919 onwards, however, no action has been taken to give effect to any of the actuarial reports submitted, and for all practical purposes section 112 (1) of the Public Service Superannuation Act is a dead letter.

The valuation of the Teachers' Superannuation Fund is a highly specialized task, additional staff and calculating-machines have to be borrowed from other Departments, and it is discouraging for the Actuary to know in advance that the time and thought spent in dealing with the problems which arise, together with the months of work of the staff, are, for all practical purposes, wasted effort.

If Government considers the annual subsidy too big a price to pay for the benefits of a Teachers' Superannuation Fund, it would be better to face up to the position and reconstruct the Fund in accordance with the State's ability to pay. Such a procedure would at least have the merit of letting teachers know where they stand, and of enabling them, if desired, to make alternative provision for their old age.

32. It is only one step from the continued refusal of the State to honour its statutory obligations to pensioners to discontinue the payment of any subsidy whatever, and, although such a contingency may appear remote, it is interesting and instructive to examine the resulting position of the Fund. For this purpose, it is only necessary to submit the following figures as at 31st January, 1934:—

	£
Amount of accumulated funds	 1,003,185
Amount of contributions paid by contributors still in the Service	 1,257,724
Capital value of pensions and allowances actually entered upon	 2,975,900

It will be seen that, if the Fund were put into liquidation on the basis of treating existing pensioners, widows, &c., as preference shareholders with a prior right of having their claims satisfied before the existing contributors shared in the assets, the former would receive only 33.71 per cent. (6s. 9d. in the pound) of their pensions or allowances, thus suffering a cut of 66.29 per cent. (13s. 3d. in the pound), while contributors still in the Service would be unable to recover any contributions paid into the Fund.

If, on the other hand, the Fund were liquidated on the basis of terminating all pensions and of dividing the accumulated funds amongst the existing contributors, the total capital available would pay them only 79.76 per cent. (15s. 11d. in the pound) of their past contributions (without interest) equivalent to the forfeiture of 20.24 per cent. (4s. 1d. in the pound).

How far the Fund has retrogressed will be seen by comparing the above position on hypothetical liquidation with similar figures taken out in connection with the last statutory valuation, and shown on page 25 of the report of the parliamentary Committee set up in 1932 to consider the proposed Government Superannuation Funds Bill.

The figures are important if for no other reason than to show why the Fund should receive an adequate subsidy in the future.

33. As this will probably be the last occasion on which I shall have the privilege of making an actuarial report on the Teachers' Superannuation Fund, I submit in Table VIII of the Appendix a consolidated Revenue Account of the Fund since its inception. I have also prepared the following concise summary of the position of the Fund at the successive dates of actuarial valuation. It will be seen that, for illustrative purposes, the accumulated funds have been regarded as applicable to a hypothetical Pensioners' Account and the balance to a Contributors' Account. This strips the problem of all technicalities and throws the position of the Fund into clear perspective. The table should convince any thoughtful person that reconstruction is urgently needed, unless Government is able and willing to shoulder the enormous liability shown therein.

TEACHERS' SUPERANNUATION FUND.

With Having existing Widows' Pensions Capital Allowances are and Orphans' to of Total Current Liability of (2.) (3.) (4.)
,845 1 ,932 2
42,190 416,664
59,985 634,581
114,511 1,223,700
166,867 1,733,206
218,110 2,220,515
289,550 2,890,015

34. The causes of the present large deficiency in the Fund may briefly be summarized as follows:— (a) The accumulation at interest of the unredeemed amount of the initial deficiency caused by the gift, in respect of service prior to the inception of the Fund, of free pensions for each year of such "back ' at the same rate as for future contributory service.

The Fund commenced operations with an initial deficiency estimated to be in the neighbourhood of £800,000. It is important to bear in mind, however, that this original estimate requires to be increased in the same ratio as actual salary-levels on retirement bear to the average retiring-salaries as estimated

when the scheme was established.

The State definitely incurred this liability in making a gift of that portion of the pension based on service prior to the establishment of the Fund, and the soundest plan would have been to take steps to pay the full capital sum into the Fund, or alternatively to provide for its redemption within a reasonable period of from twenty to thirty years, and to make a small additional annual subsidy to assist the contributions of new entrants.

(b) The failure of successive Government since 1919 to honour their statutory obligations as to

subsidy.

The amount of the statutory annual subsidy has no relation to the actuarial position of the Fund, but is merely a proportion, actuarially calculated, of the pensions and allowances actually emerging. Pensions are, in effect, divided into two parts:-

(i) That portion provided by the contributors:

(ii) The balance which is to be met by the State.

It will be seen, therefore, that the principle underlying the Act is that members are to contribute upon the basis of paying their share of the liabilities during service, while the State is to defer payment of its share until officers are retired. It does not appear to be sufficiently appreciated that the longer a financial liability is deferred the greater is the amount of money that will ultimately have to be provided by reason of the operation of interest. It has also to be remembered that, under the plan of basing subsidies on pensions, the annual subsidies themselves tend to increase rapidly for many years by reason of the increasing number of new pensioners annually coming on to the Fund.

Reference to Table X of the Appendix shows a shortage at 31st January, 1934, of £1,340,084 (exclusive of interest) in the subsidies actually paid by the State as compared with those prescribed

- (c) The burden thrown on the Fund as the result of the practice followed, particularly from 1922 onwards, of compulsorily retiring men with forty years' service irrespective of their attained ages or their own wishes.
- (d) The great increase in pension liability due to the effect of the war on salary-levels. At the most a contributor would contribute on his increased salary only for his future service, whereas he would obtain the same pension benefit as if he had been in receipt of such a salary for the whole period of his service. Some idea of the increased pension liability can be obtained from the fact that between 1913 and 1927 the average annual salary of teachers aged fifty and over increased by £203 in respect of males and £161 in respect of females.
- (e) Additional concessions granted to contributors from time to time, as for example, the options to contribute on salaries prior to the cuts of 1921–22, 1931, and 1932, or to accept refunds of contributions on "excess" payments.

 (f) Inadequate contribution scales, particularly in respect of female teachers.

GENERAL REMARKS.

35. Extra Remuneration not to count as Salary for Superannuation Purposes.—In the Teachers' Superannuation Fund officers undertaking duties additional to those attached to the position ordinarily held are allowed to contribute on such extra remuneration, but such remuneration counts as salary for pension purposes only if it is earned in the three years preceding retirement. This means that any teacher who is deprived of earning such additional remuneration during the last three years of service would receive no benefit for any contributions paid on such remuneration for possibly the bulk of his service, whereas another teacher who only received such additional remuneration during the last three years of service would receive the same pension as if he had contributed on such remuneration for the whole period of his service.

My own opinion is that any payment for duties other than those attached to the position ordinarily held by the teacher should not be regarded as salary for the purposes of superannuation.

If any legislative amendments are made in this direction, it would appear desirable to provide for regulations setting out what allowances were not to be regarded as salary or payment for duties other than those attached to the position ordinarily held by the teacher.

36. Unemployed Teachers. — Section 97 of the Public Service Superannuation Act provides that a teacher is not retired from the Service by reason of unemployment unless such unemployment extends over twelve months, and there is a further provision that the Superannuation Board may grant an extension of such period of unemployment, the break in the service to count for superannuation purposes.

I am of opinion that under present conditions of employment in the teaching service it would be better to provide that no such break in service be allowed to count for superannuation purposes, and, of course, contributions would not be collected in respect of such break. It is more in keeping with the general idea of superannuation that no contributor should be granted a pension in respect of any period for which no service has been given to the State.

37. Medically Unfit Pensions.—This is probably one of the most difficult problems in the administration of any Superannuation Fund. On the one hand, some teachers may be classed "medically unfit" although they are quite competent to undertake work of a less exacting nature than the particular work they have been performing, while, on the other hand, some teachers totally unfit to render efficient service in any occupation at all may not fall within the definition of "medically unfit" as interpreted by the Superannuation Fund in accordance with statute.

It seems advisable to consider the desirability of creating a special class of "medically unfit for duty" officers, grading each such officer as 100 per cent., 90 per cent., &c., unfit to carry on his occupation.

An officer graded 100 per cent. medically unfit would, of course, receive a full pension based on length of service, an officer graded 50 per cent. medically unfit for duty might be allowed a pension halfway between a "length of service" pension and an "actuarial" pension, and all other grades be dealt with similarly.

38. Provision for Joint Life and Survivor Pensions.—There have been from time to time suggestions to increase the widows' pension now standing at £31 per annum. The cost of making any material increase is too high to warrant any recommendation that it should be provided out of the Consolidated Fund, and, moreover, it may very well be argued that it is no duty of the State as employer to relieve the teacher of his own obligations to provide for his widow by life assurance or other means.

On the other hand, there would be objections raised to any suggestion that all male teachers should be asked to pay any extra contribution for an increased widows' allowance, partly because of the high cost of such a benefit and partly because in the cases where a pensioner or contributor died as a bachelor or a widower he would have been paying a substantial contribution for no actual benefit. It would be possible, however, to meet the case of any teacher who would prefer to accept a smaller retiring-allowance on the understanding that his widow's allowance was increased by making provision in the Act for such an option on terms that would involve no increased strain on the Fund. One plan would be to allow such contributors the option to exchange their retirement pensions for a joint-life and survivor pension payable so long as either the husband or wife were alive. Alternatively another rate of pension could be payable to the contributor on the basis of a reduction on his death to, say, half-rates for his widow.

The Fund's finances could be adequately protected, by providing for such an option to be exercised by the contributor not less than five years prior to the date of retirement, this to obviate any adverse selection against the Fund by the contributor. In order to meet the case of present contributors who are now within five years of retirement, or even of any existing pensioners, provision might also be made for them to have an option to exchange their pensions for joint-life and survivor pensions within a specified period, say, six months from the date of the passing of the amendment, subject to the production of such evidence of medical fitness as is determined by the Superannuation Board.

39. Removal of Pension Limitation of £300 per Annum.—The National Expenditure Commission of 1932 made a strong recommendation for the removal of the arbitrary pension limitation of £300 per annum in respect of officers joining the Service after the 24th December, 1909, so as to bring them into line with officers joining the Service before that date.

The injustice of compelling officers to contribute to a Fund and at the same time limiting them to a pension of £300 irrespective of the value of their contributions should be too obvious to require comment. A University Professor or a Medical Officer appointed to the Service at a salary remaining practically stationary during his whole service may pay three or four times as much as another teacher with similar service, but he gets no credit for it.

In this connection it may not be out of place to point out that the arbitrary pension limitation of £300 was never taken into account in the original estimates of cost furnished before the schemes were established, nor was it included as part of the original Act, being introduced some two years later for reasons I have never been able to discover. If the matter were not so serious in its broader aspects, one might be tempted to enlarge on the Gilbertian touch of an employer commencing a superannuation scheme for his employees and giving away, inversely to their future value to him, an increased pension benefit—(i.e., 97½ per cent., 75 per cent., 50 per cent., and 25 per cent. of pension benefit to employees with respectively one, ten, twenty, or thirty years of remaining service—without imposing any restrictions as to the maximum amount of pension granted, while at the same time asking new employees to devote themselves to his service, and to contribute for the whole period of their employment to a fund offering them an arbitrary maximum pension, that is equivalent in the case of the higher-paid officers to a pension at a rate for each year of service decreasing as the length of service increases. If any limitation had to be applied at all in a State scheme, it would more readily have been understood had it applied only in respect of those officers who had long years of back service for which they made no contribution to the Fund.

As the National Expenditure Commission has pointed out, each Actuary who has had to report on the Government Superannuation Funds has adversely commented on the arbitrary pension limitation.

There is, however, a danger in connection with this £300 arbitrary limit, that too much stress on the grave injustice done to the higher-paid officers may tend to obscure the fundamental reasons for establishing a staff superannuation scheme—namely, to induce men of ability to join and continue in the Service, and to offer an adequate retiring-allowance to those who rise to high positions as the result of outstanding merit.

A superannuation scheme is not established by an employer—whether a Government or a private firm—from philanthropic motives, but rather from motives of enlightened self-interest. The State, in common with any employer of labour, does not remunerate its teachers on philanthropic grounds nor on the basis of levelling-down all salaries to a uniform amount irrespective of the class of work performed, and it is unreasonable to suppose that it has in mind an intention to depart suddenly from sound business principles just when some of its employees reach old age. The object in stressing this aspect of the employer's motive is that once the principle is admitted that the establishment of a superannuation scheme is from an enlightened self-interest, we are infallibly led to a certain line of reasoning regarding the relative benefits a superannuation fund should pay and the way the employer's subsidy should be allocated.

The opinion of any competent critic on the Teacher's Superannuation Fund with its maximum pension of £300 per annum, especially when considered side by side with the minimum pension of £300 provided by the Superannuation Fund of one of the old established New Zealand banks would not only be unflattering to the State but would also bring out prominently that those responsible for the 1909 amendment lost sight of the elementary principles of a staff superannuation scheme. Compared with the generally accepted idea in commercial pension funds that merit should be rewarded and an adequate subsidy paid on the contributions of all employees, the State is actually penalizing its best teachers, present and future, and in effect is allowing the Superannuation Fund to confiscate portion of their contributions and interest accretions.

40. In conclusion, I have to acknowledge the assistance of the small but efficient staff engaged in carrying out the heavy work of the valuation.

C. Gostelow,
Fellow of the Institute of Actuaries (London),
Government Actuary.

APPENDIX.

TABLE I.

THE BENEFITS AND CONTRIBUTIONS PROVIDED FOR BY THE ACT.

(These benefits are slightly modified in the case of persons employed in service under the Universities on the 7th November, 1912, who joined the scheme before the 1st July, 1913.)

The contributions vary according to the age at the time when the first contribution becomes payable, and are as follows:—

Contributions

Age 30	and under		 	 5 ne	er cent. of pay.
	and not exce	eding 35	 	 6	··
,, 35		40	 	 7	,,
,, 40	,,	45	 	 8	,,
,, 48	,,	50	 	 9	,,
,, 50)		 	 10	,,

- (I. On Attainment of Pension. Males at Age 65, or after Forty Years' Service; Females at Age 55, or after Thirty Years' Service.
- (1) A pension of one-sixtieth of yearly salary for each year's service, with a limit of forty-sixtieths (two-thirds) of salary. Maximum pension for entrants after the 24th December, 1909, £300.
- (2) Or the option, in lieu thereof, of a return of total contributions.

Note.—The Board may, with the approval of the Minister of Education, retire contributors on pension in the following cases:—

- (a) Where the age of a male contributor is not less than 60, or of a female contributor not less than 50.
- (b) Where the age of a male contributor is not less than 55, if his length of service is not less than thirty years.
- (c) Where the length of service of a male contributor is not less than thirty-five years.

In any such exceptional cases the Board may, with the approval of the Minister of Education, impose upon the retiring contributor such terms and conditions as to payments into the fund or otherwise as the Board thinks fit.)

Benefits ...

- II. On Retirement before Pension Age (on the Grounds of being Medically Unfit for Future Duty).
- (1) At any time on the certificate of two doctors approved by the Board a pension of one-sixtieth of yearly salary for each year's service, limited to forty-sixtieths.

 (2) Or the option, in lieu thereof, of a return of total contributions.
 - III. On Retirement before Pension Age (on other Grounds than Medical Unfitness).
- (1) On voluntary retirement or dismissal for misconduct, a return of total contributions.
 - IV. At Death, whether before or after becoming entitled to a Retiring-allowance.
- (1) Leaving no widow or children: A return of total contributions less any sums received from the fund during lifetime.
- (2) Leaving a widow:—
 - (a) £31 yearly during widowhood; or
 - (b) A return of total contributions, together with such compensation (if any) as the contributor would have been entitled to receive from the Consolidated Fund on compulsory retirement, less any sums received from the fund during lifetime. (If death occurs before retirement the compensation is paid from the Consolidated Fund; if after retirement, from the Superannuation Fund.)
- (3) Leaving children: 10s. weekly to each child until age 14.

(Note.—The contributions and pensions are payable monthly, and the pensions are computed on the average salary for the last three years.)

TABLE II.

STATEMENT OF PROGRESS OF ACTIVE MEMBERSHIP.

		New Members		Increase by	Promotion.		Discontinue	d.	Total in	Force at End	l of Year.
Year.	Number.	Salaries.	Annual Contribu- tions.	Salaries.	Annual Contribu- tions.	Number.	Salaries.	Annual Contribu- tions.	Number.	Salaries.	Annual Contribu- tions.
		£	£	£	£		£	£		£	£
1906-10	3,968	571,694	39,634	106,582	7,130	721	130,344	9,479	3,247	547,932	37,288
1911–15	2,371	317,039	17,199	188,951	10,976	1,174	193,900	12,665	4,444	860,022	52,798
1916-20	2,438	350,721	18,937	613,788	35,706	1,708	325,331	20,038	5,174	1,499,200	87,400
1921	1,048	154,143	8,404	109,148	6,100	350	91,448	5,448	5,872	1,671,043	96,456
1922-26	3,887	644,399	34,976	244,098	12,821	1,791	454,089	27,848	7,968	2,105,451	116,408
1926–27	967	160,963	8,721	129,074	7,009	559	143,641	8,334	8,376	2,251,847	123,801
1927–28	841	131,745	6,997	83,058	4,247	532	139,632	8,062	8,685	2,327,018	126,983
1928-29	1,160	161,466	8,318	97,275	4,885	559	146,406	8,487	9,286	2,439,353	131,699
1929-30*	901	117,497	6,391	122,031	6,749	571	148,741	8,531	9,616	2,530,140	136,308
1930–31	853	111,309	6,228	115,863	6,062	560	140,948	8,006	9,909	2,616,364	140,592
1931–32	628	72,047	3,931	-140,244	-7,401	573	145,820	8,482	9,964	2,402,347	128,640
1932–33	119	25,700	1,634	[-119,795]	-6,462	728	179,997	10,332	9,355	2,128,255	113,480
1933–34	99	18,597	1,114	57,077	3,031	551	104,284	5,782	8,903	2,099,645	111,84
Totals	19,280	2,837,320	162,484	1,606,906	90,853	10,377	2,344,581	141,494			

PARTICULARS OF DISCONTINUANCE OF ACTIVE MEMBERSHIP.

				Dr. Wi	thdrawal			В	y Pension	ıs.			Tra	By ansfers			
		By Deat	h.	or Di	smissal.		ary (Age Service).		tended visions.	Me	edically	Unfit.		to Other unds.	Tota	al disconti	nued.
Year.	Number.	Amount paid on Retirement.	Family Pension.	Number.	Amount paid on Retirement.	Number.	Pensions entered upon.	Number.	Pensions entered upon.	Number.	Amount paid on Retirement.	Pensions entered upon.	Number.	Amount paid on Transfer.	Number.	Amount paid on Retirement.	Pensions entered upon.
		£	£		£		£		£		£	£		£		£	£
1906-10	51	1,737	1,174	462	6,762	167	11,816	10	938	29	422	1,913	2	30	721	8,951	15,841
1911–15	84	-5,100	932	807	23,798		15,808	48	7,326	51		4,457	9	-1,009	1,174	29,907	28,523
1916–20		16,214	1,956	1,234	47,399	208	27,744	22	3,076	-60		7,303	18	1,059	1,708	64,672	
1921	14		206	271	13,604		9,170		527	11		1,505		95			
1922–26		12,424	1,823	1,325		295	60,129				1,106			788	1,791	75,869	
1926–27	22	3,236		440	21,910		20,091	6		9		1,536	2	733	559	26,590	
1927–28	13	3,194	922	407	22,546		21,925		1,129	5		797	4	336	532	26,076	
1928-29	18	4,119	$\frac{690}{922}$	428	22,639		20,605	2	172	16	'	2,043	3	23	559	26,781	23,510
1929-30	$\frac{29}{20}$	$5,701 \\ 3,227$	1,066	$\frac{439}{447}$	24,168 $25,986$		17,842	$\frac{i}{2}$	$1,751 \ 487$	$\frac{15}{11}$	••	1,213 $1,693$	$\frac{6}{2}$	$^{\cdot \cdot \cdot}_{92}$	$\frac{576}{560}$	29,869	
1930-31	$\frac{20}{23}$	$\frac{3,227}{4,447}$	984	423	26,980 $26,165$		$17,632 \\ 35,677$	10^{-2}	1,061	15	• •		1	16	573	29,305	
1931–32 1932–33	23 14	4,228	574	507	29,207	159		28	2,860	18		$\frac{1,937}{3,133}$	2	43	$\frac{573}{728}$	$30,628 \\ 33,478$	
1932-33 1933-34	20	2,973	1,279	$\frac{307}{465}$			8,193		888	10		1,523	6	889	551	31,630	11,883
Adjustments			+4788	<u> 5</u>			+8,218		+383			+1450			- 5		+14839
Totals	548		18,191	7,650	353,503	1624	312,898	${197}$	30,106	$\frac{-}{285}$	2,239	37,369	73	5,113	$\frac{-}{10,377}$		398,564

This table compiled from statement (3) of annual reports.

^{* 1929-30} figures adjusted.

TABLE III.
STATEMENT OF PROGRESS OF PENSIONS.*

Year.	Gran	ted.	D	oid by Death,	In													
Number	Number.	nsion.	H.			Force.	G	ranted.		d by ath.	I	n Force.	Gra	ented.	Dea	id by oth or piry.	In	Force.
		Pe	Number,	Pension.	Number.	Pension,	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.
1911-15	175 1 208 2 48 2 93 6 82 2 97 2 92 2 80 1 75 1 101 3 159 3	8,193 11,641		£ 1,317 2,726 5,056 1,046 7,708 2,897 4,190 3,125 5,616 6,516 4,463 6,230 55,487	1088 1221 1230 	£ 10,499 23,581 46,269 54,393 112,014 132,226 149,554 165,979 180,696 192,711 221,871 243,816 245,779	10 48 22 4 45 4 6 2 7 2 10 28 6 	7,3 3,0 55 8,3 1,5 1,1 1,7 4 1,0 2,8 8 8 +	76	1,548 425 355 $1,164$ 585 481	5 78 7 109 9 110 8 109 5 107 3 111 4 103 3 108 1 133 5 136	8,264 10,486 10,698 16,773 17,923 17,504 17,250 18,648 17,971 18,448 20,827 21,270	51 60 11 39 5 16 15 14 15 18 10 	£ 1,913 4,457 7,304 1,505 7,689 2,162 797 2,056 1,213 1,693 1,693 1,523 —1 37,381	11 22 8 15 10 2 5 7 6 4 8 10 	£ 505 1.063 2,203 760 2,252 1,528 311 826 882 523 766 6 1,473 1,832 14,924	61 99 102 126 125 128 139 147 155 166 176	£ 1,408 4,802 9,903 10,648 16,085 16,719 17,205 18,435 18,766 19,936 21,107 22,767 22,457
Year.			Gran		Voi	d by Deatl	<u>-</u> -		orce,	-	Gra	anted.	Void. In Force.					rce.
		Nun ber		Pension.	Num ber.		n.	Num- ber.	Pension.		ım- er.	Pension.	Nur		nsion.	Num ber.		Pension.
1906-10 1911-15 1916-20 1921 1922-26 1926-27 1927-28 1928-29 1929-30 1930-31 1931-32 1932-33 1933-34 Adjustments Totals		. 10 . 15 . 1 . 10 . 3 . 3 . 2 . 3 . 3 . 3	06 61 .2 00 60 32 33 32 66 44 9	£ 1,613 1,618 2,278 206 5,164 875 922 668 922 1,066 984 574 1,279	1444774 11669 11714 1714 11714	9 68 1,08 0 14 1,23 47 8 49 0 58 0 58 0 58 76 2 61 7 49	32 30 40 30 77 98 30 55 31 32 22	91 148 224 226 257 270 284 287 299 309 315 312 339	£ 1,416 2,352 3,550 3,616 7,550 7,948 8,372 8,490 8,857 9,192 9,413 9,375 10,162		311 380 441 75 477 125 140 133 134 127 160 2224 104	£ 16,280 29,209 40,402 11,408 86,545 27,675 24,773 23,510 21,728 20,877 39,658 44,614 11,883 —11,640	9 16 3 16 4 4 5 5 6 6 5	05 4 360 9 30 2 31 13 49 5 53 5 48 4 75 8 39 7 35 9	£,019,471,193,261,478,281,954,991,034,628,029,000	27 55 83 88 1,19 1,27 1,36 1,44 1,53 1,58 1,67 1,84	55 66 67 73 34 44 0 22 77 22	£ 14,261 38,999 70,208 79,355 152,422 174,816 120,154 226,967 239,810 270,840 296,785 299,668

^{*} This table compiled from statement (4) of annual reports.

TABLE IV.

Classification of Pensions granted, showing the Ages at which they were granted, for Period from 1st February, 1930, to 31st January, 1934.*

		Atta	r Length	of Pension Age of Service on 75).	R	etired (S	Medically Unfit ection 77).	Ch (Sectio	ows and ildren ns 85 and 86).			Total.	
at which Pe granted.	nsions	Nun	nber.	Amount of	Nui	nber.	Amount of	Number.	Amount of Pension.		Number.		Amount o
		М.	F.	Pension.	М.	F.	Pension.	Nur	Amo Pen	м.	F.	Total.	Pension.
				£ s. d.	i		£ s. d.		£		_		£ s.
	• •						••	$\frac{1}{1}$	$\begin{array}{c c} 31 \\ 31 \end{array}$	• •	1 1] 1	$\begin{array}{ccc} 31 & 0 \\ 31 & 0 \end{array}$
• •	• •	• • •		•••				1	31		î	î l	31 0
								1	31		1	1	31 - 0
	:							1	31		1	1	31 0
	•••		* *				• •	$\frac{1}{2}$	$\begin{array}{c c} & 31 \\ 62 \end{array}$	• •	$\frac{1}{2}$	$\frac{1}{2}$	$\begin{array}{ccc} 31 & 0 \\ 62 & 0 \end{array}$
• •	• •	• •	• •	• •				2	$\frac{62}{62}$	• •	$\frac{2}{2}$	$\tilde{2}$	62 - 0
• • •		 I		300 0 0			• • •	, Ĩ	31	1	1	2	331 0
								2	62		2	2	62 0
						••		5	155	• •	5	5	155 0
• •	• •		• •	150.0	••	, • •		$\frac{1}{3}$	31 93		$\frac{1}{3}$	$\begin{array}{c c} 1 \\ 4 \end{array}$	$\begin{array}{ccc} 31 & 0 \\ 263 & 3 \end{array}$
• •	• •	1	• •	170 3 0	••			2	62		2	$\frac{1}{2}$	62 0
	:						1	7	217	• •	7	7	217 0
		2		274 10 0				3	93	$\frac{2}{2}$	3	5	367 10
	• •	$\frac{2}{2}$	1	974 19 0		٠.		$\frac{3}{2}$	93 62	$\frac{2}{7}$	4 4	$\frac{6}{11}$	1,067 19 $1,730 5$
• •	••	$\frac{7}{18}$	$\frac{2}{1}$	$\begin{bmatrix} 1,668 & 5 & 0 \\ 4.114 & 2 & 0 \end{bmatrix}$	• •		••	$\frac{2}{3}$	93	18	4	$\frac{11}{22}$	$\begin{array}{ccc} 1,730 & 5 \\ 4,207 & 2 \end{array}$
	::	18	1	$\begin{bmatrix} 4,114 & 2 & 0 \\ 2,478 & 10 & 0 \end{bmatrix}$	•	::	::	5	155	9	6	15	2,633 10
••		9		2,918 11 0	i		242 4 0	4	124	10	4	14	$3,284\ 15$
		12	٠. ي	3,927 17 0	1	٠.	117 0 0	1	31	13	1	14	4,075 17
• •	• •	18	5 14	8,084 16 0	$\frac{2}{1}$		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	93 93	$\frac{20}{13}$	$\begin{array}{c} 8 \\ 17 \end{array}$	$\frac{28}{30}$	8,75518 $6,38814$
• •	• •	$\frac{12}{14}$	$\begin{array}{c} 14 \\ 12 \end{array}$	$\begin{bmatrix} 6,032 & 9 & 0 \\ 6,344 & 3 & 0 \end{bmatrix}$	· ·		205 5 0	1	31	14	13	$\frac{30}{27}$	6,375 3
		20	11	9,165 9 0	i		225 13 0	ĩ	31	21	12	33	9,422 2
		18	9	7,178 8 0	2		563 17 0	3	93	20	12	32	7,835 5
• •	••	19	17	9,227 10 0	٠.		070 15 0	1	31	$\frac{19}{7}$	18	37	9,258 10
• •	••	4	$\frac{63}{15}$	$\begin{bmatrix} 9,966 & 10 & 0 \\ 2,622 & 6 & 0 \end{bmatrix}$	$\frac{3}{2}$	··i	$972 15 0 \\ 566 8 0$		93	$\frac{7}{2}$	$\begin{array}{c} 63 \\ 19 \end{array}$	$\begin{bmatrix} 70 \\ 21 \end{bmatrix}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
			18	$\begin{bmatrix} 2,622 & 6 & 0 \\ 2,813 & 11 & 0 \end{bmatrix}$	$\frac{2}{2}$	2	742 12 0	4	124	$\frac{2}{2}$	24	26	3,680 3
			19	3,645 13 0	$\bar{2}$		532 7 0	3	93	2	22	24	4,271 0
	}	1	17	3,264 7 0	1	2	335 14 0			$\frac{2}{1}$	19	21	3,600 1
			11	1,576 5 0	1	1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{3}{2}$	$\begin{vmatrix} 93 \\ 62 \end{vmatrix}$	1	$\frac{15}{17}$	$\begin{array}{c c} 16 \\ 17 \end{array}$	2,003 19 $2,464 13$
• •	• •	•••	$\begin{array}{c} 13 \\ 12 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	$\begin{vmatrix} 2 \\ \end{vmatrix}$	227 3 0			$\cdot \cdot \cdot_2$	12	14	2,404 13
• • • • • • • • • • • • • • • • • • • •	• •	• •	7	1,171 18 0	$\tilde{2}$	2	442 10 0			$\overline{2}$	9	11	1,614 8
		,	9	1,500 7 0	1	1	252 12 0	1	31	1	11	12	1,783 19
• •			• •	• •	1	2	456 18 0	,	91	1	$\begin{array}{c c} 2 \\ 1 \end{array}$	$\frac{3}{1}$	$\begin{array}{cccc} 456 & 18 \\ 31 & 0 \end{array}$
• •	•••	••		138 10 0		4	333 10 0	1	31	• •	5	5	$\frac{31}{472} = 0$
• •	::					2	267 4 0				2	2	267 4
• •					٠.	2	153 11 0				2	2	153 11
• •				••		1	50 6 0 133 8 0			• •	$\frac{1}{2}$	$\frac{1}{2}$	50 - 6 $164 - 8$
• •	••	••	• •	• •	• •	1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} 1\\2 \end{vmatrix}$	$\begin{array}{c c} 31 \\ 62 \end{array}$	• •	3	$\frac{2}{3}$	104 8
••		::		• •				ĩ	31		1	i l	31 0
								1	31		1	1	31 - 0
					1		31 9 0			1		1	31 9
• •	• •			• •	• •		20 10 0	I	31	• •	1	1	$\begin{array}{cccc} 31 & 0 \\ 29 & 19 \end{array}$
• •	••	•••	••	• •	• •	1	29 19 0		:.	• •		1	49 19
			••	• •					::				
						2	55 7 0	٠			2	2	55 - 7
			••	• •		.;	58 0 0	1	31	1	1	$\begin{bmatrix} 1\\2 \end{bmatrix}$	$\begin{array}{ccc} 31 & 0 \\ 58 & 0 \end{array}$
• •	••		• •	• •	1	1	98 0 0		• •				90 U
		::			ï		17 9 0	• •		1		1	17 9
				• •				• •					
				• •	• •			1	31	· · ·	1	1	$\begin{bmatrix} 31 & 0 \\ 26 & 0 \end{bmatrix}$
• •	•••		••		• •	• •		$\frac{1}{5}$	$\begin{vmatrix} 26 \\ 130 \end{vmatrix}$				$\begin{bmatrix} 26 & 0 \\ 130 & 0 \end{bmatrix}$
	::			::		• •	!	$\frac{3}{2}$	52		(52 0
••								3	78		ļ		78 0
		• •]	••	• •			5	130		!		130 0
• •		• •	• •	• •	٠.	• •	•••	$rac{4}{1}$	$\begin{array}{c c} 104 \\ 26 \end{array}$				$ \begin{array}{c cccc} & 104 & 0 \\ & 26 & 0 \end{array} $
• •	• •	• •		••				2	52	22	22	44	52 0
				• •		• •		$\bar{6}$	156				156 0
								3	78			i	78 0
• •	••				••		••	$\frac{2}{2}$	52				$\begin{bmatrix} 52 & 0 \\ 52 & 0 \end{bmatrix}$
• •	••	••	••	••	!	• •		1	$\frac{52}{26}$!	ļ		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	::	• •				• •		$\frac{1}{2}$	52	i	i	į.	52 0
							••	5	130	j !			(130 0
					;								
Totals		167	258	93,495 6 0	28	28	8,271 14 0	133	3,903	217	397	614	05,670 - 0

* Compiled from cards.

TABLE IVA. TEACHERS' SUPERANNUATION FUND.

Existing Pensioners (1st February, 1934) who retired under the Extended Provisions of

	Cases.	Amount of Pension.	Age at Retirement.	Number of Cases.	Amount of Pension
		Male	š.		
	1	£ s. d.	1	1 1	£ s. d.
8	1	40 15 0	51	2	574 5 0
9	1	33 15 0	52	$\frac{2}{2}$	$265 \ 19 \ 0$
10	1	67 7 0	53	1	260 1 0
11	2	$123 \ 13 \ 0$	54	2	$431 \ 2 \ 0$
16	1	189 - 6 - 0	55	11	2,968 9 0
17	2	239 5 0	56	8	1,854 19 0
18	1	$112 \ 2 \ 0$	57	8	1,741 3 0
19	2	153 - 6 - 0	58	10	2,216 2 0
20	1	110 - 2 - 0	59	3	760 10 0
21	1	76 - 6 - 0	60	19	$3,359 \ \ 6 \ \ 0$
22	2	222 19 0	61	7	1,136 17 0
24	1	206 - 7 - 0	62	9	1,572 13 0
$25 \dots \dots$	2	451 10 0	63	6	1,239 6 0
26	2	$283 \ 19 \ 0$	64	6	827 2 0
27	3	566 6 0	Over 64	6	1,357 4 0
29	2	$367 \ 2 \ 0$			1,00. 1 0
30	7	894 14 0			
31	3	621 - 8 - 0			
32	5	828 16 0			
33	5	$728 \ 10 \ 0$			
34	3	529 - 9 - 0			
35	7	1,422 7 0			
36	10	2,348 0 0			
37	9	2,427 7 0			
38	7	2,103 7 0			
39	6	1,726 18 0			
er 39	13	3,690 2 0			
	100	20,564 18 0		100	20,564 18 0

4		1	$22 \ 2 \ 0$	40	1 1	52 0 0
$\hat{6}$		i	14 6 0	45	1	
8		2	84 8 0	46	7	60 7 0
9	• • •	$\frac{z}{2}$				1,242 11 0
11	• •	2		47	10	1,459 10 0
$12 \dots$	• • •	3		48	12	1,816 14 0
	• •		141 15 0	49	5	847 12 0
13	• •	5	341 18 0	50	19	1,668 10 0
$\frac{14}{15}$		4	394 13 0	51	14	1,473 7 0
15	• • •	1	60 7 0	52	14	1,458 10 0
16		2	$125 \ 9 \ 0$	53	15	$2,043 \ 13 \ 0$
17	••	3	284 - 5 - 0	54	8	975 0 0
18	••	2	140 5 0	Over 54	10	$912 \ 19 \ 0$
19	٠.	2	155 11 0			
$20 \dots$		5	757 - 3 - 0			
$21 \dots$		5	5 46 17 0		1	
$22 \dots$		3	$286 \ 18 \ 0$		1	
$23 \dots$		5	$461 \ 18 \ 0$			
2 4		4	502 14 0			
25		6	818 16: 0		i i	
$26 \dots$		6	830 12 0			
27		8	$1,037\ 16\ 0$			
28		8	$1,275 \ 13 \ 0$			
29		15	2,376 9 0			
ver 29		19	3,191 0 0		1	
Totals		116	14,010 13 0		116	14,010 13 0

TABLE V.

PRESENT ANNUAL PAY AND CONTRIBUTIONS OF OFFICERS NOW IN SERVICE.

	}	Nun	nber.	s		Annual				
Ag attair	e ned.			Ma	les.	Fe	males.	Contri	bution.	Age attaine
		Males.	Females.	Actual.	Contributing.	Actual.	Contributing.	Males.	Females.	
				£	£	£	. E	£	£	
3		1	1	39	39	80	80	. 2	4	18
)		5	13	459	459	780	780	23	39	19
)		41	68	2,529	2,529	4,270	4,270	126	213	20
Ĺ		97	192	6,431	6,431	11,971	11,971	324	599	21
2		112	279	8,975	8,975	19,662	19,662	449	983	22
		136	276	14,367	14,367	22,517	22,523	718	1,126	23
Ŀ		105	287	15,610	15,610	29,236	29,245	780	1,466	24
		142	301	26,573	26,573	40,038	40,038	1,329	2,008	25
	٠	166	295	34,944	34,944	46,450	46,495	1,747	2,327	26
		187	298	43,978	43,978	52,683	52,747	2,194	2,637	27
		221	266	55,681	55,741	50,356	50,458	2,787	2,524	28
		213	253	56,001	56,118	49,519	49,627	2,808	2,485	29
		198	232	55,823	55,921	47,854	47,911	2,795	2,396	30
		143	203	42,113	42,148	42,031	42,106	2,107	2,110	31
		138	160	40,383	40,383	33,981	34,086	2,022	1,712	32
		122	145	37,281	37,292	32,150	32,271	1,865	1,623	33
		104	131	33,012	33,067	29,656	29,719	1,671	1,516	34
		87	128	27,318	27,362	29,369	29,463	1,381	1,485	35
		84 .	131	28,163	28,198	30,570	30,791	1,453	1,569	36
		79	100	26,343	26,343	24,120	24,373	1,355	1,238	37
		81	133	28,173	28,173	32,693	32,960	1,459	1,719	38
		91	116	30,288	30,373	29,062	29,466	1,577	1,534	39
		75	111	26,557	26,731	27,774	28,176	1,410	1,480	40
		92	96	32,386	32,511	24,997	25,369	1,756	1,353	41
	;	80	104	28,073	28,525	26,794	27,648	1,512	1,498	42
		69	86	24,817	25,153	22,356	23,520	1,345	1,305	43
		80	92	30,441	30,606	24,383	25,774	1,672	1,408	44
		69	68	24,924	25,210	18,247	19,241	1,334	1,052	45
		60	70	24,231	25,068	18,877	20,583	1,392	1,139	46
	• •	62	67	24,397	24,801	18,749	20,960	1,348	1,199	47
	• • •	51	72	20,736	21,462	18,527	20,409	1,147	1,210	48
		68	58	28,252	30,184	15,425	17,009	1,673	1,054	49
	• •	57	43	23,045	23,841	12,096	13,630	1,450	821	50
		60	45	22,167	23,850	12,217	13,980	1,282	862	51
	• •	65	39	25,951	28,437	10,560	11,886	1,602	766	52
	• • •	48	38	20,062	22,639	10,115	11,664	1,305	773	53
	• •	63	41	27,060	30,486	11,300	13,323	1,749	884	54
	• •	$\frac{54}{57}$	21	20,949	23,581	5,715	6,588	1,369	466	55
	• • •	35	9	14,891	16,677	2,402	2,671	976	186	56
	• •	30	6	12,746	14,815	$\frac{1,739}{2,005}$	2,048	876	141	57 58
	• •	26	11	10,332	$11,781 \\ 9,861$	$\frac{3,005}{1,480}$	3,559	778	$\frac{272}{145}$	59
		20	$\begin{bmatrix} 5 \\ 3 \end{bmatrix}$	8,576 8,834	10,443	762	$1,758 \\ 904$	$\frac{663}{721}$	84	60
	• •	24	9		4,896					61
	• •	$\begin{array}{c} 12 \\ 17 \end{array}$		$4,198 \\ 6,419$	7,634	• •	•••	$\frac{358}{521}$		62
	• • •	$\frac{17}{12}$		5,819	6,974	• •		549	• •	63
	• •	9	••	3,962	4,702	• •		363	••	64
	• • •	-		1,944	2,320			180	• •	65
	• •	$rac{6}{2}$		973	1,230	126	126	97	13	66
		1	1	709	709		120	64		67
	• •	3		1,093	1,093			96		68
	• •	J	1	1	1,035	126	126			69
	• • •	• •		• •						70
	• •	• •		i ::			1		i	71
	• •	• •	• •		::					72
	• •	1		827	827	• •	• •			73
		1	* *	747	747			- 75		74
	• •		• •							75
	• •	• •					1			76
	::			324	400		.,	40		77
Total	-	3,806	5,095	1,100,926	1,133,218	946,820	971,994	60,758	51,437	

TABLE VI.
EXPERIENCE TABLE.

Probabilities per Cent. per Annum of Withdrawal, Death, and Retirement used in the Calculation of Valuation Factors for the Teachers' Superannuation Fund.

	nbers : Females.	Contributing Mer		98.	g Members : Mal	Contributin		
Age	as a percentage	Withdrawal, Dea Year (expressed er existing in the ne Year).	ment within a	Death, and Retireded as a Percentage the Service at the	a Year (express ber existing in	ment within	Age.	
	Retirement.	Death.	Withdrawal.	Retirement.	Death.	Withdrawal.		
	Per Cent.	Per Cent,	Per Cent.	Per Cent.	Per Cent.	Per Cent.		_
15	• •	0.08	$2 \cdot 40$		0.17	2.40	• •	í
16		0.08	2.60	• •	0.18	$2 \cdot 40$	• •	3
17	• •	0.08	2.80	• •	0.18	2.40	• •	7
18		0.08	3.10	• •	0.19	2.40	• •	3
19		0.08	3.60	• •	0.19	$2 \cdot 39$	• •)
20		0.08	4.20	• •	0.20	$2 \cdot 37$	• • •)
21		0.09	5.00	••	0.20	2.35	• •	
22		0.09	5.90	• •	0.21	$2 \cdot 32$	• •	2
23		0.09	7.00		0.21	2.29	• •	•
24		0.09	8 · 30		0.22	2.25	• •	
25		0.09	$9 \cdot 80$	• •	0.22	2.21	• • •	•
26	* /	0.10	$10 \cdot 40$		0.23	2.16	• •	
27	0.04	0.10	10.70		0.23	$2 \cdot 11$	• •	
28	0.04	0.10	$10 \cdot 40$	0.05	0.24	2.06	• •	}
29	0.04	0.11	$9 \cdot 70$	0.05	0.25	2.01	• •)
30	0.04	$0 \cdot 11$	$8 \cdot 90$	0.06	0.26	1.95	• •)
31	0.04	$0 \cdot 12$	$8 \cdot 00$	0.06	0.27	1.89	• •	
32	0.04	$0 \cdot 13$	$7 \cdot 20$	0.06	0.28	1 · 83	• •	
33	0.04	$0 \cdot 14$	$6 \cdot 50$	0.06	0.29	1.77	• • •	
34	0.04	$0 \cdot 15$	5.90	0.07	0.30	1.70	• • •	:
35	0.05	0.16	$5 \cdot 30$	0.07	0.31	1.63	• •	
36	0.06	0.17	4.80	0.07	0.32	1.56	• •	
37	0.07	0.18	$4 \cdot 30$	0.08	0.33	1.50	• •	
38	0.09	0.19	$3 \cdot 80$	0.08	0.34	1.45	• •	
39	$0 \cdot 12$	0.20	$3 \cdot 40$	0.08	0.36	1.40	• • •	•
40	$0 \cdot 16$	$0 \cdot 21$	3.00	0.09	0.38	1.35	• • •	•
41	$0 \cdot 24$	$0 \cdot 22$	$2 \cdot 60$	0.09	0.40	1.31		
42	0.36	$0 \cdot 23$	$2 \cdot 20$	0.10	0.42	1.28	• • •	
43	0.53	0.24	1.80	0.11	0.45	1.26	• • •	
44	$0 \cdot 76$	0.25	1.50	0.12	0.48	1.24	• • •	
45	$1 \cdot 35$	$0 \cdot 26$	1.20	0.14	0.51	$1 \cdot 22$	• • •	
46	$2 \cdot 10$	$0 \cdot 27$	0.90	0.16	0.54	1.19	• •	
47	$3 \cdot 00$	0.28	0.60	0.18	0.57	1.15	• •	
48	$4 \cdot 00$	$0 \cdot 29$	0.40	0.20	0.61	1.10	• • •	
49	5.00	$0 \cdot 30$	0.20	0.24	0.65	1.03	• • •	
50	6.00	0.32		0.31	0.69	0.95	• •	1
51	$7 \cdot 60$	0.34	• •	0.41	0.73	0.86	• • •	
52	$9 \cdot 40$	0.36	• •	0.55	0.77	0.76	• • •	
53	$12 \cdot 80$	0.38	• •	1.00	0.81	0.66	• • •	
54	$20 \cdot 00$	0.41		$\frac{2 \cdot 40}{4 \cdot 00}$	0.86	0.55	• •	
55	$23 \cdot 00$	0.44	••	4.00	0.91	0.43	• •	
56	$24 \cdot 00$	0.48		6.00	0.96	0.30	• •	
57	$24 \cdot 50$	0.53		8.00	1.01	0.16	٠.	
58	24.80	0.59		10.00	1.06	• •	• •	
59	$25 \cdot 00$	0.65	• •	12.00	1.12	••	• •	
60	100.00			14.00	1.18	• •	• •	
			••	16.00	1.24	• •	••	
		• •	• •	19.00	1.30	• •	• •	
			• •	22.00	1.37	••	• •	
		••	• •	26.00	1 · 44	••	• •	
				100.00				

TABLE VII.
LIFE AND SERVICE TABLE.

Based upon the Probabilities per Cent. Per Annum of Withdrawal, Death, and Retirement given in Table VI.

		Males.			Females.					
Age.	Existing in Service.	Withdrawals.	Deaths.	Retirements.	Existing in Service.	Withdrawals.	Deaths.	Retirements.	Aş	
5	100,000	2,400	170	1	100,000	2,400	80		1	
6	97,430	2,338	175		97,520	2,536	78		1	
7	94,917	2,278	171		94,906	2,657	76		1	
8	92,468	2,219	176		92,173	2,857	74		1	
9	90,073	2,153	171		89,242	3,213	71		1	
ŏ	87,749	2,080	175		85,958	3,610	69		2	
ĭ	85,494	2,009	171		82,279	4,114	74		2	
2	83,314	1.933	175		78,091	4,607	70		2	
3	81,206	1,860	171		73,414	5,139	66		2	
4	79,175	1,781	174		68,209	5,661	61		2	
5	77,220	1,707	170		62,487	6,124	56		2	
6	75,343	1,627	173	1	56,307	5,856	56		2	
7	73,543	1,552	169		50,395	5,392	50	20	2	
8	71,822	1,480	172	36	44,933	4,673	45	18	2	
$\stackrel{\circ}{9}$ \dots	70,134	1,410	175	35	40,197	3,899	44	16	2	
o	68,514	1,336	178	41	36,238	3,225	40	14		
ĭ	66,959	1,266	181	40	32,959	2,636	40	13	:	
$\stackrel{\cdot}{2}$ $\stackrel{\cdot}{\ldots}$	65.472	1,198	183	39	30,270	2,179	$\tilde{39}$	12	:	
$\tilde{3}$ \vdots	64,052	1.134	186	38	28,040	1,822	39	ĨĨ		
4	62,694	1,066	188	44	26,168	1,544	39	10		
5	61,396	1,001	190	43	24,575	1,302	39	12		
6	60,162	939	193	42	23,222	1,114	39	14		
7	58,988	885	195	47	$\frac{23,222}{22,055}$	948	40	15	;	
	57.861	839	197	46	21,052	800	40	19	3	
	56,779	795	$\frac{137}{204}$	4 = 1	$\frac{21,032}{20,193}$	686	40	24	}	
	55,735	752	212	50	19,443	583	41	31	2	
$egin{array}{cccc} 0 & \dots & 1 \\ 1 & \dots & \end{array}$	54,721	717	219	49	18,788	488	41	45		
2	53,736	688	$\frac{210}{226}$	54	18,214	401	42	66	1	
3	52,768	665	$\frac{230}{237}$	58	17,705	319	$\tilde{42}$	94	4	
4	51.808	642	$\frac{249}{249}$	62	17,250	259	43	131		
_ !	50,855	620	$\frac{249}{259}$	71	16,817	202	44	227		
	49,905	594	$\frac{269}{269}$	80	16,344	147	$\frac{11}{44}$	343	١.	
_	48,962	563	$\frac{209}{279}$	88	15,810	95	44	474		
a 1	48,032	528	293	96	15,197	61	44	608		
	47,115	485	306	113	14,484	29	43	724		
	$\frac{47,113}{46,211}$	439	319	143	13,688	25	44	821		
_	$\frac{40,211}{45,310}$	390	331	186	12,823		44	974		
$egin{array}{cccc} 1 & \dots & \\ 2 & \dots & \end{array}$	44,403	337	$\frac{331}{342}$	244	11,805		42	1,109		
_	43,480	287	352	435	10,654		40	1,363		
	42,406	233	365	1,018	9,251		38	1,849		
$egin{array}{cccc} 4 & \dots & 5 & \dots \end{array}$	40,790	175	371	1,632	7,364	•••	$\frac{36}{32}$	1,692		
	$\frac{40,790}{38,612}$	116	371	2,317	5.640		$\frac{32}{27}$	1,352	'	
6		57	362	2,865	$\frac{3,040}{4,261}$		23	1,042		
7	35,808	1	345	3,252	$\frac{4,201}{3,196}$		19	791		
8	32,524				0,190		15	595		
9	28,927	• • •	324	3,471	2,386	••		1,776		
0	25,132	1	297	3,518	1,776	• • •		1	1	
1	21,317	•••	264	3,496	• •	• • •	• •	•••	İ	
$2 \dots$	17,557	•••	228	3,336	• •	• • • • • • • • • • • • • • • • • • • •	• • •	• •		
$3 \dots$	13,993	• •	192	3,078	• • •	. , • •		•••		
4	10,723		154	2,788	• •	• • •		•••		
5	7,781			7,781				1	1	

TABLE VIII.

Consolidated Revenue Account of the Teachers' Superannuation Fund from 1st January, 1906, to 31st January, 1934.

Income.	£	s.	d.	Outgo.	£	s.	d.
Funds at 1st January, 1906	,			Pensions to members, and allowances			
Members' contributions	2,309,263	19	6	to widows and children	2,892,751	4	8
Transfers from other funds	4,726	9	2	Contributions refunded	424,414	6	11
Government subsidy	1,058,583	6	8	Transfers to other funds	5,597	4	10
Subsidy under section 114, Public Ser	-			Administration expenses	19,312	0	1
vice Superannuation Act, 1927 .	. 33,187	15	7	Commission	29,960	4	6
Subsidy from Fiji Government	2,202	17	3	Provision for loss on investments	16,475	17	11
Interest from investments	955,781	1	0	Other payments	43	6	9
Interest on arrears of contributions .	26,333	3	2	Funds at 31st January, 1934	1,003,184	16	1
Other receipts	1,660	9	5	, , , , , , , , , , , , , , , , , , ,	,,		
	£4,391,739	1	9		£4,391,739	1	9

 $\begin{tabular}{ll} TABLE\ IX. \\ SUMMARY\ OF\ TEACHERS'\ SUPERANNUATION\ FUND\ RESULTS. \\ \end{tabular}$

	VALUATION BALANCE-SH	EET, AS AT 31ST	January, 19	34.	
MALES	_	Liabilities.		£	£
Value of	561 pensions for £154,147 19s. 268 pensions for £8,308 per am	per annum alread num granted to w	ly granted vidows of de-	1,354,293	
,,	ceased contributors and per 68 pensions for £1,768 per an	nsioners nnum granted to		78,737	
	deceased contributors and	pensioners		7,148	
,,	prospective pensions to widows			230,541	
,,	prospective pensions to children			45,686	
,,	prospective pensions for back s			1,597,700	
,,	prospective pensions for future			1,231,410	
,,	return of contributions on deat			14,710	
,,	return of contributions on with				
,,	return of contributions (section		$\mathbf{Expenditure}$		
	Adjustment Act, 1932), say			16,000	4,706,262
Females—					, ,
Value of	981 pensions for £135,402 3s. p	er annum already	$7 ext{ granted } \dots$	1,535,722	
,,	prospective pensions for back s			1,226,984	
,,	prospective pensions for future			1,120,165	
,,	return of contributions on deat			23,646	
,,	return of contributions on with	drawal		183,899	
"	return of contributions (section		Expenditure		
	Adjustment Act, 1932), say	7		14,000	
					4,104,416
					£8,810,678
		Assets.			£
Accumulated					1,003,185
Value of fut	are contributions from males				820,302
,, fut	re contributions from females				503,375
	sidy of £43,000 now being paid				955,556
,, sub	sidy under section 114, Public S	Service Superannu	ation Act		156,114
,, fut	ure increase in subsidy to be pro-	ovided	• • • • • • • • • • • • • • • • • • • •		5,372,146
					£8,810,678

TABLE X. Statement showing Subsidies paid as compared with Subsidies required under the System indicated in the Act.

Year ended.	Subsidy required.	Subsidy paid.	Shortage.
	£	£	£
•	Nil	5,000	-(5,000)
	2,000	${f Nil}$	2,000
**	5,000	Nil	5,000
	5,000	\mathbf{Nil}	5,000
	8,000	7,000	1,000
	11,000	7,000	4,000
	17,000	7,000	10,000
	17,000	7,000	10,000
**	17,000	17,000	Nil
	33,000	17,000	16,000
	33,000	17,000	16,000
" 1916	33,000	17,000	16,000
	43,000	17,000	26,000
,, 1918	43,000	17,000	26,000
,, 1919	43,000	43,000	Nil
,, 1920	68,000	43,000	25,000
	68,000	43,000	25,000
lst January, 1923*	73,667	71,583	2,084
,, 1924	93,000	63,833	29,167
,, 1925	137,000	68,000	69,000
,, 1926	137,000	68,000	69,000
,, 1927	137,000	68,000	69,000
1099	173,000	68,000	105,000
1090	173,000	68,000	105,000
1090	173,000	68,000	105,000
1091	214,000	122,167	91,833
1020	214,000	43,000	171,000
1099	214,000	43,000	171,000
1094	214,000	43,000	171,000
${\it Totals} \qquad \dots$	2,398,667	1,058,583	1,340,084

^{*} Period of thirteen months.

 $\label{eq:approximate Cost of Paper.} \textbf{--Preparation, not given ; printing (2,434 copies), £35 10s.}$