It may not be out of place, therefore, for me to state by way of illustration that, in spite of the smaller annual pension, the net liability to the Superannuation Fund in respect of the retirement of a physically fit male teacher with thirty-five years' service is, on the average, at least 30 per cent. in excess of the net liability in respect of the same officer if he were compelled to remain in the Service until the completion of forty years' service.

21. The importance of the ascertainment of the state of the fund in the form given in paragraph 18 lies in the fact that the total shortage in the fund to be met by the State—namely, £5,559,202—is equivalent to an annual interest income (at 4½ per cent.) of £250,164. It follows that if any less sum than £250,164 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 £250,164 per annum in respect of present contributors alone. If, however, any annual amount in excess of £250,164 be 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 minimum amount of £250,164 is a perpetuity and does not cease with the lifetime of the present members, nor does it include any subsidy to new entrants.

## ASCERTAINMENT OF STATE SUBSIDY.

22. 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 clause 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 in respect of service after joining the fund, my interpretation of the principle underlying the section is that the State makes its contribution when benefits are actually entered upon, and then pays for the full amount of pensions in respect of all service prior to the establishment of the fund and for such portion 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 1930-31, 1931-32, and 1932-33, the amounts provided by the contributions, and the subsidies payable on the basis indicated by the Act,

to be as follow:—					1930–31. £	1931−32 <b>.</b> £	1932–33 <b>.</b> £
Estimated pensions					235,677	244,739	255,454
Amount provided by contributions		• •			74,275	79,228	84,859
Amount due to be paid by the Stat	e in res	${ m spect}$ of ${ m t}$	he three	years			
mentioned (but see also next par	$\operatorname{agraph}$	ı)			£161,402	£165,511	£170,595

- 23. The above figures would give for the years 1930–31, 1931–32, and 1932–33 an average subsidy of approximately £166,000 per annum, or £98,000 per annum more than is at present being paid. The following considerations, however, must be taken into account:—
  - (a) Actuarial recommendations made in the past in pursuance of the Act have not been fully carried out, the actual payments into the fund to the 31st January, 1930, being short by £735,251 of the amounts recommended. From Table IX of the appendix it will be seen that this shortage accumulated at 4½ per cent. interest to the end of last year amounts to £1,023,136, and I consider that £46,000 per annum requires 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 by 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.
- 24. I have accordingly to report that pursuant to the system laid down by the Act the annual subsidy required for each year of the period ending 31st January, 1933, is as follows:—

						£
Subsidy now being paid						68,000
Further annual subsidy required—	_				£	
Paragraph 23 above					98,000	
Paragraph 23 $(a)$ above					46,000	
Paragraph 23 $(b)$ above	٠.				2,000	
						146,000
Annual subsidy required for the	years	1930–31,	1931-32,	1932–33		£214,000

When making provision for this annual subsidy it is important to see that it is back-dated and that interest at  $4\frac{1}{2}$  per cent. is added to any portion paid late.

## RECOMMENDATIONS.

25. In my last actuarial report I pointed out that it would be a great improvement if the present highly technical method of arriving at the subsidy were abolished in favour of a simple automatic basis that would not only be more in accordance with the actual deficiency, but would avoid sudden increases in the subsidy and reflect salary fluctuations.

It is not necessary to add anything further to the remarks made in that report beyond pointing out that the suggested subsidy of 10 per cent. of the salary roll would now need to be increased by reason of the short payments in subsidies during the intervening three years.