1915.

NEW ZEALAND.

TEACHERS' SUPERANNUATION FUND:

ACTUARIAL EXAMINATION FOR THE TRIENNIAL PERIOD ENDED 31st DECEMBER, 1913.

Laid before Parliament in pursuance of Section 38 (4) of the Public Service Classification and Superannuation Amendment Act, 1908.

REPORT.

By the Actuary appointed by His Excellency the Governor to make the Actuarial Examina-tion of the Teachers' Superannuation Fund for the Triennial Period ended 31st December, 1913.

Wellington, 8th March, 1915.

1. I have the honour to submit the following report on the Teachers' Superannuation Fund as at the 31st December, 1913, as required by section 38 of the Public Service Classification and Superannuation Amendment Act, 1908.

2. The Teachers' Superannuation Act, 1905, which came into operation on the 1st January, 1906, established a superannuation scheme for teachers. The benefits under this Act, however, compared unfavourably with those granted to public servants, and by the Public Service Classifica-tion and Superannuation Amendment Act, 1908, the scheme was brought more into line with the Public Service and Government Railway Funds. The chief difference between the old and new schemes is in the manner of calculating the pensions, only half the usual rate of pension being allowed for back service under the old scheme, and the whole pension being calculated on a lower average salary—viz., the average for the whole period of service instead of for the last three years. A minimum pension of £52 per annum, however, formed one of the benefits under the old scheme for those in the service on the 1st January, 1906. Of the 2,505 original members on the 31st March, 1908, there were at the 31st December, 1913, only ninety-seven contributors who had elected to remain subject to Part IX of the Education Act, 1908, with which the Teachers' Superannuation Act, 1905, was consolidated.

3. By the Public Service Classification and Superannuation Amendment Act, 1912, the scheme was further extended to include service under the Universities, and persons so employed at the date of the amendment were given the option of joining the scheme before the 1st July, 1913, their pensions to be computed in the same manner as in the case of new entrants, save that there will be added thereto a one-hundred-and-twentieth part of their salaries for every complete year of service, whether continuous or not, prior to the 7th November, 1912, the date of the commencement of the Act.

4. The last-mentioned Act also revived the right of teachers permanently employed on the 1st January, 1906, who had not joined the scheme, to elect to do so, the election to be exercised before the 1st July, 1913. Subject to the payment of the arrears of contribution with 5 per cent. interest from the 1st January, 1906, these teachers obtained the same rights as if they had joined on that date. One hundred and fifty-six became contributors on these conditions.

5. It is compulsory for all persons to become contributors to the fund who are first permanently employed after the passing of the Act—

(a.) In the Education service as a teacher in any public school;

(b.) In any branch of the Education service which is also a branch of the Government service;

(c.) Under the University of New Zealand, Auckland University College, Victoria College, University of Otago, Canterbury 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.

6. "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 associated classes under Part VII of the Education Act, 1908; 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 College, University of Otago, Canterbury College, or the Canterbury Agricultural College.

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

8. The number of pensioners on the fund at the 31st December, 1913, was 460, drawing pensions amounting to £29,898 per annum; the number of contributors at the same date was 4,017, with aggregate salaries amounting to £708,589, and paying contributions at the rate of £44,956 per annum.

9. The income and outgo of the fund during the three years are shown in the Consolidated Revenue Account, which is as follows :—

Consolidated Revenue Account of the Teachers' Superannuation Fund from the 1st January, 1911, to the 31st December, 1913.

Income.		£	s.	d.	Outgo.		£	s.	d.
Funds at 1st January, 1911	..	154,211	16	6	Allowances	..	66,596	2	10
Members' contributions	..	133,443	14	9	Contributions refunded	..	14,655	10	11
Government contributions	..	31,000	0	0	Public Trust Office commission	..	425	10	1
Refunds	..	118	7	7	Miscellaneous	..	4	4	0
Interest	..	28,043	13	7	Funds at 31st December, 1913	..	265,136	4	7
		£346,817	12	5			£346,817	12	5

Valuation.

10. The rate of interest used in the valuation was 4 per cent. The funds are at present invested with the Public Trustee at $4\frac{1}{4}$ per cent., and, while more remunerative investments could be obtained at the present time, as referred to elsewhere, a higher rate than 4 per cent. could not with safety be assumed for the long periods over which a pension scheme will extend.

11. The Experience Table (Table VII) contains the rates per cent. per annum for withdrawals, mortality, retirement on pension, and increase of salary, used in arriving at the liability. The withdrawal and the salary scale have been calculated entirely from the experience of the fund itself, but owing to the limited time the scheme has been in operation it has not been possible to do this in the case of the other factors, and the rates of retirement on pension and death have been partly arrived at by including the experience of the Public Service Fund. The Life and Service Table deduced from these rates is given in Table VIII of the appendix.

12. No particulars regarding the wives and children of contributors have been supplied, and it has been assumed that the prospective liability for these will be relatively the same, age for age, as in the case of male public servants.

13. It has also been assumed that all male and female teachers will retire at the age of sixty-five and sixty respectively, if they remain so long in the service, although there are a few still contributing at higher ages.

14. The benefits to which the contributors who elected to remain subject to the provisions of the old Act are entitled have been valued as if they were equivalent to the generally higher benefits provided by the new Act. Probably this will not overstate the real liability, as they exercised a decided selection in choosing between the old and the new schemes.

15. The valuation balance-sheet is given in detail in Table IX, a summary of which is as follows :—

Liabilities.

	£
Value of contributors' pensions already granted for £27,932 per annum	277,705
Value of widows' and children's pensions already granted for £1,966 per annum	15,749
Value of prospective pensions for back service	1,012,152
Value of prospective pensions for future service	695,277
Value of prospective pensions to widows and children	111,252
Value of return of contributions on death or withdrawal	90,137
	£2,202,272

Assets.

	£
Accumulated funds	265,136
Value of future contributions	493,539
Value of present and future Government subsidies	1,443,597
	£2,202,272

16. Compared with the previous valuation the liabilities show an increase of £696,593, and the funds and value of future contributions an increase of £236,814, making a net increase in the Government's liability of £459,779. The causes of the increase are (1) the extension of the definition of " Education service," as already mentioned, to include service under universities; (2) the revival of the right of persons employed in the Education service on the 1st January, 1906, who had not already joined the fund, to do so; (3) increase of salary scale and consequent increase in the pensions to be based thereon; and (4) the natural increase in the number of contributors. Under No. (1) forty-six persons joined the scheme, some of whom were entitled to retire immediately on pension; and under No. (2) 156 persons joined, bringing on to the fund a considerable liability for back service.

The number of contributors, their salaries, and the annual pensions payable at 31st December, 1913, and the 31st December, 1910, respectively were as follows :—

	1913.	1910.
Number of contributors	4,017	3,247
	£	£
Annual salaries	708,589	547,932
Average salary per contributor	176	169
Annual pensions payable	29,898	14,261

The nearer a person is to the retiring-age the greater is the value of his pension and the less the value of his future contributions; the increase of salary being chiefly at the higher ages has therefore greatly increased the liability, while adding little to the value of the assets.

17. Section 38 (2) of the Act requires the report to 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." As the contributions are insufficient to provide for the full benefits for future service, the whole of the pensions for back service and a certain portion for future service are left to be provided by the subsidy. The sums required during the ensuing three years, 1914, 1915, and 1916, are as follows :—

Required for	1914.	1915.	1916.
	£	£	£
Current ordinary pensions ..	26,802	25,686	24,579
New pensions and family pensions ..	6,507	12,425	18,379
	33,309	38,111	42,958
Deduct amount of pension provided by contributions ..	4,172	5,215	6,358
Subsidies required for ensuing three years ..	29,137	32,896	36,600

I have therefore to report that, in addition to the annual subsidy of £17,000 now being paid, further subsidies of £12,000, £16,000, and £20,000 will be required for the years 1914, 1915, and 1916 respectively, or an average of about £16,000 per annum. The increase in the subsidy required has, like the increase in the liability, been partly occasioned by the additional contributors joining the fund under the Public Service Classification and Superannuation Amendment Act, 1912.

As the scheme had only been in operation for eight years at the date of the valuation, while some of the pensions were for nearly forty years' service, the amount of pension purchased by the contributions is at present comparatively small. The proportion of the total pensions so purchased, however, shows a steady increase from year to year.

18. The only other matter calling for remark is the investment of the funds. The higher the rate of interest which can be obtained, having due regard to the safety of the capital, the stronger the financial position of the fund will be, and the less the subsidy it will eventually be necessary to ask for. The interest allowed by the Public Trustee (4¼ per cent.) is much below the rate which could be secured by the direct investment of the moneys on mortgage, and I would strongly advocate an alteration being made in the Act to enable them to be invested in this manner.

It has been proposed that an Investment Committee, representing the Teachers', Public Service, and Railway Superannuation Funds, should be set up for the purpose of investing the moneys of the different funds. This, of course, could be done without any interference with the independence of the different schemes or any amalgamation of their liabilities or subsidies. If desired each fund could be separately invested by the committee, but pooling the money for this purpose, besides simplifying the book-keeping and general procedure, has certain other advantages, as, instead of three uninvested balances, there would only be one, and in the event of a loss arising through a bad investment it would not fall wholly on one fund but be distributed *pro rata*. The same rate of interest would also be realized by each. The interest, less losses (if any), and the expenses, &c., could be apportioned to the different funds according to the amounts invested.

The funds at the 31st December, 1913, amounted to £265,136, and if 5 per cent. could be realized on this instead of 4¼ per cent. it would make an annual addition to the income of £1,989, and as the funds must eventually become very large to correspond with the liabilities, even a small increase in the rate of interest is of great importance.

PERCY MUTER, F.I.A.,
Acting-Actuary to the Government Insurance Department.

APPENDIX.

TABLE I.

THE BENEFITS AND CONTRIBUTIONS PROVIDED FOR BY THE ACT.

(These benefits are slightly modified in the case of those existing contributors (numbering 97) who elected to remain under the provisions of Part IX of the Education Act, 1908, and in the case of persons employed in service under the Universities on the 7th November, 1912, who joined the scheme before 1st July, 1913.)

Contributions

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

Age 30 and under	5 per cent. of pay.
Over 30 and not exceeding 35	6 ,,
,, 35 ,, 40	7 ,,
,, 40 ,, 45	8 ,,
,, 45 ,, 50	9 ,,
,, 50 ..	10 ,,

Benefits

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 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.)

II. *On retirement before Pension Age (on the Grounds of being medically unfit for Future Duty.)*

(1.) At any time after fifteen years' service, 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.) £18 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 : 5s. 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.*

Year.	New Members.			Increase by Promotion.		Discontinued.			Total in Force at End of Year.		
	Number.	Salaries.	Annual Contributions.	Salaries.	Annual Contributions.	Number.	Salaries.	Annual Contributions.	Number.	Salaries.	Annual Contributions.
		£	£	£	£		£	£		£	£
1906–7 ..	2,939	444,950	33,652	..	..	127	18,095	1,604	2,812	426,855	32,048
1907–8 ..	247	34,600	1,860	14,446	914	177	29,294	1,952	2,882	446,607	32,870
Part 1908	161	19,083	1,075	14,000	825	112	25,044	1,713	2,931	454,646	33,057
1909 ..	334	37,327	1,185	41,670	2,975	113	22,403	1,673	3,152	511,240	35,544
1910 ..	287	35,734	1,862	36,466	2,416	192	35,508	2,537	3,247	547,932	37,285
1911 ..	349	40,267	2,234	41,524	1,823	212	33,731	2,378	3,384	595,992	38,964
1912 ..	470	50,364	2,740	14,616	710	213	32,183	2,201	3,641	628,789	40,213
1913 ..	645	108,638	6,216	11,249	1,292	269	40,087	2,765	4,017	*708,589	*44,956
Totals..	*5,432	770,963	50,824	173,971	10,955	*1,415	236,345	16,823	..	..	..

TABLE III.
PARTICULARS OF DISCONTINUANCE OF ACTIVE MEMBERSHIP.*

Year.	By Death.			By Withdrawal or Dismissal.		Old Age or Length of Service.		Medically unfit.			Total discontinued.		
	Number.	Amount paid on Retirement.	Family Pension.	Number.	Amount paid on Retirement.	Number.	Pensions entered upon.	Number.	Amount paid on Retirement.	Pensions entered upon.	Number.	Amount paid on Retirement.	Pensions entered upon.
		£	£		£		£		£	£		£	£
1906–7 ..	6	58	155	35	276	78	4,207	8	137	312	127	471	4,674
1907–8 ..	13	220	212	136	1,014	20	1,182	8	234	208	177	1,468	1,602
Part 1908 ..	10	341	341	83	1,276	9	504	10	51	491	112	1,668	1,336
1909 ..	9	436	321	76	1,389	24	2,049	4	..	343	113	1,825	2,713
1910 ..	9	656	114	131	2,863	46	4,813	6	..	559	192	3,519	5,486
1911 ..	8	426	176	155	4,370	39	4,087	10	..	630	212	4,796	4,893
1912 ..	7	607	75	147	4,005	49	4,146	10	..	946	213	4,612	5,167
1913 ..	19	884	321	184	4,195	52	5,413	14	..	1,372	269	5,079	7,106
Totals ..	*81	3,628	1,715	*947	19,388	317	26,401	*70	422	4,861	*1,415	23,438	32,977

TABLE IV.
STATEMENT OF PROGRESS OF PENSIONS.*

Year.	Attainment of Pension Age or Length of Service.						Retired medically unfit.					
	Granted or transferred.		Void by Death.		In Force.		Granted or transferred.		Void by Death or Expiry.		In Force.	
	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.
		£		£		£		£		£		£
1906–7..	78	4,207	..	..	78	4,207	6	312	..	..	6	312
1907–8..	20	1,182	4	220	94	5,169	4	208	1	52	9	468
Part 1908	9	503	3	156	100	5,516	9	491	1	52	17	907
1909 ..	24	2,049	4	248	120	7,317	4	343	4	237	17	1,013
1910 ..	46	4,813	8	693	158	11,437	6	559	2	164	21	1,408
1911 ..	39	4,087	3	175	194	15,349	10	630	1	163	30	1,875
1912 ..	49	4,146	3	163	240	19,332	10	946	1	52	39	2,769
1913 ..	52	5,413	8	694	284	24,051	14	1,372	3	260	50	3,884
Totals ..	317	26,400	33	2,349	..	..	63	4,861	13	980	..	..

Year.	Death of Contributor or Pensioner: Family Pension.						Total Pensions.					
	Granted or transferred.		Void by Death or Expiry.		In Force.		Granted or transferred.		Void.		In Force.	
	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.	Number.	Pension.
		£		£		£		£		£		£
1906–7 ..	10	155	..	..	10	155	94	4,674	..	..	94	4,674
1907–8 ..	20	310	3	39	27	426	44	1,700	8	311	130	6,063
Part 1908 ..	26	403	2	31	51	798	44	1,397	6	239	168	7,221
1909 ..	32	476	5	65	78	1,209	60	2,868	13	550	215	9,539
1910 ..	17	269	4	62	91	1,416	69	5,641	14	919	270	14,261
1911 ..	18	279	9	132	100	1,563	67	4,996	13	470	324	18,787
1912 ..	6	93	9	122	97	1,534	65	5,185	13	337	376	23,635
1913 ..	33	489	4	57	126	1,966	99	7,274	15	1,011	460	29,898
Totals ..	*162	*2,474	36	508	..	..	*542	33,735	82	3,837	..	..

* Compiled from annual reports.

TABLE V.

PRESENT ANNUAL PAY AND CONTRIBUTIONS OF OFFICERS NOW IN SERVICE.*

Age attained.		Number.		Present Annual Pay.		Present Annual Contributions.		Age attained.
		Male.	Female.	Male.	Female.	Male.	Female.	
				£	£	£	£	
80	.. ..	1	..	600	..	60·0	..	80
79	.. ..	1	..	600	..	60·0	..	79
78	.. ..	1	..	132	..	13·2	..	78
73	.. ..	1	..	225	..	22·5	..	73
70	.. ..	2	..	405	..	40·5	..	70
69	.. ..	1	..	140	..	14·0	..	69
68	.. ..	1	..	335	..	33·5	..	68
66	.. ..	5	..	1,180	..	118·0	..	66
65	.. ..	7	1	2,095	115	209·5	11·5	65
64	.. ..	10	1	2,475	165	247·5	16·5	64
63	.. ..	7	..	1,960	..	196·0	..	63
62	.. ..	11	2	4,065	605	406·5	60·5	62
61	.. ..	11	2	2,683	285	268·3	28·5	61
60	.. ..	18	..	5,374	..	537·4	..	60
59	.. ..	18	1	5,430	135	543·0	13·5	59
58	.. ..	21	2	6,405	475	623·1	42·8	58
57	.. ..	13	4	4,605	570	423·5	53·3	57
56	.. ..	27	2	7,231	352	659·0	31·7	56
55	.. ..	34	10	10,240	1,775	922·9	159·8	55
54	.. ..	32	11	8,849	1,912	804·9	172·1	54
53	.. ..	31	12	10,175	1,955	911·7	172·9	53
52	.. ..	15	16	4,436	2,553	375·3	209·8	52
51	.. ..	46	15	11,899	2,107	967·0	173·3	51
50	.. ..	45	27	11,707	4,152	948·7	340·5	50
49	.. ..	44	39	12,496	5,985	1,004·6	485·0	49
48	.. ..	49	49	13,775	8,264	1,084·9	640·5	48
47	.. ..	52	46	14,162	7,465	1,016·2	541·3	47
46	.. ..	38	45	11,040	7,502	779·6	531·7	46
45	.. ..	47	47	12,119	7,350	857·0	525·0	45
44	.. ..	52	57	14,953	9,340	1,072·2	664·0	44
43	.. ..	45	47	12,988	7,054	886·4	483·9	43
42	.. ..	41	55	10,597	8,521	654·2	521·8	42
41	.. ..	46	44	11,294	7,461	696·7	456·2	41
40	.. ..	46	53	10,753	7,559	665·0	471·2	40
39	.. ..	50	70	12,794	10,588	776·6	645·1	39
38	.. ..	48	53	11,507	7,630	666·5	448·8	38
37	.. ..	38	65	8,727	9,519	454·3	505·0	37
36	.. ..	38	59	9,085	8,575	471·8	445·6	36
35	.. ..	58	54	12,682	7,544	658·5	396·0	35
34	.. ..	57	80	13,475	11,416	685·8	591·9	34
33	.. ..	54	64	10,896	8,625	561·7	449·8	33
32	.. ..	59	69	12,385	9,927	632·1	503·1	32
31	.. ..	64	70	13,351	9,102	678·3	458·6	31
30	.. ..	40	79	7,808	10,769	390·4	539·6	30
29	.. ..	52	91	11,139	11,805	557·0	590·2	29
28	.. ..	53	83	10,315	10,201	515·8	510·1	28
27	.. ..	40	100	7,110	12,240	355·5	612·0	27
26	.. ..	52	123	9,741	14,101	487·0	705·1	26
25	.. ..	60	123	10,300	13,744	515·0	687·2	25
24	.. ..	77	129	12,257	13,638	612·8	681·9	24
23	.. ..	51	127	7,660	13,244	383·0	662·2	23
22	.. ..	47	91	6,581	8,580	329·0	429·0	22
21	.. ..	15	41	1,447	2,997	72·4	149·9	21
20	.. ..	8	21	545	1,049	27·2	52·5	20
19	.. ..	8	14	465	640	23·3	32·0	19
18	.. ..	8	17	370	590	18·5	29·5	18
17	.. ..	3	5	126	175	6·3	8·7	17
16	.. ..	1	1	35	20	1·7	1·0	16
Totals	..	1,800	2,217	418,224*	290,376*	28,003·3*	16,942·1*	Totals.

* Compiled from cards.

TABLE VI.

CLASSIFICATION OF PENSIONS GRANTED FROM 1ST JANUARY, 1911, TO 31ST DECEMBER, 1913, INCLUSIVE, SHOWING THE AGES AT WHICH THEY WERE GRANTED.

Age at which Pension granted.	Attainment of Pension Age or Length of Service. Number. M.	F.	Total.	Amount of Pension. £ s. d.	Retired medically unfit. Number. M.	F.	Total.	Amount of Pension. £ s. d.	Widows and Children. Number.	Amount of Pension. £	Total. Number. M.	F.	Total.	Amount of Pension. £ s. d.	Age at which Pension granted.
73	..	..	..	..	..	..	..	..	1	18	..	1	1	18 0 0	73
72	1	..	1	52 0 0	..	..	..	..	..	..	1	..	1	52 0 0	72
69	1	..	1	98 16 0	..	..	..	..	..	..	1	..	1	98 16 0	69
68	1	..	1	106 8 0	..	..	..	..	..	..	1	..	1	106 8 0	68
66	6	..	6	1,263 19 0	..	..	..	..	..	..	6	..	6	1,263 19 0	66
65	18	..	18	2,087 5 7	..	..	..	..	..	..	18	..	18	2,087 5 7	65
64	3	2	5	329 8 8	..	..	..	..	1	18	3	3	6	347 8 8	64
63	3	..	3	289 19 2	..	..	..	..	1	18	3	1	4	307 19 2	63
62	4	1	5	455 16 10	..	..	..	..	1	18	4	2	6	473 16 10	62
61	3	..	3	253 8 7	..	..	..	..	..	..	3	..	3	253 8 7	61
60	13	2	15	1,487 4 7	2	..	2	194 16 5	1	18	15	3	18	1,700 1 0	60
59	..	5	5	385 6 0	..	..	..	..	2	36	..	7	7	421 6 0	59
58	3	..	3	367 5 0	1	..	1	111 17 0	..	..	4	..	4	479 2 0	58
57	..	6	6	486 7 9	2	..	2	162 10 0	..	..	2	6	8	648 17 9	57
56	4	5	9	1,060 13 6	3	..	3	344 9 0	1	18	7	6	13	1,423 2 6	56
55	1	11	12	892 5 9	3	..	3	301 16 0	1	18	4	12	16	1,212 1 9	55
54	..	5	5	418 15 9	1	..	1	129 12 0	..	..	1	5	6	548 7 9	54
53	..	5	5	507 17 0	..	..	..	..	..	..	..	5	5	507 17 0	53
52	..	6	6	343 7 7	..	..	..	..	..	..	..	6	6	343 7 7	52
51	..	4	4	302 10 0	1	..	1	113 6 0	..	..	1	4	5	415 16 0	51
50	..	8	8	573 1 7	..	..	..	..	1	18	..	9	9	591 1 7	50
49	..	4	4	377 3 0	3	..	3	485 3 0	..	..	3	4	7	862 6 0	49
48	..	5	5	599 11 4	1	..	1	139 11 0	..	..	1	5	6	739 2 4	48
47	..	3	3	289 1 0	1	..	1	52 0 0	..	..	1	3	4	341 1 0	47
46	..	5	5	471 10 0	..	1	1	72 17 0	..	..	..	6	6	544 7 0	46
45	..	..	..	..	..	1	1	52 0 0	1	18	..	2	2	70 0 0	45
44	..	..	..	..	..	1	1	67 12 0	1	18	..	2	2	85 12 0	44
43	..	1	1	94 19 0	..	..	..	..	1	18	..	2	2	112 19 0	43
42	..	..	..	..	..	1	1	52 0 0	..	..	..	1	1	52 0 0	42
41	..	..	..	..	1	1	2	143 10 0	..	..	1	1	2	143 10 0	41
40	..	1	1	52 0 0	1	1	2	177 5 0	..	..	1	2	3	229 5 0	40
39	..	..	..	..	..	2	2	117 2 0	..	..	..	2	2	117 2 0	39
35	..	..	..	..	1	..	1	48 8 0	1	18	1	1	2	66 8 0	35
34	..	..	..	..	1	1	2	79 3 0	..	..	1	1	2	79 3 0	34
33	..	..	..	..	..	3	3	103 6 8	1	18	..	4	4	121 6 8	33
31	..	..	..	..	..	..	..	..	2	36	..	2	2	36 0 0	31
29	..	..	..	..	..	..	..	..	1	18	..	1	1	18 0 0	29
28	..	..	..	..	..	..	..	..	1	18	..	1	1	18 0 0	28
13	..	..	..	..	..	..	..	..	3	39			3	39 0 0	13
12	..	..	..	..	..	..	..	..	4	52			4	52 0 0	12
11	..	..	..	..	..	..	..	..	3	39			3	39 0 0	11
10	..	..	..	..	..	..	..	..	2	26			2	26 0 0	10
9	..	..	..	..	..	..	..	..	4	52			4	52 0 0	9
8	..	..	..	..	..	..	..	..	3	39			3	39 0 0	8
7	..	..	..	..	..	..	..	..	3	39	}20	13 {	3	39 0 0	7
5	..	..	..	..	..	..	..	..	1	13			1	13 0 0	5
4	..	..	..	..	..	..	..	..	1	13			1	13 0 0	4
3	..	..	..	..	..	..	..	..	2	26			2	26 0 0	3
2	..	..	..	..	..	..	..	..	3	39			3	39 0 0	2
1	..	..	..	..	..	..	..	..	1	13			1	13 0 0	1
0	..	..	..	..	..	..	..	..	1	13			1	13 0 0	0
*	..	..	..	..	..	..	..	..	2	26			2	26 0 0	*
*	..	..	..	..	..	..	..	..	5	90	..	5	5	90 0 0	*
Totals	61	79	140	13,646 0 8	22	12	34	2,948 4 1	57	861	103	128	231	17,455 4 9	Totals.

* Not stated. Adjusted to agree with annual reports.

TABLE VII.

EXPERIENCE TABLE.

Rates per Cent. per Annum of Withdrawal, Mortality, Retirement, and Increase of Salary.

	Contributing Members : Males.				Contributing Members : Females.				
Age.	Rate of Withdrawal (Teachers' Super-annuation Fund).	Rate of Mortality (Combined New Zealand Super-annuation Funds).	Rate of Retirement (Combined New Zealand Super-annuation Funds).	Rate of Increase of Salary (Teachers' Super-annuation Fund).	Rate of Withdrawal (Teachers' Super-annuation Fund).	Rate of Mortality (Assumed).	Rate of Retirement (Combined New Zealand Super-annuation Funds).	Rate of Increase of Salary (Teachers' Super-annuation Fund).	Age.
15	6·60	0·20	..	4·2	2·40	0·22	..	1·6	15
16	5·90	0·20	..	6·3	2·60	0·23	..	3·8	16
17	5·35	0·20	..	8·4	2·80	0·24	..	6·6	17
18	4·90	0·20	..	14·1	3·10	0·25	..	10·6	18
19	4·50	0·20	..	18·6	3·60	0·26	..	12·4	19
20	4·10	0·21	..	20·4	4·20	0·27	..	13·0	20
21	3·70	0·21	..	20·1	5·00	0·29	..	12·0	21
22	3·40	0·22	..	20·4	5·70	0·30	..	12·0	22
23	3·12	0·23	..	18·3	6·20	0·31	..	9·0	23
24	2·90	0·24	..	13·5	6·70	0·31	..	6·6	24
25	2·70	0·25	..	8·4	7·00	0·32	..	5·2	25
26	2·52	0·26	..	6·0	7·15	0·32	..	4·6	26
27	2·37	0·27	..	5·1	7·20	0·32	..	3·8	27
28	2·22	0·28	..	4·5	7·10	0·32	..	3·4	28
29	2·10	0·29	..	4·8	6·90	0·32	..	3·4	29
30	2·00	0·30	..	4·8	6·70	0·32	..	2·6	30
31	1·90	0·32	..	4·2	6·40	0·32	..	2·4	31
32	1·80	0·34	..	4·8	6·20	0·32	..	2·0	32
33	1·70	0·36	..	4·5	5·80	0·32	0·25	1·6	33
34	1·60	0·38	0·18	4·5	5·50	0·32	0·25	2·0	34
35	1·53	0·40	0·20	4·8	5·10	0·33	0·25	1·8	35
36	1·47	0·42	0·20	4·5	4·70	0·33	0·25	2·0	36
37	1·40	0·44	0·20	4·8	4·20	0·33	0·25	1·8	37
38	1·35	0·46	0·21	4·5	3·70	0·33	0·30	1·8	38
39	1·30	0·49	0·22	4·8	3·10	0·34	0·40	1·6	39
40	1·23	0·52	0·23	4·8	2·60	0·34	0·50	2·0	40
41	1·20	0·53	0·24	4·5	2·20	0·36	0·60	1·8	41
42	1·14	0·54	0·25	5·1	1·90	0·38	0·70	2·2	42
43	1·11	0·55	0·26	4·5	1·60	0·40	0·88	1·6	43
44	1·08	0·57	0·27	3·9	1·30	0·44	1·08	1·6	44
45	1·04	0·59	0·28	3·9	0·95	0·48	1·38	1·8	45
46	1·02	0·60	0·29	3·6	0·52	0·52	1·83	2·0	46
47	1·00	0·63	0·30	3·0	..	0·57	2·58	2·0	47
48	1·00	0·67	0·41	3·0	..	0·63	3·63	1·4	48
49	0·98	0·70	0·53	2·4	..	0·69	4·63	1·0	49
50	0·96	0·73	0·68	2·4	..	0·76	5·90	0·8	50
51	0·92	0·78	0·88	1·5	..	0·83	7·43	0·2	51
52	0·87	0·82	1·12	2·1	..	0·90	9·25	..	52
53	0·82	0·86	1·37	1·5	..	0·98	11·88	..	53
54	0·74	0·92	1·69	1·2	..	1·07	14·63	..	54
55	0·66	0·98	2·07	0·9	..	1·15	17·38	..	55
56	0·57	1·05	2·52	1·2	..	1·25	19·88	..	56
57	0·46	1·15	3·05	0·6	..	1·34	21·30	..	57
58	0·32	1·25	3·74	0·6	..	1·45	22·50	..	58
59	0·20	1·37	4·57	..	..	1·56	25·00	..	59
60	..	1·52	5·81	..	..	..	..	..	..
61	..	1·69	7·91	..	..	..	..	..	..
62	..	1·88	13·00	..	..	..	..	..	..
63	..	2·12	21·20	..	..	..	..	..	..
64	..	2·40	29·50	..	..	..	..	..	..

TABLE VIII.

LIFE AND SERVICE TABLE.

BASED UPON THE RATES PER CENT. PER ANNUM OF WITHDRAWAL, MORTALITY, AND RETIREMENT GIVEN IN TABLE VII.

	Males.					Females.					
Age.	Existing in Service.	With-drawals.	Deaths.	Retire-ments.	Average Salary.	Existing in Service.	With-drawals.	Deaths.	Retire-ments.	Average Salary.	Age.
					£					£	
15 ..	100,000	6,599	200	..	30·0	100,000	2,400	220	..	24·0	15
16 ..	93,201	5,498	186	..	34·2	97,380	2,532	224	..	25·6	16
17 ..	87,517	4,683	175	..	40·5	94,624	2,650	227	..	29·4	17
18 ..	82,659	4,050	165	..	48·9	91,747	2,844	230	..	36·0	18
19 ..	78,444	3,530	157	..	63·0	88,673	3,193	231	..	46·6	19
20 ..	74,757	3,065	157	..	81·6	85,249	3,580	230	..	59·0	20
21 ..	71,535	2,647	150	..	102·0	81,439	4,072	236	..	72·0	21
22 ..	68,738	2,336	151	..	122·1	77,131	4,396	231	..	84·0	22
23 ..	66,251	2,067	153	..	142·5	72,504	4,496	224	..	96·0	23
24 ..	64,031	1,857	154	..	160·8	67,784	4,541	211	..	105·0	24
25 ..	62,020	1,674	155	..	174·3	63,032	4,412	199	..	111·6	25
26 ..	60,191	1,517	156	..	182·7	58,421	4,177	185	..	116·8	26
27 ..	58,518	1,387	158	..	188·7	54,059	3,893	171	..	121·4	27
28 ..	56,973	1,265	160	..	193·8	49,995	3,549	159	..	125·2	28
29 ..	55,548	1,167	161	..	198·3	46,287	3,194	147	..	128·6	29
30 ..	54,220	1,085	163	..	203·1	42,946	2,878	137	..	132·0	30
31 ..	52,972	1,007	169	..	207·9	39,931	2,556	128	..	134·6	31
32 ..	51,796	932	175	..	212·1	37,247	2,309	120	..	137·0	32
33 ..	50,689	862	183	..	216·9	34,818	2,019	113	87	139·0	33
34 ..	49,644	794	189	89	221·4	32,599	1,793	106	81	140·6	34
35 ..	48,572	743	194	97	225·9	30,619	1,562	99	76	142·6	35
36 ..	47,538	699	199	95	230·7	28,882	1,358	94	72	144·4	36
37 ..	46,545	652	205	93	235·2	27,358	1,149	90	68	146·4	37
38 ..	45,595	615	209	96	240·0	26,051	964	86	78	148·2	38
39 ..	44,675	581	219	99	244·5	24,923	773	83	100	150·0	39
40 ..	43,776	538	228	101	249·3	23,967	623	82	120	151·6	40
41 ..	42,909	515	227	103	254·1	23,142	509	83	139	153·6	41
42 ..	42,064	480	227	105	258·6	22,411	426	84	157	155·4	42
43 ..	41,252	458	227	107	263·7	21,744	348	88	191	157·6	43
44 ..	40,460	437	230	109	268·2	21,117	275	92	228	159·2	44
45 ..	39,684	414	234	111	272·1	20,522	195	97	283	160·8	45
46 ..	38,925	397	234	113	276·0	19,947	104	104	365	162·6	46
47 ..	38,181	382	240	114	279·6	19,374	..	112	500	164·6	47
48 ..	37,445	374	251	154	282·6	18,762	..	118	681	166·6	48
49 ..	36,666	360	257	194	285·6	17,963	..	124	832	168·0	49
50 ..	35,855	344	262	244	288·0	17,007	..	129	1,003	169·0	50
51 ..	35,005	322	273	308	290·4	15,875	..	131	1,180	169·8	51
52 ..	34,102	297	279	382	291·9	14,564	..	132	1,347	170·0	52
53 ..	33,144	272	285	454	294·0	13,085	..	128	1,554	170·0	53
54 ..	32,133	238	296	543	295·5	11,403	..	122	1,668	170·0	54
55 ..	31,056	205	304	643	296·7	9,613	..	111	1,671	170·0	55
56 ..	29,904	170	314	754	297·6	7,831	..	97	1,557	170·0	56
57 ..	28,666	132	329	874	298·8	6,177	..	83	1,315	170·0	57
58 ..	27,331	88	342	1,022	299·4	4,779	..	69	1,076	170·0	58
59 ..	25,879	52	354	1,183	300·0	3,634	..	57	908	170·0	59
60 ..	24,290	..	369	1,411	300·0	2,669	..	..	2,669	170·0	60
61 ..	22,510	..	380	1,781	300·0	..	..	..	..	..	..
62 ..	20,349	..	383	2,645	300·0	..	..	..	..	..	..
63 ..	17,321	..	367	3,672	300·0	..	..	..	..	..	..
64 ..	13,282	..	319	3,918	300·0	..	..	..	..	..	..
65 ..	9,045	..	..	9,045	300·0	..	..	..	..	..	..

TABLE IX.

SUMMARY OF TEACHERS' SUPERANNUATION RESULTS.

VALUATION BALANCE-SHEET AS AT 31ST DECEMBER, 1913.

Liabilities.

MALES—

	£	£
Value of 177 pensions for £17,065 0s. 10d. per annum already granted	143,820	
„ 63 pensions for £1,147 3s. per annum granted to widows of contributors or pensioners	12,476	
„ 63 pensions for £819 per annum granted to children of deceased contributors or pensioners	3,273	
„ prospective pensions for back service	591,724	
„ „ for future service	366,199	
„ „ to widows	89,464	
„ „ to children	14,530	
„ return of contributions on death	6,209	
„ „ on withdrawal	35,484	
		1,263,179

FEMALES—

	£	£
Value of 157 pensions for £10,867 2s. per annum already granted	133,885	
„ prospective pensions for back service	420,428	
„ „ for future service	329,078	
„ „ for children	7,258	
„ return of contributions on death	12,546	
„ „ on withdrawal	35,898	
		939,093
		£2,202,272

Assets.

	£
Accumulated funds	265,136
Value of future contributions from males	328,702
„ „ from females	164,837
„ subsidy of £17,000 per annum	425,000
„ future increases in subsidy to be provided	1,018,597
	£2,202,272