

# REPORT

ON

# PUBLIC INSTRUCTION

MADRAS

FOR 1916-17 AND FOR THE QUINQUENNIUM 1911-12 TO 1916-17

VOLUME I

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OFFICE OF THE DIRECTOR OF PUBLIC INSTRUCTION,  
MADRAS, 23RD OCTOBER 1917.

C. No. 8920.

From

THE HON'BLE MR. J. H. STONE, M.A., C.I.E.,  
DIRECTOR OF PUBLIC INSTRUCTION,  
*Madras,*

To

THE SECRETARY TO THE GOVERNMENT OF MADRAS,  
HOME (EDUCATION) DEPARTMENT,  
*Fort St. George, Madras.*

SIR,

I have the honour to submit a report on the state and progress of education in the Presidency during the quinquennium which ended on 31st March 1917. For the preparation of the report Mr. R. G. Grieve, Deputy Director of Public Instruction, was placed on special duty.

2. It will be convenient at the outset to summarize briefly the chief events of the period, while reserving a detailed treatment of the more important features to a later stage.

3. *The War and Education.*—The war has naturally affected the progress of education in various directions. Recruitment from Europe has been impossible since the outbreak of the war and the vacancies, permanent or temporary, due to retirement or to officers going on active service have not been easily filled; and consequently temporary arrangements have had to be made, in most cases locally. Financial difficulties have also been experienced and it has been necessary to postpone for consideration after the war many desirable schemes. Moreover, at the very time when it has been necessary for Government to economize, private bodies, particularly Missionary Societies, have found it difficult to secure adequate funds to maintain their existing activities. Minor difficulties have also been experienced, such as the delay and loss caused in regard to stores and apparatus of all kinds by the piratical proclivities of the enemy. At the outset of the war there were in the Presidency four German Missionary bodies, viz., the Basel German Mission (part German part Swiss), the Leipzig Evangelical Lutheran Mission, the Hermannsburg Evangelical Lutheran Mission, the Schleswig-Holstein Mission. Under the management of these Missions there were, on 31st March 1915, in all one college, 22 secondary schools and 455 elementary schools with a total of 31,107 pupils. At an early stage in the war the problem arose as to how the educational facilities offered by these schools were to be continued and how they were to be financed. After some discussion Government accepted as a tentative measure an offer by the Missionary Educational Council of South India to continue the schools with approved committees for each Mission and approved correspondents for each school, subject to the receipt from Government of the usual recurring grants, and this arrangement still continues, pending a final decision as to the eventual management and ownership of the schools.

4. *Special Officer.*—A special officer on Rs. 2,000 per mensem was placed on special duty for two years ending with 30th June 1914 to assist the Director of Public Instruction.

5. *Reorganization of Inspecting Staff.*—During the quinquennium proposals for the reorganization of the inspecting staff have been under consideration, but financial considerations have rendered their acceptance impossible at present. One

additional appointment in the Indian Educational Service, however, has been created of an inspectorate with Bangalore as headquarters. Forty-nine temporary Sub-Assistant Inspectors of Boys' Schools and one Sub-Assistant Inspectress of Girls' Schools have been sanctioned. With the continuous development of education further increases are urgently necessary, and since the close of the quinquennium some further temporary relief has been given.

6. *Transfer of Industrial Schools to the Director of Industries.*—The appointment of Superintendent of Industrial Education was abolished in 1914 on the reconstitution of the Department of Industries. The Industrial Experts who had previously been under control of the Director of Public Instruction were placed under the Director of Industries to whom also were transferred the industrial schools. Figures and information regarding industrial schools are now, under the orders of the Government of India, being included in the Public Instruction Reports.

7. *Conferences.*—A number of conferences was held. In 1914 there was a meeting of Inspectors of Schools at which administrative questions were discussed and a similar one of Inspectresses in 1915. Conferences of officials and non-officials were held in 1916, the first of which dealt with several important points in the system of grants-in-aid and in the Madras Educational Rules, while the other discussed the suggestions made in a resolution of the Government of India in connection with the development of female education.

8. *University development.*—With the help of special Imperial and Provincial grants the University has been able to enlarge its functions. A number of courses of special University lectures has been delivered, arrangements have been made to encourage and publish the results of research work, and three University chairs have been established, Professors of Indian History and Archæology, Comparative Philology and Indian Economics being appointed. Other points are the compilation of a Tamil Lexicon under the supervision of a committee of experts, the working out of plans for the erection of University buildings for the accommodation of the professors, office and library, and the increase in corporate life which the erection of hostels and the strengthening of the tutorial staff make possible. A number of changes in the regulations and in the courses of studies, for both the Honours and Pass Degrees, has been made. The most important perhaps is that the Intermediate Examination can now be taken in parts, and students who in one year have succeeded in one part are required to appear subsequently only in that part in which they failed.

9. *Arts Colleges.*—The number of Arts Colleges has increased and there is affiliation in a larger number of subjects. The staffs of the Government Colleges have been strengthened, particularly those of the Presidency and Kumbakōnam Colleges.

10. *New Arts Colleges.*—Two new Government Colleges were opened during the period, one a Second Grade College for men at Anantapur, the other a First Grade College for women at Madras. Both are at present on a temporary footing; but the demand for the higher education of women which the supply has created and the existing strength of the Queen Mary's College for Women and of the Women's Christian College and the flourishing condition of the Anantapur College suggest the necessity for their permanent retention.

11. *Professional Colleges.*—In the professional colleges the Teachers' College staff has been strengthened, while that of the Law College has been thoroughly reorganized. In the Engineering College arrangements have been made for the teaching of higher Electrical Engineering and an appointment has been created in the Indian Educational Service in this connection, the Professor being assisted by a qualified Laboratory Assistant. A Manual Training Class has been attached to the Teachers' College under one of the two Manual Training Instructors on Rs. 400—10—500 appointed during the quinquennium.

12. *Colleges not under the control of the Director of Public Instruction.*—From the year 1915-16 figures relating to the Forest, Veterinary, Medical and

Agricultural Colleges have, under the orders of the Government of India, been included in the Public Instruction Reports.

13. *The Secondary School Leaving Certificate Scheme.*—In 1916 to meet a suggestion that the University should assume control of the examination for Matriculation, the Director of Public Instruction with the approval of Government invited the Syndicate to nominate four University members to the Madras Secondary School Leaving Certificate Board. The invitation was accepted, and the Board now consists of ten members, of whom five are officials and five non-officials.

14. *Improvement of Special Schools.*—The reorganization of the training schools referred to in the previous quinquennial report was given full effect to early in the period and the number of training schools both for masters and for mistresses has been increased. Additional facilities for training are still urgently required and the Government of India have allotted funds which will make further developments possible in the ensuing quinquennium.

The staff of the School of Commerce, Calicut, was reorganized, and the special training class for commercial teachers was reopened in 1914.

15. *Hostel for widows.*—In connection with two Government High Schools for Girls, one in Triplicane, Madras, and one at Vizagapatam, hostels for Hindu caste widows have been opened and it is hoped by this means to increase the supply of suitable teachers for girls' schools.

16. *European Education.*—In July 1912 a conference was held at Simla to consider the whole question of the education of the domiciled community. Orders have been received on a number of the recommendations of the conference and funds have been provided, both Provincial and Imperial, which have made it possible to take action upon these recommendations and to effect considerable improvements in the quality of the education given in the schools. Orders have yet to be received on a few points, e.g., the examination to be held at the end of the European High School course, and the starting of a training college for the domiciled community in Southern India.

One interesting feature has been the extension of the work done at the Special Classes Centre, at which, in addition to domestic economy mentioned in the last quinquennial report, there are courses in needle-work, housewifery and physical and manual training under specially appointed instructors.

In 1915-16 the St. George's Homes were recognized. These Homes have been started on the analogy of those at Kalimpong, and are maintained by liberal grants from Government and by private donations and subscriptions. They are at present located at Kodaikānal but are to be transferred to a site on the Nilgiris.

17. *Education of Muhammadans.*—Additional provision was made for Muhammadan education not only by the opening of two additional training schools, but also by the provision of extra scholarships tenable in colleges, secondary and elementary schools and by the opening of two incomplete secondary schools in Villore and Madras. The opening of a third at Trichinopoly is under consideration. The Muhammadan inspecting staff has been strengthened, a lecturer in Arabic and Persian has been attached to the Presidency College, and Urdu munshis have been provided in a number of secondary schools.

18. *Sanskrit Education.*—The proposals for the improvement of Sanskrit education which were referred to in the previous quinquennial report were brought into force in 1912-13. Of these the most important were the inclusion of the post of Sanskrit Superintendent in the cadre of the Provincial Educational Service, the appointment of two Supervisors of Sanskrit Schools and the introduction of a regular system of aid and scholarships.

19. *Medical inspection of schools.*—A small beginning as regards the medical inspection of schools was made, the pupils in the Corporation Elementary Schools, Madras, being examined by Lieutenant-Colonel Donovan, I.M.S., and Mrs. (Dr.) Simonsen. It has also been arranged that Mrs. Simonsen should be Medical Officer for the Widows' Hostel, Triplicane.



20. *Special grants.*—In the early part of the period large assignments from Imperial and Provincial funds were made. Details of these assignments and of expenditure are given in the succeeding chapter. As a result of these subsidies there has been a marked expansion of education, particularly of Elementary education.

21. *Hostels.*—Among other purposes for which special grants were sanctioned were hostels, and a number of school and college hostels have been erected or are in course of construction. The grants were in several cases paid in advance and were at exceptionally favourable rates. Pachaiyappa's College and the Christian College have large schemes on hand.

22. *Delegation of powers.*—Inspecting officers and heads of institutions were given increased powers to sanction appointments, leave, expenditure, e.g., on scholarships and stipends and grants-in-aid.

23. *Changes in the Grant-in-Aid Code and the Madras Educational Rules.*—A number of changes was made in the Grant-in-Aid Code and the Madras Educational Rules. In the Grant-in-Aid Code, for example, the rate of building grant was raised from one-third to one half, and it was ruled that the Land Acquisition Act could be utilized for the acquisition of lands and buildings for schools and that half grants might be sanctioned towards the cost of such acquisitions. As regards the Madras Educational Rules there is now before Government a revised reprint, embodying alterations already sanctioned and suggesting for approval certain further modifications. In the beginning of the quinquennium the Madras Inspection Code, which was out of date, was thoroughly revised and brought into conformity with existing regulations and conditions.

#### I.—GENERAL SUMMARY.

24. *General statistics of institutions.*—During the quinquennium the total number of public institutions rose from 25,859 to 31,276 or by 20·9 per cent and their strength from 1,152,886 to 1,534,051 or by 33·0 per cent.

Both the number and strength of private institutions declined, the former by 8·8 per cent and the latter, by 0·1 per cent.

Taking public and private institutions together, the number of institutions rose by 16·0 per cent and their strength by 29·7 per cent as against an increase, in the case of the latter, of 27·1 per cent in the previous quinquennium.

25. *Institutions and scholars by districts.*—There is a decrease in the number of institutions in the case of five districts and of strength in the case of three districts. But this is only nominal as it is the result of the formation, at the close of the last quinquennium, of the two new revenue districts of Chittoor and Ramnad and consequent changes in the extent of certain other districts. While progress has been affected by the prevalence of plague in some cases, the general results are satisfactory.

26. *Institutions according to managing agencies.*—The number of Government institutions rose from 408 to 488. The number of municipal schools rose from 357 to 587 and of local board schools from 4,254 to 6,648.

The number of aided institutions increased from 16,356 to 19,657 and of pupils in them from 716,375 to 909,415. Of the 19,657 aided institutions 5,310—or 27 per cent—were mission institutions.

Unaided institutions fell in number from 4,476 to 3,896 and in strength from 125,947 to 115,991.

27. *Education in relation to population.*—The percentage of male scholars to the male population increased from 5·1 in 1911–12 to 6·5 in 1916–17 and the corresponding percentage for female scholars rose from 1·0 to 1·5; the percentage of the number of scholars—male and female—to the total population rose from 3·0 in 1911–12 to 4·0 in 1916–17.

The increase in the percentage of scholars to population took place in all the districts except Madura, Tinnevely and Salem.

In 1916-17, the percentages varied in the different districts from 16.0 in Madras to 3.8 in Salem in the case of males and from 6.1 in Madras to 0.7 in Salem in the case of females.

28. *Scholars according to classes of the community.*—Male and female scholars of all classes of the community increased in numbers during the quinquennium, Europeans and Indian Christians each by 16, Muhammadans by 25, Brahmans by 20, Non-Brahman caste Hindus by 30 and Panchamas by 67 per cent.

29. *Scholars studying English.*—The number of scholars studying English increased from 156,110 in 1911-12 to 224,967 in 1916-17. The figures for 1917 show an increase of 44 per cent over those for 1912.

30. *Scholars unprotected from small-pox.*—The number of scholars unprotected from small-pox fell during the quinquennium from 4,761 to 3,668.

31. *Relative extent of education in municipal and non-municipal areas.*—The percentages of institutions and scholars in municipal areas to the total number of institutions and scholars on the 31st March 1917 were 8 and 19, respectively.

32. *General statistics of receipts and charges.*—The total expenditure on education rose during the quinquennium from Rs. 135.6 lakhs to Rs. 216.9 lakhs which included an expenditure of over Rs. 7½ lakhs relating to certain professional colleges and special schools (viz., Medical, Forest, Agricultural and Veterinary colleges and Medical schools) not under the control of the department. Thus, the total expenditure on education, including that on the industrial schools, increased by Rs. 74 lakhs or by 55 per cent. The statistics of 1911-12 included industrial schools as they were under the control of this department at the end of the previous quinquennium and so, for the sake of comparison, the figures of these schools have been taken into account during the year 1916-17. The amounts met from the five main sources, provincial funds, district funds, municipal funds, fees and private funds all increased considerably but in very different proportions. The increase in district board and municipal expenditure was largely met by contributions from Provincial funds, and taking the first three sources together, it will be seen that public funds showed an increase of 79 per cent. Fees rose by 51 per cent and the amount met from private funds or other sources by a little less than 20 per cent. Public funds take a proportionately larger share than before in meeting the cost of education and the amount from private funds, though it has increased, shows proportionate diminution. It may be mentioned here what the amount under "Subscriptions and other sources" in column 32 of General Table IV represents. This head contributes Rs. 27½ lakhs to the total direct expenditure of Rs. 154 lakhs. Nearly the whole amount relates to schools under private management and represents the managers' contributions and subscriptions collected towards the maintenance of the schools from private bodies. The small amount relating to schools under public management represents the miscellaneous receipts of these schools.

The total direct expenditure on education rose from Rs. 94½ lakhs to nearly Rs. 148½ lakhs, an increase of Rs. 54 lakhs or 57 per cent. The increase was shared by all classes of institutions, viz., colleges Rs. 5 lakhs, secondary schools Rs. 17 lakhs, elementary Rs. 25 lakhs, training Rs. 5 lakhs and special schools Rs. 2 lakhs. The direct expenditure from provincial revenues on Government institutions increased by 69 per cent in the period. The increase on Government training schools to the extent of nearly Rs. 3 lakhs due to the complete reorganization of these schools was spent towards the improvement of the pay and prospects of the staff, the opening of additional training schools and the enhancement of the rate of stipends. The amount spent by district and municipal boards on their own elementary schools increased from Rs. 12 lakhs to Rs. 27 lakhs, while the provincial subsidy for such schools increased from Rs. 3 lakhs to Rs. 16 lakhs. It will be seen from the following statement giving separate figures for municipalities, that the total recurring expenditure increased from Rs. 4½ lakhs to Rs. 7½

lakhs during the period and the capital outlay from Rs. 57 lakh to Rs. 2.14 lakhs. The amount of teaching grants to aided elementary schools from municipal funds fell from Rs. 1 lakh to Rs. 61 lakh.

*Expenditure on schools maintained and aided by municipal boards.*

Class of institutions.	Number of institutions.			Recurring expenditure from					Capital expenditure from						
	Maintained by municipalities.	Aided by municipalities.	Total.	Provincial revenues.	Municipal funds.	Other public funds.	Fees.	Other sources.	Total.	Provincial funds.	Municipal funds.	Other public funds.	Fees.	Other sources.	Total.
Colleges ... ..	3	1	4	...	16,675	...	30,294	537	47,506	...	9,675	...	...	131	9,806
High schools ... ..	17	...	17	23,224	16,332	...	2,11,256	2,322	2,53,234	...	61,162	...	...	5,000	66,162
Middle English schools.	6	...	6	...	3,734	...	18,331	6	22,071	...	1,497	...	...	...	1,497
Middle Vernacular schools.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Primary schools ... ..	556	344	900	...	4,22,509*	...	9,679	495	4,32,633	...	1,36,871	...	...	...	1,36,871
Special schools ... ..	5	...	5	...	1,230	...	...	...	1,230	...	...	...	...	...	...
Total, 1916-17 ... ..	587	345	932	23,224	4,60,480†	...	2,69,660	3,360	7,56,724	...	2,09,205	...	...	5,131	2,14,336
Total, 1911-12 ... ..	353	646	999	21,561	2,67,910†	...	1,65,462	1,787	4,56,720	9,839	47,016	...	...	...	56,855

\* Includes Rs. 60,656 being the teaching grants paid to aided elementary schools.

† Excludes Rs. 5,828 being stipends paid on behalf of teachers in municipal service, under training and Rs. 833 boarding charges in the Victoria College, Palghat.

‡ Includes Rs. 91,237 being the teaching grants paid to aided elementary schools.

The total indirect expenditure rose from Rs. 41 lakhs to Rs. 61 lakhs. Expenditure from each source showed an increase. The most noticeable features of the indirect expenditure were the increased cost of inspection due to the strengthening of the inspecting agency by the appointment of an additional inspector in the cadre of the Indian Educational Service and of 49 temporary officers in the Sub-Assistant Inspectors' cadre and also the increase in expenditure on buildings and furniture to the extent of Rs. 10½ lakhs and on hostel (boarding) charges which showed an increase of over 6 lakhs. The last item represents only the messing charges. The following table gives a summary of an expenditure of Rs. 25 lakhs under building and equipment on different classes of schools, viz., colleges Rs. 8½ lakhs, high schools Rs. 6½ lakhs, middle English schools Rs. 1 lakh, elementary over Rs. 6½ lakhs and special nearly Rs. 2½ lakhs. To the total expenditure, public funds contributed nearly Rs. 20 lakhs and private funds over Rs. 5 lakhs.

*Amount expended on buildings, furniture and apparatus during 1916-17.*

	Colleges.	High schools.	Middle English schools.	Middle Vernacular schools.	Primary schools.	Special schools.	Total.
	Rs.	Rs.	Rs.	...	Rs.	Rs.	Rs.
Provincial Revenues ... ..	6,77,923	3,35,426	47,832	...	1,28,626	2,24,004	14,14,811
Local Funds ... ..	...	19,945	12,071	...	2,81,504	...	3,13,520
Municipal Funds ... ..	9,675	61,162	1,497	...	1,36,871	...	2,09,205
Subscriptions and other sources.	1,70,951	2,27,685	38,210	...	1,13,438	14,155	5,64,439
Total ... ..	8,58,549	6,44,218	99,610	...	6,60,439	2,39,159	25,01,975

33. *Provincial receipts and charges.*—The budget grant for the year 1916-17 under 22. Education was Rs. 80.87 lakhs, the revised estimate, Rs. 83.45 lakhs and the actuals Rs. 83.15 or Rs. 30 lakh less than the revised estimate. This decrease falls under teaching grants to elementary schools (Rs. 20 lakh) and building grants to European schools (Rs. 10 lakh).



Detailed statement showing the Imperial allotments (Recurring and Non-recurring) made available during the quinquennium 1912-13 to 1916-17 the amount spent and the objects of expenditure—cont.

[The amounts are expressed in lakhs of rupees.]

	1912-13.		1913-14.		1914-15.		1915-16.		1916-17.		Total.	
	Allotment.	Actuals.	Allotment.	Actuals.	Allotment.	Actuals.	Allotment.	Actuals.	Allotment.	Actuals.	Allotment.	Actuals.
<b>A.—RECURRING—cont.</b>	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Objects of expenditure on items 4, 5 and 6.</i>												
(i) Additional Sub-Assistant Inspectors.		·30		·93		1·02		1·08		1·06		4·39
(ii) Improvement of Female Education.		·51		·51		·47		·47		·51		2·47
(iii) Training of Teachers ...		1·09		1·60		1·54		1·42		1·44		7·09
(iv) Subsidies to Local Boards and Municipalities.		3·50		6·72		8·02		8·02		8·00		34·26
(v) Teaching grants to Colleges and Secondary schools.	8·25	...	8·25 + 6·80	...	8·25 + 6·80	26	8·25 + 6·80	23	8·25 + 6·80	26	72·20	78
(vi) Teaching grants to Elementary schools.		·93		2·52		1·25		2·52		1·25		11·55
(vii) Hostel grant ...		·96		·96		·96		·86		·96		4·20
(viii) Scholarships ...		...		·17		·47		·55		·49		1·68
(ix) European Education ...		·52		1·09		1·04		1·08		1·06		4·79
(x) Technical Education ...		·12		·21		...		...		..		·33
<b>Total (4 to 6) ...</b>	<b>8·25</b>	<b>7·93</b>	<b>15·05</b>	<b>14·71</b>	<b>16·30</b>	<b>16·30</b>	<b>16·30</b>	<b>16·30</b>	<b>16·80</b>	<b>16·30</b>	<b>72·20</b>	<b>71·54</b>
<b>Grand Total ...</b>	<b>9·35</b>	<b>8·78</b>	<b>16·15</b>	<b>15·81</b>	<b>17·70</b>	<b>17·70</b>	<b>17·70</b>	<b>17·50</b>	<b>17·70</b>	<b>17·54</b>	<b>78·60</b>	<b>77·38</b>
<b>B.—NON-RECURRING.</b>												
1. Out of Rs. 6·57 lakhs sanctioned in 1910-11 to be spent in 1911-12 and 1912-13, the amount allotted for 1912-13 was Rs. 3·57 lakhs out of which about Rs. 2 lakhs was spent towards equipment of Secondary schools.	3·57	3·57	...	...	...	...	...	...	...	...	3·57	3·57
2. For the improvement of hostels Rs. 4·50 lakhs was assigned in 1912-13 and was partly utilized in 1913-14.	...	...	2·25	2·25	...	...	...	...	...	...	2·25	2·25
3. An assignment of Rs. 49 lakhs made in 1912-13 for education in general—												
(i) University ...	...	...	2·00	2·00	...	...	...	...	...	...	2·00	2·00
(ii) Purchase of books to arts colleges and books and slates to pupils of backward classes in Government institutions.	...	...	·15	·15	...	...	...	...	...	...	·15	·15
(iii) Subsidy to Local Boards and Municipalities for Elementary schools.	...	...	1·34	1·34	...	...	...	...	...	...	1·34	1·34
(iv) Training of teachers ...	...	...	1·26	1·26	1·70	1·70	·50	·50	·43	·43	3·89	3·89
(v) Teaching grants to Elementary schools.	...	...	...	...	2·04	2·04	...	...	...	...	2·04	2·04
(vi) Building grants to European schools.	...	...	...	...	1·00	1·00	...	...	·30	·30	1·30	1·30
(vii) Hostels ...	...	...	·68	·68	1·00	1·00	·77	·77	1·39	1·39	3·84	3·84
(viii) Government and Board educational buildings.	...	...	10·25	10·25	6·74	6·74	1·39	1·39	1·12	1·12	19·50	19·50
(ix) Play grounds ...	...	...	·12	·12	1·36	1·36	·04	·04	·12	·12	1·64	1·64
(x) Industrial education ...	...	...	·03	·03	...	...	...	...	...	...	·03	·03
<b>Total (item 3) ...</b>	...	...	<b>15·83</b>	<b>15·83</b>	<b>13·84</b>	<b>13·84</b>	<b>2·70</b>	<b>2·70</b>	<b>3·36</b>	<b>3·36</b>	<b>35·73</b>	<b>35·73</b>
4. An assignment of Rs. 16 lakh towards a Muhammadan hostel made in 1914-15.	...	...	...	...	16	16	...	...	...	...	16	16
<b>Grand total ..</b>	<b>3·57</b>	<b>3·57</b>	<b>18·08</b>	<b>18·08</b>	<b>14·00</b>	<b>14·00</b>	<b>2·70</b>	<b>2·70</b>	<b>3·36</b>	<b>3·36</b>	<b>41·71</b>	<b>41·71</b>

A recurring assignment of Rs. 80 lakh was given at the beginning of the period for the improvement of aided secondary schools. Out of an aggregate of Rs. 4 lakhs thus available during the period Rs. 2½ lakhs was given to the

managers to cover the loss of fee income foregone on account of Muhammadans, Uriyas, girls and pupils of backward classes and castes and Rs.  $1\frac{1}{2}$  lakhs as additional teaching grant. Another recurring assignment was made early in the period, viz., Rs. 30 lakh for the education of the domiciled community in the city of Madras which was spent mainly towards the payment of boarding grants. Later, another recurring amount of Rs. 30 lakh was allotted for Muhammadan education which has not yet been entirely spent as the schemes for utilizing the amount had not fully matured before the close of the quinquennium. Lastly, the coronation grant of Rs. 8.25 lakhs was made available in 1912-13 and was increased to Rs. 15.05 by another allotment of Rs. 6.80 lakhs in the next year. This again was increased by an additional grant of Rs. 1.25 lakhs in 1914-15, thus making a total of Rs. 16.30 lakhs which was available during the last three years of the quinquennium. Out of the total of nearly Rs. 72 lakhs relating to the last three items, the amount spent on teaching grant to elementary schools was Rs.  $11\frac{1}{2}$  lakhs, training of teachers Rs. 7 lakhs, additional Sub-Assistant Inspectors nearly Rs.  $4\frac{1}{2}$  lakhs, female education Rs.  $2\frac{1}{2}$  lakhs, hostel buildings Rs. 4 lakhs, European education nearly Rs. 5 lakhs and subsidy to district boards and municipalities Rs. 34 lakhs. As elementary education is a vital concern of district boards and municipalities, a large portion of the allotment set apart for this purpose was distributed to each board and municipality proportionately to their requirements. The amount was mainly spent in opening more elementary schools, in strengthening the existing schools by additions to and improvements in the scale of salaries of the staff and in paying extra capitation allowance on account of pupils in the four lower standards in all elementary schools under their management irrespective of their grade. A portion of the amount set apart for elementary education was spent direct by the department in increasing the inspecting agency, in training more teachers and in paying enhanced teaching grants to aided elementary schools on account of the increase in capitation grants to teachers and to girls and pupils of backward classes and of the attainment of a high standard of efficiency.

With regard to the non-recurring allotments an assignment of Rs. 3.57 lakhs was made in 1912-13, of which Rs. 2 lakhs was spent towards the equipment of aided Secondary schools. Next year Rs. 2.25 lakhs out of Rs. 4.50 lakhs allotted in the previous year was given towards the construction of hostel buildings. In the same year, a large amount of Rs. 49 lakhs was allotted to be spent in three years, out of which about Rs. 36 lakhs only was utilized before the end of the quinquennium, as some schemes covered by these grants had to be postponed owing to the financial restrictions imposed by the war. Lastly another non-recurring grant of Rs. 16 lakh was made in 1914-15 for a Muhammadan Hostel and was utilized in full. The following are the several items under which the allotment of Rs. 49 lakhs was intended to be utilized; the amounts actually spent during the period under review are also shown against each item :—

	In lakhs of rupees.	
	Allotment.	Actuals.
Colleges, Secondary schools and Training institutions ...	6.0	8.3
Elementary schools ... ..	17.0	17.3
Educational hygiene, Playgrounds, Swimming baths, Reading rooms, etc. ... ..	6.0	3.0
Manual training ... ..	1.5	...
Girls' schools, technical and special schools ... ..	6.0	0.1
European education ... ..	5.5	1.3
University ... ..	3.0	2.0
Hostels ... ..	4.0	4.0
	49.0	36.0

36. *Miscellaneous charges shown in General Table IV.*—Under the head 'Miscellaneous' in General Table IV are included the hostel (boarding) charges of Rs. 16.5 lakhs, the expenditure on private schools which do not conform to the departmental standards of instruction to the extent of Rs. 4.73 lakhs and miscellaneous items such as the charges relating to the Oriental Manuscripts

Library, Registration of books, Endowment grant, European scholarships examination and allowance to the Secretary to the Students' Advisory Committee amounting to Rs. 42 lakh. Out of Rs. 2.26 lakhs shown under 'Fees,' Rs. 2.13 lakhs represents the fee receipts of the private schools and Rs. 13 lakh the departmental examination fees and of Rs. 2.76 lakhs appearing under 'Other sources' Rs. 2.60 lakhs is the amount spent by the managers of these private schools, the balance being the 'Miscellaneous' receipts credited to Government.

37. *Average cost and average fee.*—Information as to the average cost of education and the average fee per head paid in the various classes of institutions is appended as desired by the Government of India :—

	Government.		Board.		Aided.	
	Average cost.	Average fee.	Average cost.	Average fee.	Average cost.	Average fee.
<i>Arts Colleges.</i>	RS.	RS.	RS.	RS.	RS.	RS.
Non-Europeans ... ..	308	96	131	84	138	90
<i>Secondary Boys.</i>						
Non-Europeans ... ..	63	21	25	20	28	21
Europeans ... ..	...	...	...	...	102	16
<i>Elementary Boys.</i>						
Non-Europeans ... ..	13	As. 5	6½	As. 4½	4	As. 11½
Europeans ... ..	...	...	...	...	59	8

## II.—CONTROLLING AGENCIES.

38. *Direction.*—Sir Alfred Bourne went on six months' leave from 22nd February 1914 and retired at the end of the leave. For the rest of the period I have been in charge of the Department except for six months in 1915 when Mr. Duncan acted for me until my return from leave.

39. *Inspection.*—The prevailing system and the system which it superseded were described in detail in the last report. The relations of the various grades of officers and their duties were therein explained and in these respects and in the control of schools there is no change to report beyond the fact that with the exception of a school in Anjengo which for geographical reasons is specially treated, all European schools, whether for boys or for girls, are now under the control of the Inspector of European and Training Schools. One additional appointment of an Inspector in the Indian Educational Service was sanctioned and a consequential redistribution of Inspectors' circles effected. Moreover, as a temporary measure of relief, 49 Sub-Assistant Inspectors of Boys' Schools and one Sub-Assistant Inspectress of Girls' Schools were appointed and shortly after the close of the quinquennium some further additions to the subordinate inspecting staff for the inspection of Muhammadan and ordinary elementary schools were sanctioned to meet urgent needs. These measures, useful so far as they go, are only a makeshift. With the continuous expansion of education, considerable even under the present exceptional circumstances, and with the more rapid diffusion of education which the restoration of peace and of more normal financial conditions will bring a further strengthening of both the male and the female inspecting agency will become imperative. The numerical increase in schools alone is a serious consideration. The multiplication of schools must, if the schools are to do good work, be accompanied by adequate provision for their supervision. There are, however, other considerations. Not only is the quantity of education increasing but also the complexity of the problems which it presents. The quality and suitability of the education imparted have to be considered. Further over the existing and the additional staff which will be necessary careful control and guidance will be required; but even as it is the Circle Inspectors have not time enough to study thoroughly the problems of elementary education in urban and rural areas and to control and guide their subordinates. Most of their time

is devoted to the inspection of secondary and training schools and to office work and they are unable, with all the will in the world, sufficiently to keep in touch with other educational activities and tendencies and to co-operate with other departments. Such being the circumstances of the case proposals were in 1914 and 1915 submitted to Government for the reorganization respectively of the male and the female inspecting agencies. If early action was then desirable, the paramount necessity for action at as early a date as possible will be readily understood in view of the considerable expansion which there has been since the proposals were submitted. Unfortunately owing to the outbreak of war and the resulting financial stringency it was impossible to give further consideration or effect to them.

The total cost of the inspecting agency in 1916-17 (excluding direction) amounted to Rs. 8,47,023, being 4.14 per cent of the total expenditure on education and 5.85 per cent of the direct cost.

As desired by the Government of India, the following table gives the number of inspecting officers, the grade and number of institutions in their jurisdiction, the number which each has to see annually and the average number actually seen :—

Inspecting officers.	Number of officers in each grade.	Grades of schools.	No. of institutions in their jurisdiction.	No. of institutions which each has to see annually.	Average No. of schools actually seen by each.
Inspectors ... ..	9	{ Secondary ... .. Training ... ..	360 54	40 (a) 6	32 6
Inspectresses ... ..	3	{ Secondary ... .. Training ... ..	40 23	13 (a) 8	10 8
Assistant Inspectors ... ..	23	{ Secondary ... .. Training ... ..	360 54	(b) (b)	12 3
Sub-Assistant Inspectors ... ..	147	{ Elementary ... .. Elementary ... ..	28,867 28,867	50 (c) 196	132 175 (d)
Assistant and Sub-Assistant Inspectresses of Girls' Schools.	11	Do. ... ..	1,684	153	146 (e)
Supervisors ... ..	240	Do. ... ..	28,867	120	138 (f)

Note.—(a) The figures 40 and 13 are misleading since the inspection of some of these schools may be assigned by an Inspector or Inspectress to their subordinates.

(b) Assistant Inspectors are required to assist Inspectors in the inspection of some schools of these classes. They are not required to see any definite number of such schools. The corresponding figures in the last column represent the average number of schools assigned to Assistant Inspectors in accordance with note (a) or visited by them with Inspectors.

(c) This is the minimum prescribed for each Assistant Inspector.

(d) The inspection of some elementary schools in heavy ranges is transferred to the Assistant Inspector or to a senior Supervisor.

(e) A few schools are transferred to the male inspecting agency or are inspected by the Inspectresses.

(f) These figures have little significance. Supervisors are expected to visit unrecognized as well as recognized schools. They are also deputed to do inspection or other special work.

40. *Inspection of Industrial and Technical Schools.*—The Department of Industries was reconstituted in 1914 and the experts who had previously been under the control of the Superintendent of Industrial Education were transferred to that department. Thirty-nine schools were handed over to the Director of Industries. The principle adopted was that those schools in which trade or the commercial element forms an important factor from the initial stage should be under his control, while those in which pupils acquire general or professional knowledge without regard to commercial considerations should continue to vest in the Director of Public Instruction. The latter class of schools therefore continues to be inspected by the Circle Inspectors with expert help where necessary. Their development is insufficient to warrant the appointment of a controlling officer with special technical qualifications, and in the present stage of education the administrative advantages conferred by unity of control outweigh the benefits which would result for special types of schools from the appointment of officers with specialized knowledge. The exceptions to this general principle are few. There are special arrangements for Sanskrit and Training Schools, and, in the case of European schools, for a particular community. Further as may be seen from the particulars given under "personnel" below, a commencement has been made in the appointment of special instructors for special subjects—for manual and physical training, and for domestic economy, needlework and dressmaking for girls



in European schools. It is probable that, in the future, as education expands specialization increases and commercial and industrial development is accelerated, some division or devolution of control will be desirable and that it will be necessary to enlist to a larger extent the services of special officers for special subjects and special types of schools.

41. *Personnel.*—The Department lost the services of a large number of officers during the period. In 1912 Mr. Hall, who, for practically the whole of his service, was Principal of the Teachers' College, Saidapet, died while at home on furlough. Mr. Nelson, long Principal of the Law College, died within a brief period after his retirement in 1913. Mr. Middlemast, Principal of the Presidency College, died in 1915 while on leave. They were succeeded respectively by Mr. Duncan, Mr. Davies and Mr. Allen. The Department also lost the services by death of Mr. Mackintosh, Additional Professor of English in the Presidency College. Two officers resigned. Mr. Mayhew was transferred to the Central Provinces as Director of Public Instruction, Mr. Braithwaite, at present on active service, is on deputation with the Government of India for service in the Ajmeer College. Mr. Erlam Smith is also on active service and is engaged in bacteriological work in connection with water-supply in France. Mr. Dodwell was transferred to the Madras Record Office as Curator. Mr. Murray Stuart reverted to the Geological Survey. Miss Bernard, Superintendent of the Presidency Training School for Mistresses and Miss Arnold and Mrs. Rhenius, Inspectresses of Girls' Schools, retired. Fourteen officers of the Provincial Service retired during the quinquennium and one died. The following officers have joined the service and hold at present the appointment noted against each:— Mr. R. M. Statham, Principal, Kumbakonam College, Mr. Douglas, Inspector of Schools, Mr. M. A. Candeth, Additional Professor of History, Presidency College, Mr. H. B. Mathews, Professor of Higher Electrical Engineering, and Mr. H. W. Barker, Professor of Civil Engineering. Mr. H. C. Papworth is acting as Additional Professor of English in the Presidency College and Mr. W. B. Brierley, who was invalided from the army, is acting as an Inspector of Schools. In 1912 Mr. R. G. Grieve was appointed Deputy Director. Mr. Middlemast and myself were on special duty at different times in the earlier part of the quinquennium in the Director of Public Instruction's Office.

In connection with manual training Mr. C. R. Porrett has been appointed Manual Training Instructor for Indian Schools and is attached to the Teachers' College, Saidapet. Mr. W. Fyfe holds a similar appointment in connection with European Schools. Other special appointments in connection with European Schools are those of Mr. S. J. Hall as Physical Training Instructor, Miss Park as Lecturer in Domestic Economy, Miss Kenny as Lecturer in Needlework and Dressmaking and Miss Iles as Peripatetic Teacher of Music. In addition to Mr. Braithwaite and Mr. Erlam Smith, Mr. Guthrie, the Leather Expert under the Director of Industries, also went on active service.

I append two tables at the request of the Government of India dealing with the classification and pay of officers of the department and with the number and average pay of teachers and also a note on improvements in the conditions of service during the quinquennium.

*Classification and pay of officers.*

Service.	Number of Officers.			Total salary.	Average pay in rupees to one place of decimals.
	Europeans or domiciled community.	Indians.	Total Indians and Europeans.		
Indian Educational Service .. .. .	30	2	32	Rs. 25,625	Rs. 800·8
Provincial Educational Service .. .. .	7	37	44	15,600	354·5
Subordinate Educational Service .. .. .	6	568	574	41,585	72·4
<i>Unclassified posts—</i>					
(a) Equivalent to Indian Educational Service .. .. .	11	...	11	5,550	504·5
(b) Equivalent to Provincial Educational Service .. .. .	3	16	19	5,350	281·6
(c) Equivalent to Subordinate Educational Service .. .. .	73	262	335	21,283	63·5
Total ...	130	885	1,015	1,14,998	113·3

*Note.*—This statement excludes teachers in elementary schools on Rs. 30 and below.

*Statement showing the number and average pay in rupees of teachers in public institutions which are not managed by Government.*

Kind of employment.	Number of teachers in public institutions which are not managed by Government.	Average pay in rupees to one place of decimals			
		In colleges.	In secondary schools.	In primary schools.	In other schools.
<i>In schools for non-Europeans.</i>					
Municipal Board ... ..	2,118	151·0	48·8	12·4	...
Local Board ... ..	13,977	42·9	39·2	10·7	66·0
Private { Aided ... ..	38,734	149·9	41·7	7·2	32·0
{ Unaided ... ..	4,868	107·1	42·4	5·2	
Total, Non-European schools ...	59,697	145·8	46·4	8·1	30·9
<i>In schools for Europeans.</i>					
Private { Aided ... ..	642	...	75·8	45·9	188·3
{ Unaided ... ..	9	...	100·0	50·0	...
Total, European schools ...	651	...	76·1	46·0	188·3

42. *Improvements in conditions of service.*—The following improvements in the conditions of service may be mentioned. Pending a decision on the recommendations of the Royal Commission on the Public Services in India and subject to certain conditions, personal allowances were granted to some senior members of the Indian and Provincial Educational Services; and four members of the former enjoy personal allowances of Rs. 100 per mensem and five of the latter similar allowances of Rs. 65 per mensem. The pay of two posts in the Indian Educational Service, viz., the Headmastership of the Central High School, Mercara, and the Vice-Principalship of the Teachers' College, Saidapet, was raised from Rs. 500—50—750 to Rs. 500—50—1,000. The creation of additional appointments on comparatively high rates of pay and revisions of establishment indirectly improve the conditions of service by adding to the prospects of junior officers. The most important of the new appointments have already been mentioned in this chapter, while revisions of establishment such as that consequent on the reorganization of training schools for masters are dealt with in the course of the report.

### III.—UNIVERSITY AND COLLEGIATE EDUCATION.

#### A.—THE UNIVERSITY.

43. The Syndicate of the Madras University has submitted to the Government of India a report summarizing the important developments in the University during the quinquennium. As no useful purpose would be served by the compilation of a separate report, which indeed could be little more than a repetition of that prepared by the Syndicate, I have incorporated here the major portion of their report.

#### I.—THE SENATE.

The quinquennium has been a period of continued activity. The Senate held ten ordinary, four special, and two extraordinary meetings with not less than two sittings on each occasion. Twice the meetings were prolonged to three and four sittings.

To facilitate the transaction of business in the Senate a regulation has been in force since 1914 limiting the duration of speeches of members ordinarily to ten minutes, only the mover of a resolution or of an amendment being allowed to speak for twenty minutes.

During the period under review Committees of the Senate were appointed at different times to consider, among others, such important questions as—

- (1) The position in the various courses of study occupied by languages other than English.
- (2) The Matriculation of holders of Secondary School Leaving Certificates under the various schemes in force in the Madras Presidency and the Native States of South India.

- (3) The necessity for lightening the Intermediate course and for providing a high degree in Arts for students unable to take Honours under the existing regulations.
- (4) The hostel accommodation for the student population of Madras.
- (5) University Readerships in Dravidian Philology.
- (6) The institution of separate courses and degrees in Science in addition to those in Arts.
- (7) The causes of failure in the Intermediate Examination in Arts and the remedies therefor.
- (8) The presentation of an annual budget to the Senate.

The decisions of the Senate upon these matters are referred to below.

#### II.—THE SYNDICATE, BOARDS AND OFFICIALS.

(1) The Regulations relating to the Syndicate have been altered so as to provide for (i) the number of elected members being increased from ten to twelve, and (ii) representation of each Faculty thereon. Formerly all but ex-officio members were elected by the Senate. Under the new Regulations two members are elected by the Faculty of Arts, one each by the Faculties of Law, Medicine and Engineering, respectively, and the remaining seven by the Senate.

(2) The Regulations relating to the Boards of Studies were altered so as to provide for the constitution of separate Boards of Studies for Tamil, Telugu, Malayalam and Kanarese, in addition to the present single Board of Studies for all the four Dravidian languages.

(3) Sir John Wallis, *Kt.*, Chief Justice of Madras, who held the office of Vice-Chancellor for eight years, was succeeded in office in May 1916, by Sir P. S. Sivaswami Ayyar, K.C.S.I., C.I.E., B.A., B.L.

(4) The recurring and non-recurring grants to the University from the Government of India have enabled the University to establish three University Professorships in (a) Indian Economics, (b) Indian History and Archæology, and (c) Comparative Philology (with special reference to Sanskrit).

It is the duty of each of these University Professors, as the Syndicate may direct, to deliver lectures, to conduct classes, to engage in research, and do any other academical work related to the subject of his chair; also to direct and supervise the work of research students in branches of knowledge related to the subjects of his chair. The Professor of Comparative Philology has the further duty, when so directed by the Syndicate or the Senate, of supervising the work of Assistant Lecturers and Readers in Indian languages.

Mr. Mark Collins, B.A., Ph.D., Professor of Sanskrit and Comparative Philology in the University of Dublin, was appointed to the chair of Comparative Philology, and he entered upon his duties in July 1914. M.R.Ry. Rao Sahib S. Krishnaswami Ayyangar Avargal, M.A., M.R.A.S., F.R.H.S. (of the Mysore Educational Service), was appointed to fill the chair of Indian History and Archæology, and he joined duty in November 1914. Mr. Gilbert Slater, M.A., D.Sc., Principal of Ruskin College, Oxford, was appointed to the University Professorship of Indian Economics, and he assumed charge of his duties in December 1916.

A University Professorship in Dravidian Philology was also instituted by the Senate; but as none of the applicants for the post possessed the required qualifications, the chair has not been filled. In lieu thereof the Senate in 1914 appointed for a period of two years five Readers in Dravidian Philology. These Readers have been working under the guidance of the Professor of Comparative Philology. In March 1916, the Senate renewed these Readerships for a further year, and appointed a Committee "to recommend arrangements to be made after the termination of the present Readerships in August 1917." The Committee submitted its report to the Senate in March 1917, recommending that the tenure of the office of Readers be not extended after 1917. The report was adopted.

#### III.—UNIVERSITY LIBRARY AND BUILDINGS.

The total number of volumes in the University Library amounts to about 19,000. This includes a large number of periodicals, publications of Learned Societies, Government publications, etc. The number of volumes added to the

library from April 1, 1912, to the end of 1916 is about 5,900. On account of the war there has been a decrease in the supply of foreign periodicals most of which are German.

The Library was thrown open to the public in the beginning of March 1914. The following statement of books consulted and of books issued on loan during the quinquennium gives an indication of the increasing use made of it:—

Years.	Number of volumes consulted.	Number of volumes lent out.
1914-15	3,219	985
1915-16	6,377	2,699
1916-17	7,435	3,778

The total amount spent on books and periodicals since the formation of the library up to March 31, 1917, is about Rs. 1,31,400; the amount still available for the purchase of books and periodicals is about Rs. 69,872, of which the sum of Rs. 62,200 is in Government Promissory Notes.

An Author Catalogue of books in the library was published in 1914, and its first Supplement in 1917. The books in the library are suited to the requirements of all University courses and of post-graduate study and research. The library is specially equipped with sets, many of them complete, of periodicals and publications of Learned Societies and Institutions.

The University Library is still located in the building of the Connemara Public Library. The whole question of erecting new buildings not only for the University Library and the Government Oriental Manuscripts Library, which the Madras Government have decided to entrust to the care of the University, but also for new University offices, lecture rooms, etc., has been under the consideration of the Syndicate from the commencement of the quinquennium. The Madras Government have made a grant of Rs. 1,24,000 towards the cost of the buildings, and have also transferred to the University a piece of land to the west of the Senate House as a site for the buildings. A further sum of Rs. 5,00,000 from the Imperial Non-recurring Grants has also been appropriated for the purpose. On November 25, 1913, the foundation stone for the new buildings was laid by His Excellency Lord Hardinge. The complete plans and elevations for the buildings which were prepared by the Consulting Architect to the Government have been approved by the Syndicate, and the construction has been entrusted to the Public Works Department. Further progress, however, in connection with the erection of the buildings, is now in abeyance owing to the war.

#### IV.—UNIVERSITY FINANCES.

*Government grants to the University.*—The Government of India made to the University in 1912 a recurring grant of Rs. 65,000 and a non-recurring grant of Rs. 4,00,000 for development of University work. The following important proposals for the utilization of these grants made by the Senate were approved by the Government of India:—

##### *Non-recurring Grant.*

	RS.
For the erection of a building for the University Library	2,00,000
For purchase of books, etc.	1,50,000
For institution of a temporary Professorship in Indian Economics	50,000

##### *Recurring Grant.*

For the appointment of a Librarian for the library	Rs. 6,000 per annum.
For courses of University lectures of an advanced character by Specialists	Rs. 12,000 per annum.
For a University Professorship in Indian History and Archæology	Rs. 500—50—1,000 per mensem.
For a University Professorship of Comparative Philology.	Rs. 9,000 per annum.
For a University Professorship of Dravidian Philology.	Rs. 9,000 per annum.

A further non-recurring grant of Rs. 3,00,000, to be spread over three years, was sanctioned by the Government of India in 1913. With the approval of

Government this additional Imperial grant has also been appropriated to the new University buildings.

Grants of Rs. 20,000 at a time have been received four times during the quinquennium from the Government of Madras towards the cost of inspection of colleges and travelling expenses of Fellows, etc.

A Senate Committee was appointed in November 1916 to consider and report upon the proposal that the Syndicate should prepare and submit to the Senate annually a University Budget of income and expenditure. This Committee in March 1917, recommended draft regulations making provision for the consideration of the Budget by the Senate which were adopted. At the same meeting the Senate accepted a number of new regulations relating to finance in general.

#### V.—COURSES OF STUDY AND EXAMINATIONS.

##### (i) *Arts.*

(a) *Matriculation.*—A Senate Committee was appointed in March 1914 to consider the question of admission of students to Intermediate courses of study with particular reference to the Matriculation of holders of Secondary School Leaving Certificates under the schemes adopted by the Government of Madras and by the Native States referred to in the last quinquennial report. In consequence of the abuse of the discretionary powers vested in Principals of Colleges in making admissions of such certificate holders, the Syndicate proposed the withdrawal of these powers from such Principals as continued to offend. This Senate Committee presented its report to the Senate in October 1914. On the Committee's recommendation the following resolution was passed by the Senate:—

“That the Syndicate be requested to issue definite rules and directions under Regulation 166 (a) to provide that no holder of a completed Secondary School Leaving Certificate shall be admitted to a University course of study or shall be registered as a Matriculate, unless he has obtained a minimum percentage of marks in certain subjects, the percentage and subjects being from time to time specified by the Syndicate, and that it be a recommendation to the Syndicate that the above minimum should be fixed on the basis of the public examination marks as well as the school marks, the latter being moderated in all cases with reference to the school average and the public examination.”

The Syndicate issued in 1915-16 definite “Rules and Directions” to all affiliated colleges in connection with the admission of Secondary School Leaving Certificate holders to University courses of study, and in 1916-17 it published in the *Fort St. George Gazette* a list of the certificate holders eligible for admission to colleges in accordance with such revised “Rules and Directions,” from among whom alone admissions to colleges might be made. Similar lists are to be published annually in future.

(b) *Intermediate Examination in Arts.*—(1) By a recent decision of the Senate the Intermediate Examination in Arts and courses of study have now been divided into two distinct parts. Under the revised regulations any candidate who has appeared for the examination in both parts in the same year and has obtained the minimum number of marks prescribed in the subjects comprised in one part but has failed to do so in the other part may appear again for examination in that part only in which he has so failed. The Intermediate Examination of 1917 was the first held under these revised regulations.

(2) During the quinquennium the Intermediate courses of study have been revised and lightened. Four thousand nine hundred and twenty-eight undergraduates have passed the Intermediate Examination in Arts in the period 1912 to 1916: of these 4,030 and 720 proceeded to the B.A. and the B.A. (Honours) courses, respectively.

(c) *B.A. Degree Examination*—(i) Languages other than English.—Under the new regulations the study of languages other than English which had been compulsory, was made optional in the degree courses. As a result the number of students taking languages fell off greatly. A Senate Committee was appointed in 1912 to frame and present to the Senate any proposals for alterations in the

regulations that might be considered desirable in order to encourage the study of such languages. This Committee's recommendations, which were accepted by the Senate, made provision in the regulations—

- (1) for students taking Mental or Moral Science, or History and Economics for the B.A. Degree, having the option of including a language in these courses;
- (2) for new courses of study in languages other than English—consisting each of a selected language and some related subject or language instead of two compulsory languages.

(ii) The old by-laws.—The B.A. Degree Examination under the old by-laws was held for the last time in 1916; facilities are still afforded to such candidates as have passed in only one or two divisions of the examination, to qualify for the degree by passing the B.A. Degree Examination under the new regulations in the parts or groups corresponding to the divisions of the B.A. Degree Examination under the old by-laws which they have not passed.

(d) *Honours Courses*.—The first B.A. (Honours) Degree Examination was held in 1914. The honours courses extend over three years from the Intermediate Examination in Arts and are as follows: (a) a compulsory course in English leading to an examination which may be taken a year after the Intermediate Examination; (b) optional courses leading to an examination which must be taken not earlier than three and not later than four years after the Intermediate Examination has been passed. The optional courses are (i) Mathematics, (ii) Physical Science, (iii) Natural Science, (iv) Mental and Moral Science, (v) History, Economics and Politics, (vi) Two languages, one being a classical language, (vii) English Language and Literature, (viii) Sanskrit Language and Literature, (ix) Arabic Language and Literature. Bachelors of Arts in Honours after the expiration proceed without further examination to the Degree of Master of Arts in Honours of two years. The number of passes in Honours in the first class to date is 33.

(e) *M.A. Degree*.—The M.A. Degree Examination under the old by-laws was held for the last time in 1914. Under a Transitory Regulation Bachelors of Arts under the old by-laws are admitted to the final examination for the B.A. (Honours) Degree as conducted in the years 1915 to 1920 and such of them as pass the examination qualify for the M.A. Degree.

On the recommendation of a Senate Committee appointed in November 1914, the Senate has passed resolutions providing for the institution under the new regulations of a M.A. Degree without Honours. The detailed regulations are still under consideration in consultation with the Boards of Studies.

(f) The provision that existed in the regulations under which candidates for the Intermediate and the B.A. Degree Examinations who fail on the first occasion were required to produce a certificate of an additional year's attendance at college on the next occasion on which they presented themselves for examination has now been rescinded.

(g) The Senate of the University is now divided into four Faculties, viz., Arts, Law, Medicine and Engineering. In October 1916 on the recommendation of a Senate Committee appointed "to consider and report upon the advisability of instituting a Faculty of Science, and B.Sc. Degree," the Senate has resolved to change the Faculty of Arts into the Faculty of Arts and Sciences and to institute courses for the Degrees of Bachelor and Master of Science.

A Senate Committee has been appointed to draft the necessary regulations in consultation with the Boards of Studies.

(h) *Teaching*.—The regulations relating to the L.T. Degree were revised with a view to lightening the course of study by—

- (1) the omission of the "History of Education" as a separate subject;
- (2) making the "methods of teaching all subjects to young children" an alternative instead of a compulsory subject; and
- (3) by the substitution of "One language other than English" for "Two languages other than English."

(ii) *Law.*

Prior to 1915 the course of study for the two examinations in Law leading to the B.L. Degree extended over two years. In March of that year the Senate on the recommendation of the Faculty of Law adopted a three-year course with three examinations so as to allow of the inclusion of a considerable amount of legal practice in both the course and the examination. After reconsideration a year later a revised body of regulations reverting to the two-year course and examinations, in which legal practice finds no part, has been finally adopted by the Senate on the recommendation of the Faculty of Law. These revised regulations further provide for the holding of the examinations in Law twice a year.

(iii) *Medicine.*

On the recommendation of the Faculty of Medicine the Senate adopted in 1914 an entirely new body of regulations for the courses and examinations in Medicine. The principal changes were—

- (1) Provision for half-yearly examinations.
- (2) Alteration of the title of the degree from "Bachelor of Medicine and Master of Surgery" to "Bachelor of Medicine and Surgery."
- (3) Extension of the L.M.S. Degree course from a four-year course to a five-year course identical in all respects to that of the M.B. & B.S. Degree.
- (4) Provision for combining the examinations of both the degrees, the same question papers being used for the two examinations with different percentages of marks.
- (5) Institution of two new examinations—one for the degree of "Doctor of Medicine," and the other for that of "Master of Surgery"—to take the place of the submission of an approved thesis for the grant of the Degree of Doctor of Medicine under the old Regulations.
- (6) Change in the name of the Degree of Sanitary Science from "Licentiate in Sanitary Science" to "Bachelor of Sanitary Science" and provision for candidates for the examination undergoing a course of study in an affiliated college and for taking the examination in two parts.

In March 1916, the Regulations for the M.D. Degree were further amended on the recommendation of the Faculty of Medicine so as to provide for every candidate for the degree passing a test in General Medicine in addition to the special subject of the particular branch selected.

The Regulations for the M.B. & B.S. and L.M. & S. Degrees were again revised by the Senate in March 1917, on the recommendation of the Faculty of Medicine; and provision has now been made for the exemption of unsuccessful candidates at the various examinations from re-examination in particular subjects in which they obtain qualifying marks, and for the Final examination being taken at the option of candidates either as a whole at one time or in two parts.

(iv) *Engineering.*

The courses of study and examinations for the Degree of Bachelor of Engineering were entirely revised by the Senate in October 1914. The new regulations provide for a four-year course in either Civil or Mechanical Engineering instead of the old three-year course.

## VI.—SCHOLARSHIPS, PRIZES, RESEARCH STUDENTSHIPS, SCIENTIFIC WORKS.

(1) *State Scholarship.*—Two scholars were selected for this scholarship during the quinquennium. Both of them proceeded to the University of Oxford. The scholar of 1912 after a distinguished career at Oxford has returned to India as a member of the Indian Educational Service. The scholar of 1914 is still at Oxford.

(2) *Special Scholarship for Research Work in Mathematics.*—Some years ago the attention of the Syndicate was invited to the remarkable character of the original work in Mathematics produced in his spare time by Mr. S. Ramanujam,

then a clerk in the Port Trust office. After inquiry he was awarded in 1913 a special scholarship of Rs. 75 per mensem for a period of two years to enable him to devote his whole time to his researches in Mathematics. A year later the Syndicate granted him a special scholarship of £250 per annum for two years to enable him to proceed to the University of Cambridge. On the report of Mr. G. H. Hardy, M.A., of Trinity College, Cambridge, under whom Mr. Ramanujam has been working, the scholarship has now been extended for an additional year. Mr. Hardy's report, which has now been published, indicates that Mr. Ramanujam is one of the most remarkable mathematicians of modern times.

(3) *Maharaja of Travancore Curzon Prize*.—This prize of Rs. 500, for the best original thesis in certain selected branches of knowledge with special reference to South Indian questions, has, during the quinquennium, been awarded only once, in 1913.

(4) *The Gokhale Prize*.—This prize was founded in 1915 by the Hon'ble Mr. S. Srinivasa Ayyangar, Advocate-General of Madras, in commemoration of the late Mr. G. K. Gokhale for promoting the study of Indian Economics, to be awarded biennially to the best essay, written on any topic connected with Indian Economics by Graduates in Arts of the University of not more than five years' standing. The theses in competition for the first award of the prize were submitted in February 1917.

(5) During the quinquennium the following research studentships were awarded in the subjects specified :—

<i>Subjects.</i>	<i>No. of studentships.</i>
Mathematics ... ..	1
Physical Sciences ... ..	4
Natural Science ... ..	1
History and Economics ... ..	7
Sanskrit ... ..	2
Medicine ... ..	1

(6) *Research and Scientific Works*.—The University has recently made arrangements for the regular publication of theses, lectures, researches, translations, etc., the work of University Professors, Readers, research students, and others. The following publications are in the press :—

- (a) Economic Surveys of Villages undertaken by students under the supervision of Dr. Gilbert Slater, the University Professor of Indian Economics. This will form the first of an Economic Series.
- (b) A few theses on Dravidian Philology prepared by the University Readers.

The Sir Subrahmanya Ayyar lecture on "Ancient Indian Polity" delivered in 1914 by M.R.Ry. Rao Bahadur K. V. Rangaswami Ayyangar Avargal, M.A., F.R.H.S., Professor of History and Economics in the Maharaja's College, Trivandrum, has been published by the University.

Mr. C. Ramalinga Reddi, M.A., Fellow of the University and Principal, Maharaja's College, Mysore, has published in Telugu a treatise on Political Economy, for which he was awarded a honorarium from the income of the endowment founded by Mr. P. Ramarayaningar, another Fellow of the University, for the encouragement of scientific publications in Telugu.

(7) *Indian Science Congress*.—Since the inauguration of the Congress graduates and under graduates of the University have taken an active part in its proceedings, and many of them have contributed papers at its meetings.

#### VII.--MISCELLANEOUS.

(1) *The Mysore University*.—During the quinquennium a University has been established in the Native State of Mysore, which is included in the territorial limits of the University of Madras. The new University was incorporated and began its operations on 1st July 1916. In consequence, the colleges in that State at present affiliated to the Madras University, namely, the Central College,



Bangalore, and the Maharaja's and the Maharani's Colleges, Mysore, will eventually cease to be connected with this University. The Mysore Darbar has safeguarded the interests of the Madras University by imposing restrictions upon the number of students from the Madras Presidency to be admitted to the Mysore colleges, and the fees to be levied.

(2) *Special University Lecturers*.—During the quinquennium under review arrangements were made for the delivery of special University lectures by persons eminent in Arts and Sciences, among which were the following:—

- (i) On "Phonetics," by Mr. Daniel Jones, M.A., Lecturer in "Phonetics" of University College, London.
- (ii) On "Differential Geometry," by Mr. E. H. Neville, M.A., Fellow of Trinity College, Cambridge.
- (iii) On "Cities in Evolution," by Professor Patrick Geddes, F.R.S.
- (iv) On "Geographical Factors in Indian History," by Professor L. F. Rushbrook Williams, M.A., B. Litt., Professor of Modern History in the Allahabad University.

*Note*.—Special University Lectures were also delivered by (1) Major W. S. Patton, I.M.S., "Investigations and discoveries regarding the disease *Kala Azar*;" (2) Mr. J. W. Madeley, M.A., M.I.C.E., "Drainage Works;" (3) Lt.-Col. C. Donovan, M.D., I.M.S., "Tropical diseases, including *Malaria*, *Kala Azar*, etc.;" (4) Mr. L. K. Anantha Krishna Ayyar, B.A., L.T., "Indian Ethnology;" (5) Mr. K. Krishna Ayyangar, B.A., L.C.E., "Architecture."

(3) *Tamil Lexicon*.—Reference was made in the last quinquennial report to the compilation of a Tamil Lexicon. In November 1912, the Government of Madras entrusted to the Syndicate the work of supervising the compilation of a Tamil Lexicon, and sanctioned a lakh of rupees towards its cost. This work was then in the hands of a Committee already appointed by the Government, and the powers and responsibilities of the Syndicate in connection therewith have never been clearly and adequately defined. They have so far been confined purely to administrative matters, such as finance, appointment of staff and establishment; and the Syndicate has assumed no responsibility in the matter of the adoption of general principles determining the form and scope of the Lexicon, or of the methods to be followed in order to give effect to those principles. This question of the Syndicate's responsibility in the matter is now under reference to the Madras Government. The Lexicon is still far from completion. The work of the Committee so far would represent only about forty per cent of the proposed dictionary.

#### B.—ARTS COLLEGES.

44. *Number of Colleges*.—Four colleges, two for men and two for women, have been newly opened. The Theosophical College, Madanapalle, and the Ceded Districts College, Anantapur, are the two new colleges for men. The latter which was opened by Government for the benefit of the Ceded Districts, is flourishing and has amply justified the expenditure involved in opening and maintaining it. An account of the colleges for women is given in the Chapter on Female Education.

Two colleges, namely, the Findlay College, Mannargudi, and the American Mission College, Madura, were raised to the First Grade.

The number of colleges affiliated in the B.A. (Honours) degree rose from three to six.

45. *Accommodation and Equipment*.—The most important additions to buildings in connection with Government Colleges were the construction of a new block for class and residential purposes for the Queen Mary's College for Women and the completion of new laboratory buildings for the Kumbakonam College. A new Chemistry laboratory is also being constructed for this college. The war has caused a temporary set-back in building activities; but several large additions are in process of construction. In a considerable number of other cases additional accommodation is required. The question of hostel accommodation is dealt with separately. Considerable additions have been made, with the aid of grants, to the equipment and libraries of First Grade Colleges. There has, however, been delay and difficulty in complying with indents for Science apparatus. Prices and freight charges have ruled high and in some cases supplies have been lost *en route*.

46. *Number and distribution of students in Arts Colleges.*—The total number of students in Arts Colleges for men and women rose from 4,939 at the beginning to 77,724 at the end of the quinquennium. This striking increase in numbers is due to the much larger number of students admitted under the existing system of Matriculation than were admitted when admission depended upon passing the Matriculation Examination. Much controversy has been aroused as to whether this increase in numbers is either justifiable or desirable. The number of women reading in Arts Colleges rose from 46 in 1912 to 184 in 1917. There were 36 students taking post graduate courses in 1917. There was a large increase in the number of students reading for Honours—459 in 1916-17 compared with 92 in 1911-12.

47. *Staff.*—In the six Arts Colleges under Government management there were 12 officers in the Indian Educational Service, 17 in the Provincial Educational Service, 38 in the Subordinate Educational Service and 53 others (including 6 on the staff of the Queen Mary's College for women, 9 appointments in the Ceded Districts College, 36 "Masters and Teachers" and 2 appointments on Rs. 200 per mensem), making a total of 120.

48. *Tutorial work.*—Closely bound up with the question of staff is that of tutorial work, regarding which I have been requested by the Government of India to incorporate in this report such information as is available. In most Arts Colleges the classes are so large that the introduction of a tutorial system such as prevails at Oxford is an impossibility. It is recognized that many members of the staffs of colleges do take an interest in the welfare of individual pupils and in such collegiate activities as do exist, and that further progress in this respect must in part depend on the development of a residential system which will include always some proportion of the teaching staff. The Government of Madras, however, felt that something more definite was desirable, and shortly after the close of the quinquennium they passed orders directing the introduction of a tutorial system in all Government Colleges. The concluding paragraphs of the Government Order run as follows:—"Each student of a college will be assigned to a member of the staff who will be regarded as his tutor. The tutor should, where possible, be the Professor or Assistant Professor of the principal subject of the student's course. He will be expected to see each individual student under his tutelage periodically so as to have an opportunity of discussing with him matters affecting his general welfare and the progress of his studies. He should also arrange a time on some fixed day in each week at which students assigned to him will be at liberty, if they so desire, to consult him on any point on which they desire advice. The information and insight thus acquired will be of great assistance to Principals of colleges who, by regular consultations with the tutors, will be enabled to acquire a personal knowledge of the progress, activities and needs of individual students which would otherwise be impossible.

The success of this system will of course depend on the spirit in which it is worked. The Government confidently hope that the members of college staffs will co-operate in making it a success and welcome the opportunities which it will give to mould and influence in the right direction the characters and dispositions of those placed under their immediate care."

#### C.—COLLEGES OR DEPARTMENTS OF COLLEGES FOR PROFESSIONAL TRAINING.

49. *Law.*—It was stated in the last report that proposals for strengthening the staff were under consideration. Action was imperative not only to meet the needs of the increasing number of students but also to secure the more efficient working of the college. A comparison between the staff as it was in 1911 and as it is now will show what has been done. In 1911 it consisted of a Principal and Senior Professor who was a whole-time officer enjoying chamber practice, a Junior Professor and two Assistant Professors on Rs. 250 each who were allowed to practise but were debarred from leave or pensionary privileges. Under the revised rules the staff consists of a Principal who is a whole-time officer debarred from all but consulting or chamber practice, two Professors on

Rs. 500 each and six Assistant Professors on Rs. 250 each all of whom are at liberty to practise. Provision was also made for the appointment, when necessary, of special lecturers and tutors, but so far none have been appointed. The course of instruction which under this reorganization was extended from two to three years was subsequently reduced from three to two as the University decided to shorten the B.L. course.

50. *Medicine*.—There is little to add to what has been stated in the University's report.

The college library has been reorganized, a special grant and an increased recurring grant having been given by Government for this purpose. A new laboratory for Biology and Physics has been built and two theatres have been re-seated to give increased accommodation. The Museum is at present undergoing reorganization. Other changes contemplated, more especially as regards the teaching staff, have been unavoidably postponed in consequence of the war.

51. *Engineering*.—In the early part of the period under review some changes were introduced in the rules relating to the Engineer classes. The general educational qualifications for admission have been altered so that not only graduates but those who have passed the Intermediate in Group I are now eligible for admission. The age limit has been lowered from 22 to 20. The college course, however, has been extended from three to four years, the one year's practical training in continuation being retained.

There were developments in connection with the teaching of Electrical Engineering, which forms part of the Mechanical Engineering course. A Professor of Electrical Engineering in the Indian Educational Service was appointed and joined duty in November 1915. An Electrical Laboratory Assistant on Rs. 200, rising to Rs. 400, was also appointed and joined early in 1916. Further a laboratory was thoroughly equipped at a cost of about Rs. 45,000 and opened for work.

The large increase in the number of students from 272 in 1911 to 511 in 1916 necessitated further additions to the staff; and four assistant instructors are now recruited temporarily and for a limited period, ordinarily three years, from the Public Works Department, as is the case with other subordinate members of the teaching staff.

The project for a new residential college was referred to in the last report. The site was acquired in 1912 and work on buildings started in 1914. It is hoped that they will be ready for occupation within two years.

52. *Teaching*.—The only Teachers' College during the quinquennium was that at Saidapet, which continued to work efficiently. It would however be desirable to make arrangements if possible for more practical training, as the Principal considers that the amount of actual practice in their art which students get is inadequate. The most important addition to the staff was the temporary appointment for five years of a Manual Training Instructor on Rs. 400 to Rs. 500. Twelve students completed a course of manual training in 1916-17, and ten passed the examination held. An increasing number of Honours graduates and M.A.'s are attending the college. Ten women were trained during the period under review. In 1916-17 there were 112 students in the L.T. department.

When the Rajahmundry Training College was closed and the Saidapet College reorganized it was anticipated that the needs of the Presidency would be met by Saidapet. This expectation has been falsified owing to the increasing demand for L.T.'s not only for Government service but also to meet the needs of secondary schools as education expands. Consequently arrangements have been made to reopen the Rajahmundry Training College. An L.T. class has also been opened recently by the authorities of St. Joseph's College, Trichinopoly.

53. *Veterinary*.—The Madras Veterinary College was first established in the year 1903, the Madras Government having fallen into line with the other local Governments in appreciating the economic utility of a Civil Veterinary Department. It was not found possible, however, to obtain trained men in sufficient

numbers to form such a department and it was with the object of supplying the required men that the college was instituted. It was first held in a rented building called Dobbin Hall, which accommodated the first and second year classes until the present college building was completed in 1905. Dobbin Hall and the large compound had meanwhile become Government property and after the removal of the classes into the college building the former class rooms were formed into a hostel for the students. The course is for three years and until four years ago the maximum strength of the college was sixty, twenty students being admitted yearly. Ten stipends of Rs. 10 monthly were originally given in each class and education was free; but owing to several preferring to accept foreign service on higher remuneration and to the urgent necessity felt in the rapidly growing Madras Civil Veterinary Department for more men, Government found it necessary to make all students enter into an agreement and bond either to serve Government for a period of at least five years on qualification or to return all benefit derived from stipends and to pay educational fees at the rate of Rs. 240 per annum. Further in consideration of these requirements from students they increased the number of stipends to the full complement of students. Meanwhile the rapidity of the growth of the department continued and called for an increased output of qualified men. The number to be admitted was therefore increased to thirty in 1915 and for five subsequent years to forty, making the full complement of the college 120 students. The supply of applicants for admission to the college is ample and up to the educational standard required from them, i.e., the old Matriculation examination or the School Final examination with 45 per cent of the marks in English and 35 per cent in Mathematics and a vernacular.

The hostel accommodation for the college students has never been sufficient. There was accommodation for only 23 students until 1915 when extensions were made which increased the capacity of the hostel by 20. Endeavours are now being made to acquire land for both hostel and Veterinary Hospital extension. It is expected that extensions to the main college building and a laboratory will shortly be taken in hand.

The college teaching staff previous to the increase in the number of students consisted of a Principal, Assistant Principal and three lecturers. It has now been supplemented by two assistant lecturers and the sanctioned appointment of another Imperial Officer after the war.

54. *Forestry*.—The idea of establishing a Forest College at Coimbatore originated, apparently, in December 1907 with Mr. F. A. Lodge, C.I.E., who was then Conservator of Forests at Coimbatore. A Forest School for Deputy Rangers and Foresters, which was poorly accommodated in the compound of the Conservator's office, had for some years previously been rendering excellent service to the Forest Department, and, in connection with a proposal to provide the school with a new building, Mr. Lodge urged that the opportunity should be taken to convert the institution into a college for rangers and for this purpose to construct a suitable building near the Agricultural College, three miles north of Coimbatore. Mr. Lodge's view was that the Forest College at Dehra Dun would before long be unable to take in enough men to supply the needs of all India and that it would be necessary to open for rangers of South India a separate college to which men from Madras, Mysore, Travancore, Hyderabad and Bombay and owners of private forests could be sent for training. For Madras, the College at Dehra Dun had always possessed certain disadvantages. Its distance had deterred many eligible men from seeking admission to it, and the practical training at Dehra Dun takes place in forests of the temperate and sub-tropical zones and under climatic conditions which are entirely foreign to Madras. The Inspector-General of Forests who, as it chanced, was at the time touring in the Presidency, warmly supported Mr. Lodge's views. The Board of Revenue took the opportunity of discussing the matter with the Inspector-General and submitted to Government proposals for the formation of a Forest College at Coimbatore. The proposals were generally accepted by the Local Government in 1908, and the Government of India, in their turn, expressed their cordial approval. The Board thereupon suggested that a beginning might be made in June 1909 by temporarily locating

the college at Saidapet in the buildings vacated by the Agricultural College; but for various reasons the proposal fell through. The construction of buildings at Coimbatore was formally sanctioned by Government in August 1909.

Rules for the working of the college based almost entirely on those in force at Dehra Dun had been framed by 1910; but further progress with the general scheme was for some time delayed owing to the reluctance of the Secretary of State to sanction the expenditure required for the staff. This difficulty was ultimately overcome, and in July 1912 the college was opened. It was temporarily located in the old Municipal Hospital at Coimbatore, the classes consisting of 31 students, all of whom were rangers or deputy rangers already serving on the Madras establishment.

The new college buildings were opened on the 14th October 1916. Attached to it are a museum of forest products and a hostel. Quarters are also provided for the instructors and the staff. Altogether the buildings have cost over ten lakhs of rupees.

The college is under the administrative control of the Commissioner of Forests assisted by a Board of Visitors (of which he is ex-officio President), consisting of the four Conservators of Forests.

There are four categories of students, viz., (1) students already in the Subordinate Forest Service, who are deputed by Government on stipends of not less than Rs. 50 per mensem; (2) students deputed by Native States; (3) students deputed by the Government of Ceylon and (4) private students.

A fee of Rs. 1,800 for the whole course is levied from students falling under classes (2) to (4), with the exception of those deputed by the Coorg Administration and private students residing in the Madras Presidency, who pay no fees. The total number of students is limited to 33. The college course runs for two years and commences in August. Six months in each year are spent on tour in typical forests of the Presidency. The subjects taught are Sylviculture, Utilisation, Working Plans, Engineering, Range Administration and Law, Surveying and Drawing, Botany, Science and First Aid. The final examination in these subjects is conducted by officers who are not attached to the college. Three classes of certificates are issued: Honours, Higher Standard and Lower Standard. On leaving the college Honours men are eligible for fourth grade Rangers' posts, Higher standard men for posts in the last grade, and Lower standard men for Deputy Rangers' posts.

The first batch of students passed out of the college in 1914.

The following are the results of the examinations during the three years which fall in the quinquennium ending March 1917:—

—				Honours.	Higher Standard.	Lower Standard.	Failed.
1914	...	...	...	3	17	3	Nil.
1915	...	...	...	4	24	1	Nil.
1916	...	...	...	1	17	5	6

55. *Agriculture.*—During the last five years a very considerable change has been made in the scope and utility of the Agricultural College at Coimbatore by a change in the curriculum. The old course was one of three years ending in the diploma and instruction could only be given to twenty students in each class owing to the lack of adequate laboratory accommodation. The new course introduced in 1914 comprises two parts, the first of two years' duration, which is complete in itself and which ends in the certificate of proficiency and the second to which selected students up to the number of twenty can proceed for a further eighteen months' training and qualify for the diploma in Agriculture. As the first course is mainly agricultural and the rudiments only of science are taught, it is possible to admit larger numbers and this class stands normally at about 40. Thus at one stroke the maximum number of students in the college has been raised from 60 to 120. Of the 77 on rolls on 31st March 1917, 4 were Indian Christians, 47 Brahmans and 26 non-Brahmans.

This has necessarily implied an increase in staff and accommodation. More quarters have been built and more apparatus obtained for the practical work which is such a feature of the teaching and which now includes, besides Agriculture proper, practical instruction in Dairying and Cow-keeping, simple Veterinary Science and elementary Carpentry and Blacksmithy. A considerable development has also taken place on the research and investigation side of the college, and there is not a single section which has not been strengthened in the course of the last five years, the additional staff being only partly engaged in the extra teaching work to be done.

Finally, in a new foundation such as the Coimbatore College, a period of five years marks considerable progress in the building up of a body of tradition, and this is seen both among the staff and the students. This feeling has been assisted by the increase in the numbers of both: while the introduction of a college coat which is compulsory for all students has helped to intensify it. A non-official body, the Madras Agricultural Students' Union, assists in promoting intercourse between past and present students and serves their interests generally.

#### IV.—SECONDARY EDUCATION.

56. *Character and scope of secondary education.*—In the last quinquennial report two points were emphasized regarding the character and scope of secondary education, (1) the sharp distinction drawn between secondary and elementary education and (2) the disappearance from the classification of schools of a lower secondary department with the consequential withdrawal of recognition from such lower secondary schools as did not comply fully with the Madras Educational Rules and were not necessary to enable parents who wished it to secure for their sons some secondary education within a reasonable distance from their homes. Such schools as remained were called incomplete secondary schools. Schools which had not the lower classes were also styled incomplete and they were encouraged to open the lower forms and classes so that pupils who intended to go through a secondary school course might do so from the first. Theoretically it is possible to defend this classification and the attempt to place difficulties in the way of the passage of pupils from elementary to secondary schools, but in practice it has been impossible to adhere to a clear line of demarcation between secondary and elementary. At a very early date it was necessary to modify rule 47 of the Madras Educational Rules which, as explained in the last quinquennial report, prevented admissions from elementary into secondary schools and the grounds on which it is now proposed to modify rule 99 are stated below. As was mentioned in the last report "Parents prefer to keep their children in elementary schools as long as possible, because the fees are low. They are neither influenced by the class feeling which keeps so many children out of the Board schools in Great Britain nor impressed by the superiority of the training given in the lower classes of secondary schools." Moreover the elementary school is often nearer the parents' home and while the children are very young, proximity, especially in towns, is the criterion in the selection of the school. Further in urban areas most elementary schools are in practice "feeders" to secondary schools, even to the extent of teaching English—badly though it may be—and nothing that the department could do would prevent them continuing to fulfil this function. In fine it has been impossible in practice to maintain a rigid distinction between secondary and elementary schools or to uphold artificial barriers preventing the admission of pupils from one class of school into the other, and pupils will continue to pass from the one to the other. The question of the distinction between elementary and secondary education was discussed in the Legislative Council in 1914 and again at the Conference on educational topics held in March 1916, on both of which occasions the abrogation of the last paragraph of rule 99 of the Madras Educational Rules was advocated. This paragraph provides that in the case of admission into forms I, II, III or IV of a pupil who does not produce a certificate of attendance at a recognized secondary school an entrance fee equal in amount to the year's fee of the form or class next below that into which he is admitted shall be levied in addition to the ordinary fees, provided that if the headmaster is satisfied that previous to admission

a recognized secondary school was inaccessible to the pupil, this entrance fee may be reduced or remitted. Orders on the resolutions of the Conference had not been passed by the end of the quinquennium, but in recommending the particular resolution to abrogate this paragraph for the sanction of Government I remarked as follows:—"In most modernized countries the artificial barrier between elementary and secondary education is being demolished and in the early years of instruction there is not and indeed there cannot be any large differentiation between the work of the pupils in the earlier classes of a secondary school and of those of an elementary school. The artificial distinction between elementary and secondary education remains very sharp in certain countries, e.g., in some German States, or at least it did before the beginning of the war. In England the distinction as dependent upon social position or wealth is gradually dying out, giving place to the idea that each member of the community should be educated to fulfil that function in life which he is best fitted for. In the latter country the difference between elementary and secondary education is primarily one of social status and secondarily one of financial ability to pay relatively high rates for the education of one's children. The distinction is not based primarily upon educational ideals. In India there are no such rigid lines of division or social distinction as there were in England a few years ago. Distinctions in this country are based mainly on caste. The son of the peon sits side by side with the son of the District Munsif provided that they do not belong to widely differing caste. As differentiating therefore between those of higher and those of lower social status the rule is needless and irritating and it is liable to press harshly in its application upon the brilliant boy of poor parentage.

"I am prepared to recommend the resolution to the acceptance of Government on these general grounds and also on the following more particular ones. One of the greatest objections to the rule is that it works unevenly and is applied inequitably. In aided schools the levy of the fee is optional so that out of the large number of boys who are admitted from elementary into secondary schools some are required to pay this fee, while others escape from payment. It would be fairer if all were compelled to pay the fee or if none were compelled to pay it. Another objection to the rule is that it puts a premium on mendacity. Some Inspecting Officers say that a large number of pupils obtain admission into secondary schools on false statements that they have studied privately during their earlier years and have not had any instruction in elementary schools.

"If the resolution receives the approval of Government and they do abrogate the rule it may be possible that we shall have to seek means for protecting the secondary schools from a possibly large influx of ill-prepared boys from elementary schools. It may even be necessary to prescribe some examination for entrance into secondary schools. I do not however propose at the present moment that such an examination be instituted. This is a case in which we may very well wait and see. We shall also have to restrict by departmental rules the teaching of English to those elementary schools which are adequately staffed for the purpose. I think that in this way it should be possible to avoid the anticipated harm to these schools of diverting them from their proper function to that of preparing boys for the secondary course."

57. *Admissions.*—Admissions are made into secondary schools of pupils from other secondary or from elementary schools or of pupils who have attended no school previously but have studied privately. Admissions are rarely restricted to the numbers that can really be properly accommodated and efficiently taught. It is natural that pressure should be brought to bear by managers on headmasters to admit all applicants when fees play such a large part in the financial running of the school. The result, however, is that a number of schools are overgrown and every inch of space is taken up. Schools of upwards of or over 1,000 pupils are not uncommon, with each form and class divided into several sections. In such schools it is found that organization, supervision and efficiency are sacrificed on the altar of fee income. The only restriction on the admissions is the proviso in rules 29 and 86 (1) of the Madras Educational Rules to the effect that no class or section of a class shall contain more than 40 without the sanction of the Director.



Unfortunately even though 40 is a high maximum it is impossible to enforce this proviso strictly without hardship to individual pupils. Where the schools in a particular locality are full, it is idle to expect managers to go to the expense of opening an additional section for the sake of four or five boys especially when they know that a few will probably drop off in the course of the term. Hence permission has generally, if reluctantly, to be given to exceed the maximum prescribed and thus in this way also overcrowding is promoted. In some large towns an additional high school could with advantage be opened. The opening of additional mufassal schools should also tend to check the rush for admission into schools in large urban centres.

58. *Promotions.*—In my remarks below on the working of the Secondary School Leaving Certificate Scheme I have spoken of the neglect of the B Group subjects and of the failure to insist on satisfactory progress in them as a necessary condition of promotion. This has been the most fruitful source of badly made promotions. Apart from this, I am inclined to think that headmasters are less interested with in making promotions and that on the whole promotions are made in a more satisfactory manner. This is not to say that evils do not exist and though my impression is that his strictures are unduly severe, I may quote what Mr. Green says in this connection as indicative of what may occasionally occur in the less well-managed schools:—“Another handicap to the efficiency of a school is the ingrained habit of Indian boys to leave the school in which they do not get annual promotion, nor does the habit show signs of growing stale. Attempts have been made with some success in Palghat and Calicut to combat the evil by an arrangement between the local headmasters. But while such measures check the local traffic in peripatetics, the general traffic goes merrily on and will continue so long as schools exist, which cater for such material in spite of the effect of such admissions on the standard of work in them. This flow of undesirable admissions is increased by boys who are alleged to have studied privately, whose antecedents it is a work of supererogation to enquire into and by boys who receive transfer certificates qualifying for promotion on condition that they leave the school of issue. The boys' real position in the school he has left is not revealed by the transfer certificate. I do not say that these abuses are widely practised, but there is no doubt that such cases do occur.

Closely connected with this peripatetic habit of non-promoted boys is the unsatisfactory way in which promotions are made, especially to the fourth and sixth forms. But the importunity of parents, and their threat of the withdrawal of their boys if they are not promoted, and the indiscriminate allotment of marks make the adoption of a reliable system of promotions still visionary.”

59. *Fees.*—There were no changes in the fee regulations. There has been considerable discussion with regard to concessions, the list of backward classes and the conditions under which and the limits up to which concessions should be given. The question of the revision of the list of backward classes, however, is still under consideration, and no action can be taken pending the orders of Government.

60. *The Secondary School Leaving Certificate Scheme.*—The general features of the scheme were described at length in the last report and it is unnecessary therefore on this occasion to repeat the details. It will suffice to mention the changes which have been made in the control of the examination and in the courses of study and to discuss the difficulties or defects which have been experienced in the working of the scheme.

The public examination was conducted until 1916 by a Board consisting of the Director of Public Instruction as President, the Secretary to the Commissioner for Government Examinations as Secretary, and four officials and four non-officials as members. The Board also advised regarding courses of study and such questions in connection with the working of the scheme as were referred to it by the Director. In the earlier part of the quinquennium, however, the question of the large number of admissions into colleges aroused considerable controversy. It was contended that admissions were made which were justified neither by the school record nor by the marks obtained at the public examination



and that the University was accepting as the test for admission an examination over which it had no control. Consequently there was a strong feeling in some quarters that it would be better to return to the old Matriculation Examination as a test for admission to the University. It was eventually decided that a larger representation of the University on the Board was desirable and that if adequate representation was secured the question of the University resuming control of the examination might be dropped. The addition of four University members was accordingly proposed and the Board as now reconstituted consists of ten members, four of whom are nominated by the University in such a way that there are five official and five non-official members. Every effort is made to see that in the personnel of the Board the different subjects are adequately represented and that at least the six who are not University members are persons in close touch with school work. The University nominees are appointed as joint examiners and the question papers are set in consultation with them by the examiners appointed. The instructions to assistant examiners for the valuation of answer books are issued at the examiners' meeting conjointly by the examiner and the joint examiner concerned. The University nominees also assist in editing the reports which examiners have since 1912 been required to submit. Copies of these reports, which contain comments on the candidates' work and answers and suggestions for future guidance, are communicated in whole or in part to the various schools. A further direction in which a closer connection between the University and the public examination has been established is in regard to the moderation of marks. Marks have been moderated since 1915, so as to take into account not only the marks gained at the public examination, but also, though to a lesser degree, those obtained at school. The moderated marks are entered in the School Leaving Certificates in accordance with instructions received from the Syndicate in addition to the public examination marks.

Few changes have been made in the examination rules or in the form of the certificate. Some simplification of the latter has been suggested, and it is felt in certain quarters that less complexity in the rules of the Syndicate for admission to college classes is desirable as well as in the entries in the certificate form. Mr. Douglas, for instance, says "I do not think that what is gained by recording a boy's marks for three years compensates for the expenditure of money, time and energy involved. No head of an office with whom I have discussed the subject has ever admitted that he consulted the school marks of the applicant (though many consult the remarks as to conduct and athletic qualifications) and yet a special clerk in each school is needed for work which is mere ploughing of the sands." It is, however, difficult to simplify the entries to any great extent without destroying essential features of the scheme; while, as to the attitude of the employer, it may be intelligible and natural but it is none the less regrettable. It also shows that the appeal for co-operation made in the last report to ensure adequate recognition of the school work done by holders of certificates has fallen on deaf ears.

It will be convenient next to notice changes made in the courses of study, the numbers appearing for the examination either for the first time or supplementally and the relative popularity of different subjects. Practical examinations in Physics and Chemistry were tentatively introduced soon after the scheme was brought into force. Practical tests have been compulsory since 1914 in Physics, Chemistry and Botany, the practical examination being conducted by means of questions set by the Board. There is also a test in type-writing (mechanism) which is conducted by examiners appointed for the purpose who visit each centre where there are candidates. Pupils appear for the public examination in the following subjects as C Group subjects in addition to those specified in the notification as first issued—Physiology, Domestic Economy, Physiography. A syllabus common to all the schools was drawn up in the case of Physiology. In the case of the other two subjects the question paper was drawn up with reference to the syllabuses followed in the schools concerned: this was the practice in the case of Physiology also until the number of schools which sent up pupils in the subject was deemed large enough for a common syllabus to be framed. The courses of study in English and Elementary Mathematics under Group A and in seven C Group subjects were considered during the quinquennium. They have been

lightened and the first examination under the revised syllabuses will be conducted in March 1918. Under Group B syllabuses were drawn up for Elementary Science and History of the British Empire together with the Geography connected with it and were subsequently approved by Government. One object of this lightening and modification of the courses was to render it possible to encourage a more thorough and more widely spread study of the vernacular and classical languages. The inadequate attention paid to the vernaculars and to Sanskrit had attracted attention for some time. Briefly put, as regards vernaculars, there will be a separate paper or part of a paper on a prescribed literature book under Vernacular Composition and Translation under Group A in addition to the existing question paper on Composition and Translation. This will include questions demanding a knowledge of grammar. The course in vernacular languages under Group C will include this literature book so that there will be one paper or part of a paper common to both groups. As regards Sanskrit or any classical or foreign language, Government have ruled that the certificates of pupils who take such languages will not be considered incomplete because they contain no entry under Vernacular Composition and Translation in Group A, nor will the Department consider the omission for such pupils a defect in school organization. Since the close of the quinquennium the University have agreed that such pupils will not be debarred from admission to the University on the ground that they have no entry under Vernacular Composition and Translation in Group A.

The number of pupils who have sat for the public examination has increased steadily. In 1913, for instance, there were 4,400 candidates appearing for the first time and 2,453 taking a supplementary course : in 1917 the respective figures were 5,578 and 3,343. There is some increase in the number taking a South Indian Vernacular over and above the increase in the number of examinees though the increase is not as large as it might well be. It is, however, marked in Tamil and Telugu. By far the most popular C Group subject is History of England : in 1917 no fewer than 5,313 appeared in this subject, and there seems to be a general impression that it is easier to secure satisfactory marks in this than in any other subject. For Algebra and Geometry there were 2,274 candidates, for Physics 2,041 and for Chemistry 1,171. Common combinations in C Group subjects are History and a language, Physics and Algebra and Geometry, or Chemistry and Algebra and Geometry. Occasionally both Physics and Chemistry are offered, but the number of schools which make provision for both Chemistry and Physics is limited. To offer both is expensive and requires more accommodation and a stronger staff for science than most schools are able to provide. The recurring charges are considerable especially in the case of Chemistry. The numbers who take subjects not leading to University courses are disappointing. In Shorthand and Typewriting they have increased, but in Commercial Practice and Geography, Book-keeping and Commercial Arithmetic and in Précis-writing and Indexing there has been a very considerable decline. This is disappointing as showing how largely the groups of the Intermediate examination dominate the choice of subjects in the schools.

I have already stated that the number of boys taking a supplementary course is increasing. It was remarked in the last quinquennial report that one great defect of the old system was the congestion of sixth forms owing to the return to them of boys who had failed in Matriculation, and it was expected that the new arrangements would not only tend to diminish the number returning to school but would oblige the schools to provide specialized instruction for those who did return and in doing so to take advantage of the sections in which the forms are worked. This expectation has not been fulfilled as pupils, whose marks according to the Syndicate's rules do not entitle them to admission to the University, tend to return in increasing numbers in the hope of improving their certificates. Such pupils and those whose marks, especially in English, are not high enough to secure admission into the public service or to secondary training schools swell the number taking a supplementary course and the 'great defect of the old system' threatens to return. Mr. Green remarks : " Boys return for additional years of school life in far larger numbers than the purposes of the course probably contemplated. The supplementary students swell school fees,

while they exhaust accommodation and the patience of the staff. The difficulty could be overcome to some extent by limiting the number of times a boy may reappear. Boys who fail to improve their certificate at a first reappearance rarely do so later, and, I think, never after a second effort. I am convinced too that the presence in large numbers of these boys is detrimental to school discipline and organization." According to Mr. Ransford, the supplementary boys are invariably found to be the least attentive and to make least progress. Under existing rules a supplementary student has a right to be presented for the public examination; but continued idleness is now held to constitute grave misconduct to be dealt with under Rule 58 of the Madras Educational Rules. Further the enactment that supplementary boys aspiring to a college course must repeat all subjects has prevented some of the previous idleness and indiscipline. "If headmasters"—to quote Mr. Ransford again—"will only have the courage to refuse supplementary boys (the sort of boy who failed repeatedly for the old Matriculation) and the fee they bring and it is the money which is the root of all bad and promiscuous admissions, the work and discipline of their institution alike are bound to progress." It may be added that more careful selection for permission to appear for the public examination also would help matters. Cases have occurred where all the pupils of Form VI have been presented for the public examination though it is laid down that headmasters in the selection of pupils to be presented for the public examination should be guided by precisely the same principles as they would adopt in making promotions to a hypothetical Form VII. The suggestion that the number of times for which reappearance is permissible should be limited would not help much as, out of the 3,343 pupils taking a supplementary course in 1917, 2,499 did so for the first time and 734 for the second. No limit could be imposed which would exclude these pupils who form the bulk of those taking supplementary courses.

It is, however, in connection with the B Group subjects that the sharpest criticism is found. It will be remembered that there is no public examination in these subjects, and the reason for this, as given in the previous quinquennial report, is that "Experience shows that subjection of the pupils to a public examination in these subjects prevents variety and originality of treatment, induces cramming and impairs their value as mental training. It is impossible to say, moreover, what, if any, fixed quantity of knowledge in them is necessary for entrance on any career. There is, therefore, no public examination in them." There is a consensus of opinion that to this is due the undeniably great neglect of these subjects. I will quote the remarks of three Inspectors:—

Mr. Ransford writes:—"There is no hope for the B subjects except with a public examination."

Mr. Douglas writes:—"Headmasters and teachers of B subjects, without a single exception, say that 'B' subjects are not in the running, in point of attractiveness, with the examination subjects. It would indeed be surprising if the case were otherwise. Be that as it may, that the abolition of a pass-mark has failed to affect materially the attitude of teachers and pupils to the public examination is, in my opinion, proved. The present system favours the incompetent. They insist on 'completing their certificates' and trust to the ignorance or indifference of employers on the one hand and to personal influence and wire-pulling on the other to get their certificates accepted as satisfactory. They alone would suffer by the adoption of a pass-mark. It is, in my opinion, a matter for great regret that at least Elementary Science and Geography are not made the subjects of a compulsory examination. The History of India should be put alongside the History of England as an optional subject in Forms V and VI. The idea that Sixth Form boys generally can be made to pay spontaneous attention to subjects which have no examination value should be definitely abandoned. So long as entrance to a career in life depends upon success in an examination, so long will the subjects of the examination absorb the pupil's interest and energy."

Mr. Champion says:—"It may without exaggeration be maintained that the public examination is still the controller and director of school work in respect of those subjects subservient to it. At the same time, I would not have it otherwise: the current neglect of B subjects amply illustrates the futility of

attempting to impart education without bringing the schools to the touchstone of some such public standard as a public external examination."

Again and again in inspection reports this neglect of B Group subjects has been mentioned and the fact that they are not taken into account in making promotions. At the same time I am not inclined to include them in the public examination and I am not without hope that steps recently taken will tend to remedy the present unsatisfactory state of affairs. In the first place, schools which neglect these subjects have been explicitly warned that neglect of the subjects or failure to take them into proper account when making promotions will entail forfeiture of the privilege of coming under the Secondary School Leaving Certificate Scheme at all: and in the second place a modification in the number of the B Group subjects was made at the end of the quinquennium and for Forms V and VI the two following subjects were prescribed for Group B (1) Elementary Science, (2) History of the British Empire together with the Geography connected with it, and detailed syllabuses have been laid down in both subjects. This will render it easier for the inspecting officers to test in detail the progress of the pupils and to report any inattention to these subjects. Indian History will find a place not only as a part of the British Empire but also in a special period prescribed in connection with what will in future be termed "History of England and British India" under Group C.

The system under which marks are awarded has also evoked criticism. The nature of this criticism may be gauged by the following quotations:—

Mr. Ransford says:—"Giving of marks is very uneven. It is exceedingly rare to find a teacher who can give marks at all sensibly for oral work, questions which might be suitable for compositions are given in oral work, and the result is an answer of tremendous length and generally abominably expressed."

Mr. Brierley says:—"There are loud complaints, however, that the marks system has invested dishonest teachers with inordinate powers, but if the inspecting agency is vigilant it is possible to minimize the causes for such complaints."

M.R.Ry. A. Rama Rao says:—"The school marking is often found to be liberal, but this is probably no more than what should be expected, seeing that the school marking is confined to the immediate lesson, which is probably fresh in the minds of the pupils."

Mr. Callaghan says:—"The system of giving marks is still unsatisfactory. Marks are seldom given for oral answers in class."

Mr. Champion says:—"The marks awarded at the public examination were and are more dependable than those assigned for daily work in school. It is not surprising that college Principals and prospective employers have confined their attention almost exclusively to the marks awarded at the public examination."

Mr. Green says:—"Methods of marking in school may have improved theoretically, for most schools can now present a fairly sound mark scheme, but the scheme is rarely carried out satisfactorily. Masters still lack the judgment or the courage to discriminate between the good and the bad. The marks in most schools disclose a dead level of mediocrity which by no means agrees with facts. In the less efficient schools, school marks diverge too favourably from marks obtained in the public examination."

Where the school marks are exceptionally unsatisfactory, there is provision for an entry to that effect in the certificate. It has, however, only very rarely happened that the marks have been so untrustworthy or so little related to facts as to justify such drastic action. With greater experience improvements may be hoped for, but at present it would perhaps be surprising to find employers paying much attention to school marks.

It may appear to some from the foregoing remarks and from the subsequent review of the methods of teaching that the picture is gloomy, that the schools are not flourishing and that the ceremonies of dead fashions still cling too closely to the teaching. Such a conclusion would be misleading; the picture has its bright as well as its dark side, there are many successful and efficient schools, and there is no lack of vitality in the teaching. My remarks on the Secondary School Leaving Certificate Scheme may fitly end with four further quotations.

M.R.Ry. A. Rama Rao says :—“The beneficial results of the Secondary School Leaving Certificate Scheme may be seen in (1) the consistent work done throughout the year, instead of the spasmodic efforts made as the examination season approaches, (2) the greater attention paid to practical work in all subjects, (3) the attention paid to physical exercises, (4) proper control exercised over students and (5) freedom in the choice of subjects and consequent specialization.”

Mr. Callaghan says :—“There is no doubt that the scheme has brought about a great improvement in school work, has helped teachers and managers in the maintenance of discipline and has had a wholesome effect on the conduct and progress of the pupils.”

M.R.Ry. M. Ramaswami Ayyangar says :—“The reports received from the several institutions are practically unanimous in their praise of this scheme as a very great improvement upon the old Matriculation course which it has supplanted. The merits of the system are (1) systematic work done daily in place of the superficial hurried cram work done just one or two months before the examination, (2) the wide scope for choice of subjects suited to the pupils' capability and calling in life.”

Mr. Champion says :—“Owing to the institution of a certificate exhibiting the progress of the pupil throughout the last three years of his school course, the long periods of idleness, followed by a grand, health-destroying spurt which characterized the work of many pupils when school work was controlled by the Matriculation examination, has given place to more sustained, placid and effective study. This marks a great step in advance.”

61. *Staff.*—The number of qualified teachers is still inadequate both of the collegiate and of the secondary grade, and it will be long before the supply is equal to the demand. It is difficult and expensive enough to make good wastage and to meet the additional demands consequent upon the normal expansion of education. The mere wastage due to death, retirement and to employment outside the profession is considerable. The Department alone employed 106 additional L.T.'s during the quinquennium and most of these not in school work but in training of teachers or in inspection. As has been explained elsewhere, however, arrangements have been made to provide additional facilities for the training of graduates and of secondary men and it is hoped that there will be some improvement in the ensuing quinquennium. Nevertheless to make it possible to staff schools entirely with trained teachers would cost many lakhs, and there are many other legitimate claims on the limited educational budget and the ideal of seeing all secondary schools manned wholly by trained teachers is not likely to be attained in this generation. Again, there is a wide divergence between different parts of the Presidency and different classes of schools in the number of qualified teachers entertained. Some parts of the Presidency can secure teachers more easily and at a lower rate than others. Tanjore, for example, can more easily secure and retain the services of a qualified graduate on a moderate salary than Cuddapah. Teachers will serve more readily in Madras than in Ramnad. The Ceded districts have generally to import teachers from the Tamil districts as few Ceded districts graduates take to teaching. Such teachers are usually on the look-out for an appointment nearer home. Consequently an exceptionally high rate of pay has to be offered in these parts and even so it is difficult to retain the services of such men. Telugu L.T.'s are scarce and Uriya graduates rarer still. The re-opening of the Rajahmundry Training College should improve matters, but at present the number of trained teachers in the Northern Circars is woefully inadequate. Conditions in Malabar are much more satisfactory. With such variations in the supply of trained men and in the relative attractiveness of different localities, there are corresponding variations in the qualifications of the staffs in different schools and in their rates of pay. A trained graduate assistant in Madras City or Tanjore will start now on about Rs. 70 per mensem rising probably to Rs. 100; the initial salary in Bellary or Anantapur will have to be at least Rs. 80 per mensem. An untrained graduate can command from Rs. 50 to Rs. 60 per mensem. In the dearth of qualified men the appointment of untrained men is unavoidable; but it certainly does not make for efficiency where for

cheapness' sake "raw" graduates and men who have no intention of remaining permanently in the profession are entertained.

If salaries have risen, prices have risen too and additional inducements have to be held out if capable men are to join the profession. In the first place greater security of tenure is desirable and in the interests both of the staff and of the management mutually binding agreements as to the terms of service, scale of pay, notice to be given on either side of termination of service, etc., are to be encouraged: in the second place, provident funds should be introduced. The details of a general provident fund have not yet been worked out, but meanwhile a considerable number of schools have funds of their own. Details are given separately. Another desirable reform, so far as schools under Board and Municipal managements are concerned, would be to place the teachers in such schools in some kind of service so that promotion would not be confined to the school in which a teacher happened to be serving at the time but would be open to him by transfer as vacancies occurred elsewhere. His provident fund deposits also should be transferable on such transfer. At present in schools under public management conditions, though ameliorated by subsidies given to improve the pay and prospects of teachers, are not satisfactory. Provident funds are rare, the scale of salaries is often inadequate, promotion is limited, and the management is not always satisfactory. A Taluk Board or Municipality often has insufficient funds to finance the school properly; and, if there is a profit, it is at times diverted to other purposes instead of being spent on the school. Party feeling and a lack of harmony among the management as regards staff and salaries are complained of in the north and it is possible that schools under public management might be more smoothly worked and the conditions of service in them improved if school boards were appointed to manage them.

The staffing of the lower forms and of incomplete secondary schools has improved, but the qualifications of the teachers of these forms and of the preparatory classes are by no means as satisfactory as they should be. The employment of a graduate to teach forms below the fourth is exceptional and for the most part Forms III to I are taught by teachers of the secondary grade, some of them untrained, while classes 3 and 4 are not infrequently in charge of "lower secondary" trained teachers. If the methods of teaching in the lower classes are to improve a corresponding improvement in the qualifications of the teachers in charge of them is required. The teacher of a classical or vernacular language is still as a rule the worst-paid teacher on the staff. In schools under public management matters have been improved by the grant of subsidies which have enabled the authorities controlling these schools to introduce a better scale of pay (generally Rs. 20 rising to Rs. 40 per mensem) and secure a better type of teacher. But apart from vernacular composition and translation, which is often taught by a graduate, the teaching of vernacular and classical languages is still generally in the hands of badly-paid pandits or munshis who have often learning indeed but whose methods in teaching are stereotyped and old-fashioned—to them in Sanskrit "Thus said Panini" is the last word.

The remarks made above are borne out by the following figures:—

Classification of teachers.	On the 31st March 1912.		On the 31st March 1917.	
	Number of teachers.	Percentage.	Number of teachers.	Percentage.
Teachers holding—				
Non-Indian Diplomas	43	1 1	47	1 1
Professional Certificate. { Collegiate	708	17	923	16
{ Secondary	1,292	30	1,683	30
{ Elementary	827	19	915	16
General Education Certificate. { Collegiate	342	8	475	9
{ Secondary	591	14	1,064	19
{ Elementary	234	5	192	3
No certificate whatever	257	6 6	356	6 6
Total	4,294	100 100	5,656	100 100

It will be observed that while the total number of teachers holding professional qualifications has increased the percentage they bear to the total number employed is less; and that, though relatively fewer, absolutely more trained teachers of the elementary grade are employed. That 19 per cent of the teachers in secondary schools should be of the elementary grade, and some of these untrained too is obviously unsatisfactory. The average number of pupils taught per teacher is approximately twenty-four.

62. *Accommodation.*—There has been considerable building activity during the quinquennium despite the financial stringency and a number of well-designed buildings have been constructed or are under construction. Some examples may be quoted from various parts of the Presidency. In the north, the Zamindar of Parlākimedi has put up a magnificent block, and the Raja of Pithāpuram has erected a fine school building. In Madras and Chingleput buildings have been completed for Muthialpet, Kellett, U.F.C.M., Chingleput, U.F.C.M., Conjeeveram and Madurantakam High schools. In the south, the Chettiyar's High school, Chidambaram, the Madrasa-i-Islamiah, Vāniyambādi, the Danish Mission High school, Tiruvannāmalai, the Board High school, Kulittalai, and the Tirukattupalle and Ambāsamudram High schools have been provided with new buildings. On the West Coast, a good building was completed for the Christian High school, Udipi. Nevertheless, as was stated in the last quinquennial report, an enormous amount still remains to be done. Mr. Callaghan complains that many schools are held in unsuitable rented buildings originally intended as dwelling houses. In the Fifth Circle, it is stated that one-third of the schools are unsatisfactorily and inadequately housed. Mr. Douglas states that in his circle 29 of the 45 schools are held in sheds or dwelling houses or in a combination of the two. Mr. Green goes so far as to say "There is only one school in the circle whose accommodation can be characterized as adequate, the Basel Mission High school, Palghat. In almost every other school accommodation lags far behind enrolment. Nearly every school in the Coimbatore and Malabar districts, but particularly in the latter, is overcrowded." It appears that, taken on the whole, the schools under public management are the worst housed, particularly in the Northern Circars.

63. *Equipment.*—A general improvement in the type of furniture used in schools is reported and in the apparatus and appliances required for the teaching of the various subjects, particularly science. Special provincial grants have greatly contributed to this result as, in addition to the normal allotment, special allotments, totalling 3·7 lakhs, were made in the earlier part of the quinquennium and were distributed free of contribution by the managements. Further progress depends partly upon the provision of funds and partly upon improvements in buildings, as suitable hygienic desks cannot be placed in badly-shaped rooms or in rooms which are too small. Most schools now have an adequate library. A good museum, however, is the exception; such as exist are generally neither useful nor used. The exceptions are found in some Roman Catholic schools.

64. *Methods of teaching.*—There has undoubtedly been some advance in the quinquennium in the methods of teaching employed in secondary schools. There has been improvement in the first place in the conditions which promote efficiency in teaching, in satisfactory accommodation and better equipment, and in the second place in the quality of the teachers. It will be of interest to record the impressions of the Inspectors as regards the teaching of individual subjects. Of English in the higher forms Mr. Yates says: "The frequent poverty and inaccuracy of expression in the higher forms is to be traced to the habit of conscious or unconscious translation of the vernacular." General complaints are neglect of grammar and defective teaching in the lower classes. M.R. Ry. A. Rama Rao says: "In most secondary schools, the teaching of English in the lower classes is in charge of Secondary School Leaving Certificate teachers, who are either trained or untrained; consequently, though the direct method is usually employed, both the reading and the pronunciation leave much to be desired. I have often heard questions to children couched in very bad English by this grade of teachers—English which the children themselves are most likely to copy." Again, Mr. Callaghan: "In the three highest forms increasing attention has been paid to



composition, but in most schools grammar has been generally neglected. In the Sixth Form of one of the schools most of the students were ignorant of the parts of speech. The chief defect in composition appeared to me to be the use of words of 'learned length,' where small words would have conveyed the meaning quite as clearly. The aim of the teacher seemed to be to get his pupils to acquire a literary style, while an easy simple conversational style is discouraged. I am not at all satisfied with the way in which the 'direct' method is employed in the earlier stages of English teaching. Teachers of the lower classes are incompetent. They either stick slavishly to the text-book and the lessons deteriorate into cram, or they accept incorrect answers or teach incorrect English." From the reports of examiners in the Secondary School Leaving Certificate Public Examination it is, I am afraid, true that grammar has been neglected recently. Some years ago the teaching of formal grammar was overdone but of late the pendulum has swung too far the other way. The question has been brought to the notice of the schools and an improvement may be expected. There is only one Inspector who reports favourably on the teaching of vernacular. Mr. Green says: "The teaching of the classical and vernacular languages appears to have undergone some improvement. More modern methods have been adopted in many schools and the improvement in the pandit's salaries in schools under public management will make it possible to introduce men of broader views and more rational methods than the learned men of old." Others complain of the methods of teaching adopted and the poor progress made. In general the teaching of Mathematics in the higher forms is favourably reported on, but not the work in earlier stages where carelessness, lack of method and untidiness are complained of. Teachers are said to be quite satisfied if the answers are correct, no matter how obtained. The Inspectors are unanimous that a great improvement has been effected in the teaching of science, at least in the higher forms. Thus Mr. Brierley: "The teaching of science in secondary schools has received an enormous impetus during the quinquennium very largely owing to the introduction of practical work in the scheme for the award of Secondary School Leaving Certificates. Large subsidies to local bodies and special grants to aided schools, irrespective of the manager's contribution, have made it possible to equip laboratories with practical-work tables and almirahs and the necessary scientific apparatus and chemicals that are essential for practical work in either Chemistry or Physics for a batch of students to work simultaneously. The laboratory of the Venkatagiri Raja's High school, Nellore, for instance, is a model of what a school laboratory should be." Mr. Douglas is not so satisfied with the teaching in the lower forms, which is described as formal and lacking in appreciation of the aims and methods of nature study. A good school garden in connection with the teaching of plant life is rare. As to the teaching of History, there is considerable divergence of opinion. Mr. Ransford remarks that "the teaching of English History needs much improvement. There is far too much of lecturing, the boys often taking down all they can of the teacher's high-flown talk, and far too little of questioning." Others speak of the teaching of History as considerably improved and this diversity of opinion very probably corresponds to real differences in the teaching in different parts of the Presidency. Certainly lecturing and dictation of notes used to be the bane of the teaching of both History and Geography, but I am inclined to think that those who claim improvement are right. My impression is that both these subjects are treated in a more realistic, practical and interesting manner. The tendency to neglect Indian History and Geography has been mentioned when dealing with the B Group subjects under the Secondary School Leaving Certificate Scheme. As to Drawing Mr. Champion says "The educative value of Drawing as taught is small." It would appear that the aims and value of Drawing are not adequately appreciated and that a properly equipped Drawing class is extremely uncommon.

Taken as a whole, the teaching has improved, especially in the higher forms. It is, however, disquieting to find that the inspecting officers are practically unanimous that the teaching in the lower classes is not very satisfactory. It is obvious that if the foundations are weak the superstructure cannot be sound. The defects in these classes may be attributed in part to inadequate supervision, in



part to hurried promotion and in part to the overcrowding in overgrown schools. It is also unfortunate that in India it is thought derogatory for a man of high qualifications to teach low forms. Consequently the younger a boy is the more he is in the hands of inexperienced novices or men of low qualifications, and this regardless of the fact that it is more difficult to teach the first class than it is to teach Form VI.

It is a fairly general opinion that incomplete secondary schools, especially those without an L.T. headmaster, are not so efficient as the corresponding classes of complete schools. A number of these schools have L.Ts., but the rule that such schools should have a trained graduate as the headmaster has necessarily to be worked with leniency and teachers who are not strictly speaking qualified to be headmasters of incomplete secondary schools are being allowed to be headmasters without outside supervision by an L.T. What has stood chiefly in the way of the development of these incomplete schools—schools chiefly with Form III as the highest—has been a lack of funds. If steps can be taken to secure their financial stability, their improvement and, in some cases, their development into complete schools may be looked for.

In connection with methods of teaching the question has been raised as to how far keys are used in schools. The consensus of opinion is that keys are not used to the same extent as before. The type of question set for the public examination does not admit of cram and the use of annotations either by teachers or pupils is discouraged in the better schools. The production of keys is thus less profitable but they still exist in connection with books prescribed for detailed study both in English and in vernaculars and, though they may not be used within the school premises, they are sometimes studied outside its precincts.

There has been considerable discussion of recent years as to how far and from what stage English should be the medium of instruction. Under the Madras Educational Rules, the vernacular has to be the medium of instruction up to the end of Form III unless the Inspector expressly permits otherwise. The substitution for English of a vernacular as the medium of instruction in the higher forms is attended by many practical difficulties and disadvantages and the only institution in which, so far as I am aware, a serious attempt was made to teach certain of the school subjects in the vernacular throughout the secondary course, abandoned the attempt as a failure. It may also be argued that the wider English is diffused the greater are the opportunities for the advancement of the more backward classes of the community. It is, however, unnecessary to enlarge upon the question here, as since the close of the period under review the matter has been discussed in detail in a conference at Simla composed of representatives from the various provinces.

65. *Manual training.*—Manual training has not made much progress. It is compulsory for all at the Mrs. A.A.W.N. College, Vizagapatam; and at the Teachers' College, Saidapet, and the American Mission High School, Pasumalai, training is given under expert guidance. In some other schools woodwork and carpentry have been introduced, but for the most part, the work is not properly organized and the instructors are not really qualified. With the appointment of a Manual Training Instructor at the Teachers' College, Saidapet, as already mentioned, and with the help of the students trained there, developments may be looked for in the ensuing quinquennium. The initial and recurring outlay is, however, considerable and special grants will probably be necessary to schools which desire to provide manual training and which employ instructors trained at Saidapet. Signs are not wanting that schools appreciate the value of such training and desire to make provision for it.

66. *Moral and religious training and discipline.*—Of direct moral instruction as distinct from religious instruction there has not been much in schools, and opinion has been divided as to the possibility and desirability of introducing such instruction. A syllabus has, however, been drawn up in conference and definite action will probably be taken in the near future. Indirect influences of course already exist and one Inspector writes: "There is no danger, I believe, of pupils growing up in ignorance of the main moral truths. Teachers are generally aware of their

responsibility in the matter of setting an example. There is no ground for dissatisfaction with the discipline and moral tone of the schools in this circle." Definite religious instruction is given in a number of schools under private management apart from mission schools. The day is often opened and closed with prayer. In particular cases in schools under public management religious instruction is permitted, for instance in the Government Madrasa-i-Azam. On the whole the tone and discipline of the schools have been satisfactory. There have been isolated breaches of discipline but none of a serious character. It has, however, been necessary to forbid categorically any participation by school boys in political agitation, and it is hoped that, with the co-operation of the managers of schools, there will be no further cause for complaint and that undesirable influences will no longer be brought to bear on immature minds. Increasing interest in games and the development of the hostel system have been aids to discipline; hindrances have been overcrowding in schools, undesirable and insanitary lodging houses, and parental apathy. On this last point a word must be said.

67. *Parental control.*—Inspectors complain that if annual promotion is got, the parents' interest lapses for a year, and that the progress reports which many schools send out receive scant attention. Mr. Callaghan remarks: "In some schools in the Fourth Circle teachers were required to visit the parents in their houses, but on account of the treatment accorded them this plan had to be given up." The other side of the picture is seen in the interest educated parents take in their children's studies and the anxiety they display to secure proper control when absence from home is necessary; and that parents do not in large numbers attend prize distributions and meetings is not surprising when it is remembered that the proceedings are generally in English, which most of them do not understand. It has to be remarked, however, that the rooms and halls in which meetings are held are usually capable of holding only a very limited number of visitors.

68. *Physical education, hygiene and medical inspection.*—There is undoubtedly greater interest in out-door games of all kinds and opportunities for exercise have been increased owing to the large grants given for the provision of playgrounds. With the help of special grants 53 schools in the mufassal and most of the schools in Madras city have secured fields for games. Inter-school competitions have continued to be fairly popular, though some school managers have no belief in them and there have been a few "unsporting" incidents. The weak point about physical education is that those who stand most in need of physical culture get least of it. As Mr. Champion says "Drill is lifeless; and flabby, and gymnastics are confined to the few." There are a few notable exceptions, e.g., the Board High School, Chittoor; but usually many boys in many schools get little or no physical training at all. Less specialisation on the parallel and horizontal bars is wanted and more exercise for all. The department has been fortunate in securing the part-time services of Mr. Noehren, a highly qualified and experienced Director of Physical Training, and under his enthusiastic guidance instructors are being brought up to date in their methods, schools are being shown how to make the best use of the limited space available, and interest in physical culture for all is being aroused in schools.

There is an awakening of interest in hygiene and medical inspection. As regards the latter, little has been done in secondary schools. Three schools in the Fourth Circle have doctors. I am convinced that a thorough medical inspection of Indian schools would reveal an appalling state of affairs. A hint of this comes from Mr. Green who says: "One school in the Eighth Circle had an unofficial inspection with the result that 44 per cent of the boys were found to have defective eyesight." With better buildings and furniture, with instruction through popular lectures and text-books, there has been some improvement in school hygiene, but unswept floors, closed windows and doors, and vitiated atmosphere are still a source of complaint; nor are the sanitary arrangements and surroundings always satisfactory.

69. *Number and strength of secondary schools.*—The number of secondary schools for boys rose from 343 in 1911-12 to 345 in 1916-17. The net increase of two is arrived at as follows:—24 new schools were opened, 20 were closed, in one case

there was amalgamation of two schools, the secondary school in the Native State of Sandur was excluded. Of the 24 schools newly opened, 2 were opened by Government, 1 is under Municipal, 3 under Board and 18 under private management. Fifteen schools which had Form III as the highest in 1912 opened higher forms during the quinquennium and some of them are already complete high schools. This is a satisfactory feature as providing a complete secondary course nearer the pupils' homes and checking the tendency to overcrowding in a number of limited centres.

The total strength of secondary schools for boys rose from 99,668 in 1911-12 to 136,141 in 1916-17, the latter figure including 1,533 girls. The increase in Forms I to VI was 24,798. Sixth Forms alone increased by 2,851, due partly to an additional number of boys taking a supplementary course. About one boy in every five comes from outside the town in which the school he attends is situated.

70. *Expenditure in secondary schools for boys.*—The total direct expenditure in secondary schools rose from nearly Rs. 24½ lakhs in 1911-12 to Rs. 38 lakhs in 1916-17. To the increase of Rs. 13½ lakhs, aided schools contributed nearly Rs. 11 lakhs, and board schools Rs. 2½ lakhs. Non-recurring grants to the extent of Rs. 12 lakhs were spent during the quinquennium towards the improvement of school and hostel buildings and equipment of secondary schools. This expenditure was mostly met from the Imperial allotments available during the period. Out of the recurring Imperial assignment of Rs. 80,000 for the improvement of aided English secondary schools, over Rs. 55 lakh was given as extra teaching grant towards the loss of fee income foregone on account of Muhammadans, Uriyas, girls and pupils of backward classes and castes and about Rs. 25 lakh as additional teaching grants to secondary schools. To the total direct expenditure, public funds contributed 11 per cent, fees 74 per cent and other sources 15 per cent, the corresponding percentages for the previous quinquennium being 12, 73 and 15 respectively. The average cost of educating each student was Rs. 28-1-4 and each pupil paid an average fee of Rs. 20-12-0. In the case of Municipal and Board schools, fees met 80 per cent of the total expenditure, Board funds 15 per cent, the balance of 5 per cent being met from Provincial funds. As regards aided schools, fees met 74 per cent, provincial funds 8 per cent and managers' funds 18 per cent of the total expenditure.

71. *General.*—It may, I think, be fairly claimed that during the quinquennium there has been improvement in the organization, accommodation and equipment of schools. I will in conclusion refer to one problem only. At present educational facilities are too much confined to a number of large centres, and boys who desire secondary education have to leave their homes at an early age and often live in an insanitary, undesirable environment. The extension of the hostel system, useful and desirable as this is, will not provide a final solution, as many schools with hostels will still be overcrowded and living in hostels is generally more expensive than living elsewhere. What is required is a wider extension of facilities for secondary education so that a lesser number of pupils will have to leave their homes at an early age and so that pupils, whose parents cannot or will not send their children away from home, may be able to take advantage of these additional facilities. The problem is largely a financial one, but its solution is necessary for the progress and development of secondary education.

#### V.—ELEMENTARY EDUCATION.

72. *Number of schools and managing agencies.*—The total number of public elementary schools for boys rose from 24,034 in 1911-12 to 28,867 in 1916-17. Of these, Government schools, comprising the practising sections of training schools, schools in the Agencies, Muhammadan Elementary Schools in Madras City and the Reformatory School, Chingleput, numbered only 199. In schools under Board and Municipal management there was a marked increase, the number in the former case increasing from 44,079 to 6,095 and in the latter from 312 to 500. This increase is satisfactory and is the result partly of taking over badly managed schools under private management and partly of opening schools in localities previously unprovided with a school.

The balance of the 28,867 schools, i.e., 22,073 are under private management, aided or unaided. Of these again, 4,923 or 22 per cent are under mission management. The rest are for the most part what are called "teacher-manager" schools. Night schools rose in number from 466 to 707 with a corresponding increase in strength from 9,784 to 17,606. Of these 707 schools, 22 were Board, 410 aided and 275 unaided schools.

Broadly speaking, schools under public management are more efficient than those under private management. Mission schools are generally better conducted than other schools under private management. Teacher-manager schools continue to be the least efficient, though there are, as might be expected, exceptions. Many of them are ephemeral in character, are ill-staffed, ill-housed and ill-equipped. The teacher-manager has no funds to fall back upon and has to depend upon his grant and payments from parents partly in money and partly in kind. He ekes out his precarious living as a stamp vendor, petition-writer, medical quack or priest and in his endeavours to secure his bodily sustenance is less regular than he should be in providing the necessary mental pabulum for his pupils. His average emoluments being small, he is tempted to try to increase them by swelling the average attendance upon which in part his grant depends. His school often has only two or three standards and his contribution to the permanent literacy of his pupils is correspondingly small. When the large proportion which teacher-manager schools bear and must long continue to bear to the total number of elementary schools is remembered, it is clear how serious a matter their relative inefficiency constitutes. Palliatives have been tried without success, such as the system of paying grants monthly described below. More radical measures are necessary, closer supervision on the one hand and better pay and prospects on the other so as at once to attract into the profession a better class of teacher with higher emoluments and to remove the disproportion of trained teachers in schools under public management with their better prospects and security of tenure, a disproportion which operates to the detriment of aided education.

Though the expansion of education during the last five years has been rapid there is room for further development. One point may be mentioned to illustrate this. Of the villages or groups of hamlets in close proximity having a population of over 2,000 or of between 1,000 and 2,000, 9 per cent of the former and 19 per cent of the latter are unprovided with schools.

73. *Strength of elementary schools for boys.*—The number of pupils in elementary schools for boys rose from 940,084 including 115,696 girls in 1911-12 to 1,231,198 in 1916-17. The latter figure includes 166,638 girls. As the number of boys reading in girls' schools in 1916-17 was 6,382, the total number of boys in elementary schools was 1,070,942. The increase in numbers represents an increase of 29 per cent. The percentage of male pupils in elementary schools calculated on the total male population rose from 4.0 to 5.2. It is, however, impossible to say how far this latter figure should be modified with reference to an increase in population since the last census.

74. *Distribution of pupils among the standards.*—The increase in the number of schools having a fourth and higher standards is disappointingly small. Complete elementary schools, i.e., schools having standards up to and including the seventh have risen in number from 188 to 298, but the number of schools having standard 4 as the highest was in 1916-17 only 4,149 as compared with 4,115 in 1911-12. The strength in standards 5 to 7 rose from 4,175 to 7,448, but even so the strength of these standards forms a negligible proportion of the total strength in elementary schools. It is possible that, if Government approve the proposal to abolish the so-called 'penal' paragraph of rule 99 of the Madras Educational Rules, their strength may increase as the preference for incomplete secondary schools has been partly due to the fact that this paragraph definitely discouraged the passage of pupils from elementary into secondary schools. With the absence of any restriction one obstacle to the increase in the strength of the higher standards of elementary schools would certainly be removed, even though the result might be to divert them from their special purpose of 'end' schools to that of being preparatory to the secondary course. I do not, however, think that it is impossible

for the same school to combine both functions, particularly if enhanced fees could be charged to those boys who wanted special preparation in English. It will be well to encourage higher grades of schools, whether called elementary or secondary; and if English is increasingly taught in these so much the better.

As to standard 4, there were, in 1916-17, 41,800 pupils in this standard but these formed only 3 per cent of the total number of pupils in elementary schools for boys. It was hoped that, with the remission of fees, the provision of books and slates, the grant of capitation allowance to teachers in schools having standards higher than the third calculated on the attendance in standards infant to three and other concessions, the number and strength of fourth standard schools would increase. This expectation has not been fulfilled and it has been suggested that further encouragement to the opening of higher standards should be given by reducing the rate of fees in these standards, by permitting the reappropriation of fees in standard 4 off higher elementary schools and by graduating capitation grants. These suggestions have been fully discussed and to all there are considerable objections. The adoption of the second and the third is now under the consideration of Government and if they decide to accept them there will be positive encouragement to open standard 4.

The remarks so far made regarding the distribution of pupils into standards relate only to the higher standards. The distribution, however, as a whole shows no improvement during the quinquennium and the duration of school life continues slightly to fall. The percentage of pupils in standards infant to three in 1911-12 was 43, 22, 17 and 14 while in 1916-17 it was 47, 21, 16 and 13. There is some controversy among experts as to the correct method of calculating the duration of school life, particularly in a country where compulsory education does not obtain, but there is unanimity in their conclusion that it has a tendency to fall. The latest calculations give in years for the last six years the following figures for the duration of school life in public elementary schools for boys:—2·41, 2·36, 2·22, 2·19, 2·17, 2·15. Allowance must be made for the fact that a very large number of new schools has been opened in recent years and these take time to develop. Further, girls reading in boys' schools are included and they generally read only in the lowest standards in boys' schools. Nevertheless, the distribution among the various standards and the duration of school life are far from satisfactory; and though it is doubtless better to have been at school for two years than never to have been at school at all, it must be concluded that a large number of elementary schools do little or nothing to add to the permanent literacy of the country. In discussing this question in the previous quinquennial report it was stated "of course the evil to be combated is not the admission of pupils but their premature withdrawal. In Europe legislation has been necessary to prevent this." In India legislation would be equally necessary. Without it we cannot eradicate the evil, we can only apply palliatives.

75. *Curriculum and methods of teaching.*—The scheme of studies for elementary schools which was fully described in the last quinquennial report remains the same. In a larger number of schools something more than the 3 R's is attempted but it cannot be maintained that the average level of the teaching in elementary schools is high; nor would it be reasonable to expect this in view of the generally low qualifications of the staff, particularly in aided schools, as has been already indicated in describing teacher-manager schools. It is not pretended that no advance has been made, but a brief reference to the methods of teaching adopted and to defects commonly met with will force the conclusion that there is much scope for improvement. In number work, merits are that greater attention is paid to mental work, that the training in the earliest stages is made more concrete and that a more practical turn is given to the teaching by homely illustrations and by exercises in local bazaar transactions. The main defect is a neglect of space work. Insufficient attention is paid to writing both in the early stages and later when unsuitable copy-books are introduced, used wrongly and corrected by faulty methods. As to reading and text-books, in the worse schools it is sometimes found either that the pupils have no books or that all in the same standard have not the same book. Vernacular poetry is unsatisfactory as often the teachers and nearly invariably the pupils do not understand the passages in their texts.

Reading is not nearly as free and fluent as it should be and much more practice in both oral and silent reading is required. Geography is on the whole better taught. More realistic methods are employed, relief maps and other apparatus are used and in not a few schools the causal relation between, e.g., the local rainfall, soil and crops is brought out. Civics is taught in a large number of schools and a post office scene or representations to the local officials afford popular topics for dramatization. The "National Anthem" or some form of song in honour of the King-Emperor is sung in all schools. The latter is generally more successful than the attempt to sing the "National Anthem" to the English words and tune when the pupils cannot understand the words and when the music is alien to the Indian genius. Most schools now possess portraits of the King and Queen and celebrate Darbar day as a day of loyal rejoicings. Nature study has improved but it is still too formally and too "bookishly" taught. School gardens are frequently still considered to be a boring departmental fad. There are, moreover, real difficulties. A garden costs a little in the initial stages, some space is required and none may be available, water may be scarce and at a distance, fencing is necessary as a protection against the omnivorous village goat. There are, however, some useful gardens and pot cultivation is occasionally attempted in towns.

In the lowest classes kindergarten methods are employed, sometimes quite well so far as the younger teachers and the best schools are concerned. The older teachers, however, when they attempt kindergarten occupations and drawing do not understand their spirit or the principle of correlation and they make the periods in the lowest classes much too long. In all elementary schools there is some form of physical training and methods have improved in the case of teachers recently trained. Some municipalities still employ drill and drawing instructors to supervise or conduct the work in these two subjects. Medical inspection is practically unknown, except in the case of the Agency schools. The Corporation schools, however, were recently inspected and conditions will be improved when action can be taken on the Medical Officer's report. Protection from small-pox or vaccination is obligatory in all schools. A more hygienic environment than prevails in many schools would also conduce to efficiency in teaching. Good teaching is difficult where light and air are deficient and where the latter is tainted by the immediate neighbourhood of a cowshed or a cesspool. Of moral or religious instruction there is little. The walls often have moral texts written up while many of the text-books in use include lessons designed for moral instruction. Indiscipline is rare.

There is a very general desire for the teaching of English in elementary schools. It is felt that even a smattering has some utilitarian value. This feeling is found even in rural tracts but is stronger and more articulate in urban areas. An English-knowing teacher generally gets more pupils for his school than one who has no such knowledge. In most higher elementary schools, English is taught, but the teaching is generally bad as the teacher's knowledge of the language is small. The criteria adopted by the inspecting officers in deciding whether English may be taught or not are the competence of the teacher and the need for the teaching of the language in the locality. It must be confessed that, even where it is forbidden, there is illicit introduction of English out of school hours.

Means similar to those described in previous reports continue to be employed by the inspecting staff to improve schools. Teachers' associations have multiplied. In the First Circle, for instance, where five years ago there were 28 with a membership of 900 there are now 100 with a membership of 3,000. These associations are not always intelligently worked, but they have undoubtedly done much good with their model lessons, schemes of work, syllabuses and the like. Exhibitions have also been helpful, particularly as showing various kinds of simple apparatus and appliances suitable for employment in the teaching of the various subjects. The inspecting officers are provided with lanterns and slides and often give lantern lectures at their headquarters or at meetings of the teachers' associations. Such lectures not only widen the general mental horizon of the teacher but often have a direct bearing on his work as there are slides to illustrate plant life, physical phenomena and sanitation. The inspecting staff also approve the syllabuses and time-tables in use in schools, issue circulars, give model lessons

in situ and occasionally conduct vacation classes in which instruction is given in the content of the various school subjects and in the methods to be employed in teaching them. Questions affecting elementary schools are also mooted and discussed at conferences of inspecting officers.

76. *Inspection of elementary schools.*—As has been explained in the section of this report which deals with controlling agencies, the existing inspecting staff is inadequate and proposals for reorganization are pending. There can be little doubt that the methods of teaching in elementary schools would be greatly improved if the Inspector had more time at his disposal to study the problems of elementary education in detail both in urban and in rural areas and was able to keep in closer touch with the local authorities so as to adapt the curriculum in consultation with them to local requirements and local conditions. Matters too would be placed on a much more satisfactory basis if the ranges were smaller. They are of unequal size and the amount of work in them varies considerably. Some ranges, instead of the ideal number of at most a hundred schools, have well over two hundred and a considerable quantity of office work. When Sundays and holidays are taken into account, it is clearly difficult for a Sub-Assistant Inspector to get through his annual inspections, let alone pay additional visits. Travelling takes time and is in some cases difficult and it may sometimes be necessary for him to assist the Inspector in the inspection of a secondary or a training school. Enquiries have to be held, and conferences and meetings of taluk boards or municipal councils attended. Small wonder therefore that the Sub-Assistant Inspector has little time for his schools and less for his private affairs. Instead of being able to travel at some leisure, and visit each school several times in the year, examine its working and the local conditions carefully and start new schools and new activities, his work is a monotonous round of hurried inspection. Some relief has recently been given in the shape of additional temporary staff and some ranges are not too heavy, but taken as a whole elementary schools are very inadequately supervised. It should perhaps be mentioned that endeavours have been made to lighten the administrative duties of the subordinate inspecting staff so far as board schools are concerned. It has been ruled by Government that the taluk boards which administer elementary education should be responsible for the preparation of all bills and the disbursement of the salaries and allowances of teachers in schools under their control and that Sub-Assistant Inspectors should be relieved of the bulk of the accounts work hitherto done by them. The main feature of the revised scheme sanctioned by Government is that all bills for salaries, house-rents, contingencies and capitation allowances are now prepared in the taluk board offices and that disbursements are made without the intervention of the Sub-Assistant Inspector. Government have also ruled that the inspecting officers of the Educational department are responsible only for the timely preparation and transmission of the necessary indentments for furniture, books and appliances for board and municipal elementary schools and that the responsibility of arranging for their supply and distribution rests with the local bodies concerned.

77. *Staffing of elementary schools.*—Out of 38,773 the total number of teachers employed in 1911-12 in elementary schools for boys, 12,956 were trained. The corresponding figures for 1916-17 were 49,060 and 16,631. Of these 16,415 were of the elementary grade, 203 were of the secondary and 7 of the collegiate grade: six held non-Indian diplomas. Twelve per cent of the total number of teachers held no certificates whatever. The percentage of trained to untrained teachers remains the same, and if the percentage is to rise a much larger output of trained teachers will be necessary not only to staff adequately existing schools but also to allow for wastage and expansion. Proposals in this regard are under consideration and some action has already been taken in connexion with the recurring grant of 4 lakhs sanctioned at the close of the quinquennium by the Government of India. This point has also been referred to under "Special Education." The average number of pupils per teacher was 25 in 1916-17 as compared with 24 in 1911-12. A large number of schools with a single teacher has about this number with fair strength in the infant and first standards and two or three pupils in the second and third.



Schools under public management continue to be much better staffed than aided schools. It is a general comment of the Inspectors that students who go to the training school from an aided school do not return to this school after training but seek employment in a board or municipal school. It is natural that this should be the case, as the pay and prospects in the schools under public management are better. The effect, however, as I have already mentioned, on the aided schools, particularly non-mission schools, is unfortunate. In Vizagapatam district, for example, the proportion of trained to untrained teachers is four to one in board schools and one to four in aided schools. Of the Presidency as a whole, the Nilgiris and Madras have the highest percentage of trained teachers, but the conditions are peculiar in these two cases. The lowest percentages are 18 in Bellary and 25 in Ganjam. In the latter case the low percentage is largely due to the paucity of trained Uriyass, and it may be hoped that the establishment of a training class at Berhampur will lead to some improvement.

Not only are the professional qualifications of the teachers in the majority of aided schools low, their general qualifications also are poor. Some improvement has been effected by the board sessional schools which have worked for a number of years and which provide general education courses, with a little special training added, for teachers possessing no qualifications whatever. Such teachers after passing through the sessional school are fit for admission into a training school. Nevertheless it remains true that men of better general qualifications will not enter the profession so long as the emoluments are less than those of a menial. With one exception, Inspectors put the average emoluments of a teacher-manager at only Rs. 6 per mensem. So long as this is the case, the staffing of elementary schools must continue to be unsatisfactory. Improvement in the pay of such a large body of teachers is of course a very expensive matter. Something has, however, been done and it is proposed to do more. In schools under public management, the minimum pay of a trained teacher has been raised from Rs. 8 to Rs. 10 and it is hoped now to fix the minimum at Rs. 11 at least. Further proposals are to permit appropriation of fees in standard 4 also instead of confining this privilege to standards infant to 3—a point already mentioned—and to enhance the pay of teachers and fix grades of pay in lieu of capitation allowances, the distribution of which is unequal and inequitable. In aided schools, while the general system of aid remains the same, modifications have been introduced into the rules which have the effect of improving the teacher's position. Instead of a flat rate of Rs. 36 per year per teacher, the following annual rates have been introduced, Rs. 36 for each untrained teacher, Rs. 42 for each trained teacher of the elementary lower grade, Rs. 48 for each trained teacher of the elementary higher grade. Further enhancements in these rates have been proposed to Government as well as the insertion of a special higher rate for each trained teacher of the secondary grade. Further, with the enlargement of the list of backward classes the teacher benefits as Rs. 1 per year instead of Rs. 8 is allowed for each pupil in average attendance belonging to a backward class or caste. Moreover the local inspecting officer can recommend an increase in grant up to 50 per cent for meritorious work. It must be admitted, however, that a larger number of teacher-manager schools suffered a reduction of grant than earned an increase. The figures for 1916-17 are as follows:—there were 12,080 teacher-manager schools with 2,474 trained teachers, and of these schools: 2,445 received enhanced grant for good work, and 4,292 reduction for bad work, the remainder having their grant neither reduced nor enhanced. In a number of cases I had to withdraw the grant entirely for fraud. An experiment may here be mentioned which was introduced in the hope that it would lead to greater stability in teacher-manager schools and improve the teacher's financial position. It was proposed to pay from the treasuries the grant for the teacher in monthly instalments and to disburse the balance due on account of the average number of pupils on the rolls or for efficiency at the same time as the other grants. The experiment which was introduced in 1915 in the four districts of Guntur, Bellary, Chingleput and Madura and repeated in 1916 was restricted to aided schools in which there had been no reduction in grant for the last three years. The experiment has not proved a success. Mission managers preferred to receive a lump sum as being



simpler and less troublesome for their accounts. Teacher-managers whose schools were situated near a treasury did not object to the system. Those who lived at a distance did not appreciate it because a visit to the treasury interrupted school work especially where there was only one teacher, and because to draw a small monthly payment they had to spend disproportionately on food, bandies and the like and often yielded to the temptation to fritter away the money drawn in the towns in which the treasury was situated. It was also pointed out that they preferred an annual lump sum as payment is made in March when food grains are cheapest and a supply for the year can most economically be laid in. The experiment therefore was abandoned. Whether a satisfactory alternative can be introduced either by disbursing the grants by postal money order or by Tahsildars through the village officers is now being examined.

78. *Accommodation.*—Of the total number of schools, 41 per cent are held in buildings of their own, 32 per cent in rented premises, 18 per cent in chavadis and the like and 9 per cent in dwellings belonging to the teacher or manager. There was considerable building activity during the quinquennium, chiefly due to special allotments made to local bodies amounting in all to Rs. 25 lakhs. In the last three years 1,892 buildings are stated to have been constructed. These buildings range from the simplest village school and the unpretentious mission building, sometimes serving the double purpose of village church and school and often costing considerably less than Rs. 1,000, to board and municipal buildings, sometimes costing as much as Rs. 10,000. Now it may be admitted that the case of Madras and perhaps of a few large towns such as Madura is exceptional, and that sites in towns are expensive, but considering the enormous number of school-houses that ought to be built and the manifold claims upon the limited resources at the disposal of the department forethought in designing school buildings and cheapness are essential. The design should be such as will admit easily of enlargement to meet ultimate needs. By neglecting this precaution local bodies have not infrequently had to incur expenditure out of all proportion to the additional accommodation provided. As to cost, type-designs are not cheap, and it will be necessary for local bodies to settle, in consultation with the inspecting officer, the design and the materials most suitable and economical in each locality. The Inspector of Schools, First Circle, states that this has been done in Ganjam and that the design settled by Mr. Macmichael when President of the District Board costs Rs. 100 and upwards and that extensions can easily be effected as strength increases. It is a very simple fact that for Rs. 10,000 ten schools can be built at Rs. 1,000 each instead of one for Rs. 10,000, but to judge by recent estimates and applications it is a truth that is being lost sight of. India cannot afford palatial elementary schools, but should aim at having a large number of modest school houses of the cheapest possible material and the simplest design.

I have referred already to school gardens. In rural areas little difficulty is experienced in finding at least a small amount of open space for play and physical training. In towns it is more difficult and in some cases municipal councils have solved the question by providing for all the schools in the municipality a common drill and play-ground in charge of a drill instructor to be used in rotation.

79. *Equipment.*—The equipment of elementary schools varies from the small unusable blackboard forming the sole item of equipment in a poor village school to the elaborately equipped board or municipal school with its pictures, maps, appliances for kindergarten occupations and practical teaching and up-to-date suitable furniture. Board and municipal schools are generally well equipped, thanks to their own allotments, to provincial subsidies and to the permission granted to local bodies to devote balances in recurring allotments to non-recurring purposes. Mission schools are generally fairly well equipped and the same may be said of individual teacher-manager schools. It is a hopeful sign that more is done by the teachers themselves in the way of making simple appliances and illustrations and the complaint that the appliances provided are not used is less universal. Less unsuitable elaborate furniture is found and perhaps the weakest point in the equipment of elementary schools is the pictures. For one illustration

of Indian conditions ten may be seen of English. This may be termed "realien" and doubtless the publishers approve; but teutonisms are discredited and illustrations of larvicidal fish in a malarial district would be much more valuable than pictures of flying fish. It will be better in paddy lands if the pupils are able to recognize a water hyacinth than if they study a picture of English flowers. Without being so dogmatic as to exclude all that appeals to the imagination one could wish for a great increase in the proportion of pictures dealing with local plant and animal life.

80. *Expenditure on Elementary Schools for Boys.*—The expansion of elementary education that has taken place in the last five years has necessarily been accompanied by a large increase in expenditure. The total expenditure on elementary schools for boys rose from Rs. 337.55 lakhs in 1911-12 to Rs. 58.32 lakhs in 1916-17 towards which public funds contributed Rs. 42.20 lakhs or 72 per cent, fees Rs. 7.29 lakhs or 13 per cent and other sources Rs. 8.83 lakhs or 15 per cent, the corresponding percentages for the previous quinquennium being 61, 19 and 20, respectively. Out of the increase of nearly Rs. 21 lakhs, which was to a large extent met from public funds, Rs. 13.55 lakhs was spent on board schools and the remaining Rs. 5.5 lakhs was sanctioned as teaching grants to aided elementary schools. The average cost per pupil was Rs. 4-13-0: each pupil in a Government school (mostly in Agency tracts) costs Rs. 13-2-7, in a board school Rs. 6-8-8 and in an aided school Rs. 4-22-0. Fees met 3 per cent of the expenditure in Government schools, 4 per cent in board schools and 17 per cent in aided schools.

## VI.—SPECIAL EDUCATION.

### *Training of teachers.*

81. *Chief characteristics of the quinquennium.*—The aim of the various reforms introduced during the quinquennium in the training of teachers has been to fit the teachers more directly for their work in schools. The result has been the introduction of a more practical form of training than used formerly to be given, the chief characteristic of which is the importance which it attaches to the continuing of the student's general education while he is under training. This feature was referred to in the previous quinquennial report and it was also there stated that it was intended that the scheme should affect secondary training too, but it has not been possible to introduce the necessary changes in the extension of the course of training to two years and in the provision of the necessary practising schools owing to the lack of funds.

Along with a more practical outlook in the training of teachers has gone a tendency to make the training more specialized. This has been due to the publication in 1913 of the revised edition of the "Scheme of Work in Training Schools," originally published in 1907-08, and to the re-organization in 1913 of the staff of Government Training Schools, both of which events have made possible a higher type of instruction than could be expected under the old régime with its poorly paid staff. Besides a generally higher standard of training, students have received extra benefits in the shape of special lectures and in increased facilities for extending their general knowledge by means of suitable current literature. Their material comforts have been increased by higher rates of stipends and by the extension of the system of training school hostels (described elsewhere) which were put on a more or less permanent footing during the quinquennium and which are one of its important features.

The system of model schools introduced in 1907-08 has been continued, and the re-organization of 1913 has made them more efficient by providing a higher rate of salary for the teachers of the model schools of Higher Elementary Training Schools. The problem of the practising school has not, however, been solved. There is the almost general complaint that it is not easy to induce parents to send their children to model schools, the work done in several schools leaves room for improvement in many respects, and lastly there is often a lack of conscious aim in their direction, so that they do not always provide the most favourable conditions for observing educational practice in the concrete.

A number of new training schools was started during the quinquennium and in 1914 special batches of students were admitted into almost all training schools and in the following year a special batch of students was admitted into the Government Training School, Nellore. In all grades, however, the number of students admitted for training and the number of schools require to be increased. It was announced at the close of the quinquennium that the Government of India had allotted to Madras a recurring grant of four lakhs for training and for improving the pay and prospects of teachers. Proposals were accordingly submitted for the approval of Government and arrangements have already been carried out for the training of additional teachers of all grades not only in Government institutions but also by enlisting the co-operation of institutions under private management for the training of collegiate and secondary teachers.

As regards the methods followed in the training schools, criticism and model lessons are generally suitably conducted. A weaker point in the training is the work in the practising section. With the existing numbers it is difficult to give the students sufficient practical work: nor does it appear to be sufficiently recognized that the practical work done must be thoroughly supervised, scrutinized and discussed with the students. The teaching of the subjects of general education is variously reported upon. With their better staffs, the Government are better than the aided schools. Nature Study seems to be the weakest subject and garden work poor. It is hoped that the revised syllabuses which will shortly issue and the special lectures on Rural Science will improve matters. Criticisms are also heard of the teaching of Geography and the Vernaculars. On the whole, however, real progress appears to have been made.

82. *Number of institutions.*—The Teachers' Colleges at Saidapet and Rajahmundry have already been referred to. The number of Government Training Schools prior to the re-organization of 1913 was as follows:—Secondary 4, Higher Elementary 13 and Lower Elementary 12. After the re-organization the corresponding numbers were 4, 10 and 14. There were in addition six temporary Lower Elementary Schools. There were, besides, the two Secondary Training Schools at Saidapet and Rajahmundry, which continued to work under the control of the Principals of the Teachers' College, Saidapet, and the Government College, Rajahmundry, respectively. The six temporary schools were made permanent with effect from January 1915. Owing to the prevalence of plague at Bellary the school had to be closed twice—in 1914 and in 1915—during the quinquennium, when the staff was sent to work at other training schools. For the same reason the Government Training School, Salem, had to be transferred to Rānipēt, working there from November 1915 to May 1916, and the Government Training School, Coimbatore, went to Tanjore, where it worked from 31st January to 17th June 1917.

The following additional schools were opened during the quinquennium:—(1) one Secondary Training class for the benefit of Uriyas at Berhampur which is at present on a temporary footing, (2) eight Elementary Higher and two Elementary Lower Schools: four of these were temporary. The one opened at Coonoor for two years has since been closed, sufficient teachers having been trained in it to render unnecessary the continuance of a separate training school for the Elementary School teachers of the Nilgiris. Two were for Muhammadans.

The Government Higher Elementary Training School, Rajahmundry, was transferred in January 1914 from the control of the Principal, Government College, Rajahmundry, to that of the Inspector.

The S.P.G. Higher Elementary Training School, Nandyal, was started on 1st March 1913. The A.E.L.M. Training School, Nayudupet, was closed during the quinquennium. There were at the close of the quinquennium 15 Training Schools for Masters under mission management.

During 1916-17 eighty-four Sessional Schools were at work, with an initial strength of 1,573, of whom 1,283 completed the course.

83. *Accommodation.*—Steps were taken during the quinquennium to provide Government Training Schools with suitable accommodation. Plans and estimates have been sanctioned for the construction of a building of the type-design for the

Government Training School, Russellkonda, and are under preparation in the case of the Government Training Schools at Chicacole and Saidapet. Extensions to the Government Training Schools at Vizagapatam, Calicut and Malappuram have been sanctioned. Proposals have been submitted to Government for extensions to the Government Training Schools in Madras for Muhammadans and for Panchamas. In the case of other schools questions of site and of extensions have arisen. Accommodation in the First Circle is "quite unworthy of Government schools," the Inspector reports. The accommodation of the Government Training Schools at Berhampur and Russellkonda is particularly bad. The Inspector of Schools, Third Circle, refers to the absence of specially equipped infant class-rooms.

The Government Training School, Badagara, has just been transferred to Channanore, and is held in a rented building. It is proposed to take over the building of the Salem College, when it is vacated, for the Government Training School, Salem. Nine training schools are held in rented buildings and four have type-design buildings. Of the latter, the building of the Government Training School, Villupuram, was cracked, and declared to be in a dangerous condition. It has subsequently been repaired.

84. *Equipment.*—The equipment of Government Training Schools was very considerably improved during the quinquennium. Much new furniture of approved design was supplied, but the most important item was a fairly complete outfit of science apparatus, which was selected with reference to the new scheme of work in Elementary Science and Botany and which cost in all Rs. 18,785. A sum of Rs. 11,700 was expended on supplying all Government Training Schools with stereoscopes and stereoscopic slides and in June 1913 Government Secondary and Higher Elementary Training Schools were each supplied with an optical lantern costing Rs. 110 and with slides costing in all Rs. 2,709. Further, nearly Rs. 6,000 was expended on the purchase of books and charts which were badly needed. Various other purchases for smaller amounts were made during the quinquennium out of the usual allotments, which have been more than doubled.

It is to be regretted that the making of simple teaching apparatus does not receive greater attention in Government Training Schools. Perhaps the best work in this direction is being done at the American Mission Training School, Pasumalai.

By virtue of the powers delegated to the Inspector during the quinquennium it is now easier for him to deal expeditiously with requisitions for equipment and other requirements. The more important of these were the powers to sanction :— (1) the purchase of articles, the price of which does not exceed Rs. 100, and of books up to a limit of Rs. 50, (2) petty works of construction and repairs up to a limit of Rs. 100 for each object and (3) the re-appropriation of funds under supplies, services and contingencies under the same minor head.

85. *Staff.*—Under previously existing rules the pay of the headmaster of a lower elementary training school was Rs. 30—2—40 and that of his assistants ranged from Rs. 15—1—20 to Rs. 20—1—30, while under the existing scales the pay has been nearly doubled. The pay of the staff of the model school remains at almost its original figure. The post of headmaster of a higher elementary training school is now in the cadre of Sub-Assistant Inspectors. The pay used formerly to be Rs. 40—4—60. Some of the assistants are in the Sub-Assistant Inspectors' and some in the Supervisors' cadre. The headmaster of a secondary training school used to be in the scale of Rs. 60—4—80. He may now draw or may rise to as much as Rs. 200 per mensem. Further the case of Agricultural Assistants of Higher Elementary Training Schools was recently considered and their promotion to the cadre of Sub-Assistant Inspectors was permitted. In fact, except in the case of the staff of the model schools of lower elementary training schools, the pay and prospects of the entire staff of training schools have been considerably improved. The direct result of the better prospects offered is seen in the fact that, whereas in January 1912 there were only 22 graduates in all the Government Training Schools, there are now 62 graduates of whom 4 are M.A.'s. By the re-organization of 1913, 54 appointments have been added to the cadre of

Sub-Assistant Inspectors and 38 to the cadre of Supervisors. The inclusion of both the inspecting and tutorial branches in the same cadres has this advantage that it makes possible the free interchange of officers of the inspectorate and of the training schools and so prevents officers in the tutorial branch from getting out of touch with the actual conditions prevailing in schools and at the same time enables inspecting officers transferred to training schools to study afresh methods of organization and teaching.

86. *Strength, stipends and admissions.*—The number of stipendiaries under the re-organization scheme was fixed for the lower elementary grade at 27 in a lower elementary and at 26 in a higher elementary school while the number of higher elementary and secondary stipendiaries was to be 240 and 100, respectively. In practice, however, these limits have been exceeded. In 1912 there were 2,552 students under training, while in 1917 there were 3,940 in the secondary and elementary grades. The stipends of students were raised during the period under review from Rs. 10 to Rs. 12 per mensem in the case of the secondary grade, from Rs. 9 to Rs. 10-8-0 for higher elementary students and from Rs. 7 to Rs. 8-8-0 for lower elementary. Stipendiary grants, payable on behalf of students trained in aided training schools, were enhanced as well but are less than the above rates. Partly on account of the difference in the rate of stipends and partly on account of their greater efficiency Government Training Schools are more popular, the applications for admission are more numerous and the pressure on their space is greater than in the case of the aided mission schools. The question of the justification for the differentiation of rates has been raised more than once and I hope that during the ensuing quinquennium sufficient funds will be available to remove or at least to mitigate this inequality. In this case a probable result will be a considerable addition to the number of admissions into the aided schools. As a general rule the number of applications for admission very greatly exceeds the number of vacancies. It is felt, however, that more care should be exercised in the selection of students for training, many of whom are often found unfit for training by reason of their poor qualifications and low order of intelligence. Though the picture drawn by some Headmasters of the ignorance and mental inertia of students seeking lower elementary training is depressing, it is gratifying to learn that things are improving. It is to be hoped that some day lower elementary students will be improved out of existence as the salaries and prospects of the teaching profession in elementary schools become more attractive.

87. *Special activities.*—There are Teachers' Associations attached to the training schools. At their meetings essays are read, discussions on educational topics take place, specimen schemes of work and syllabuses are circulated and in general considerable activity and vitality are displayed. The Inspector considers that their utility would be considerably enhanced if some financial aid were forthcoming. He makes the same remark regarding excursions, many of which appear to have had valuable results but which would have been more systematic if it had been possible with the help of a grant to depute a teacher to cover the ground previously, read literature bearing on the locality to be visited and draw up notes to guide the observation of the students. A special course of lectures on Rural Science, lasting for three months, was delivered at the Teachers' College, Saidapet. Special lectures on First Aid were also given in training schools. An Educational Exhibition, which was well attended by teachers from training schools, was organized at Saidapet early in 1917 and a series of instructive lectures was held in connexion with it.

88. *Examinations and certificates.*—Since the Preliminary Examination of 1915 a distinction has been made between the papers set for the Elementary Higher and Lower Grades. An important change in the examination was effected in 1914, when consequent on the introduction of a revised form of teachers' certificates on the analogy of the Secondary School Leaving Certificates the number of the subjects of examination was reduced to the three R's and Drawing and Physical Training in the case of Elementary Grade students. The object of this new form was, by entering in it a record of the students' work while under training, to

emphasize the process as well as the result. It has subsequently been decided to drop the examination in Physical Training and to select an additional subject instead. A further change is that students who have failed in only one subject at the Preliminary Examination have been permitted to reappear in this subject only. This concession should be beneficial as ordinarily students who fail under the present rules at their first appearance do not subsequently pass. Further minor alterations are under consideration. A proposal to abolish the Final Practical Examination is before Government. Its abolition, which commands general approval, is advocated on the ground that it is an artificial and very partial test of a teacher's work, held in a strange environment and under conditions which handicap the examinee. The percentage of passes in the preliminary examination averaged during the last five years 76 in the case of the secondary grade and 61 in the case of the elementary. In 1914 it was ruled that a trained and certificated teacher might on the specific recommendation of the Circle Inspector obtain a trained teacher's certificate of higher grade, excepting a collegiate grade certificate, on his passing a higher literary test. This higher test does not include the special examination which was instituted in 1916 for the benefit of bona fide teachers, who have failed in the Matriculation or the Upper Secondary Examination and who are desirous of undergoing secondary training. Under the ruling referred to above 22 secondary grade certificates have been issued, and entries have been made in 83 elementary grade certificates specifying in what way the holders have improved their general educational qualifications.

In spite of better arrangements for training in drill, gymnastics and physical training and in spite of better control and supervision, the results of the Teachers' Certificate Examination in Drill and Gymnastics were very poor in 1916 only 41 per cent passing as against 81 per cent in 1912. It is probable that the standard was too low in 1912.

89. *Training of teachers for girls' schools.*—There has been little change in the number of training schools for mistresses. In the Northern Circle there is one additional aided school making a total of seven of which two are Government Schools. In the Central Circle there is an additional Government Elementary School with a corresponding decrease of one in the number of aided elementary schools; and there is also one more Government Secondary School situated in Triplicane, Madras. In the Southern Circle there are four secondary and five elementary schools, three under departmental and six under mission management. The Coimbatore Government Training school was raised to the secondary grade in 1916. The schools in the Northern Circle added 272 trained women teachers to the already existing number. In the Central Circle 316 in 1917 were trained as against 167 in 1912. In the Southern Circle about 700 were trained during the quinquennium, while the number of students on 31st March 1917 was about 170 greater than in 1913. Both Miss Lynch and Miss Patterson plead for an increase in the number of training schools. The question is largely a financial one, but the desirability of an increase is clearly put by Miss Lynch:—

“A large number of applications received had to be rejected for lack of accommodation in the training schools. The paramount urgency for establishing more training schools for women is now so well recognized that it is no longer necessary to labour this point, and as funds become available I have no doubt that measures will be taken to open a Government Training School in each district. Sanction has just been received for the opening of a training school at Cuddalore in the South Arcot district and I hope that before the end of the next quinquennium similar Government Training Schools will also be established at Nellore, Vellore and Salem at least, a step which would go a very long way in providing a sufficient number of trained women teachers for girls' schools under public management as well as in improving the standard of efficiency in all the elementary girls' schools throughout the Circle. With the opening of a training school for each district I have also every reason to think that quite a large number of Hindu women will be induced to embrace the teaching profession provided salaries commensurate with the arduous work of teaching are offered to them.”

The order of precedence in the matter of the location of new schools was discussed at a conference of Inspectresses and proposals for gradually adding to

the number of training schools will, it is hoped, be given effect to as funds permit.

Pending a general reorganization of the training schools for mistresses and secondary girls' schools temporary additions have been made from time to time, according to exigencies, to the staffs of these schools, and a large proportion of the new appointments created carry salaries which will ensure the employment in them of graduate teachers. Provision has been made for instruction in kindergarten to the students under training and specially qualified instructors have been employed for this purpose in the more important schools. Arrangements have also been made for the delivery of lectures on First-aid, Hygiene and Physiology by qualified lady medical practitioners in the Presidency Training School for Mistresses, the Secondary Training School, Triplicane, and the Coimbatore Training School. Proposals for the delivery of similar lectures in the Training Schools for Mistresses in the Northern Circle are under consideration.

To induce a larger number of caste Hindu and Muhammadan mistresses to undergo training, the rate of stipends has been raised from Rs. 12 to Rs. 14 per mensem for the secondary and from Rs. 9 to Rs. 10-8-0 for the elementary grade, and similarly the rates of stipendiary grants have been enhanced on behalf of mistresses under training in private institutions. The expenditure under stipends and stipendiary grants respectively rose from Rs. 19,118 and Rs. 21,504 in 1912-13 to Rs. 48,196 and Rs. 32,386 in 1916-17. •

#### *Law Schools.*

90. There are no schools in which legal education is given with the exception of the Law College which has already been dealt with.

#### *Medical Schools.*

91. The Medical schools at Rayapuram, Tanjore and Vizagapatam and the school department of the Medical College worked throughout the quinquennium. In 1916 a fifth school was opened at Calicut on a small scale. The strength of the schools has greatly increased. In Tanjore, for example, the strength has risen from 93 to 136, while the number of private pupils seeking admission has risen by leaps and bounds, the number for 1916-17 being 372. The strength of the Rayapuram school has risen from 248 to 335, that of Vizagapatam from 50 to 105. The curriculum of studies and the rules regulating the training and examination of Sub-Assistant Surgeon students were recently revised by a committee and the scheme has been brought into force with effect from February 1916. The revised curriculum is of a higher standard and includes Pathology, Histology and Practical Chemistry. The Government have also decided that persons who pass the examination for Sub-Assistant Surgeons shall be designated "Licensed Medical Practitioners" and be permitted to affix "L.M.P." to their names. Owing to the introduction of additional subjects into the curriculum and the increase in the number of students, there are deficiencies in staff, accommodation, equipment and hostel facilities. Already some action has been taken. At Rayapuram the number of instructors has been increased from 6 to 9; at Vizagapatam and Tanjore a sixth instructor has been appointed to teach Pathology and allied subjects. Proposals for increased accommodation and additional hostels have been submitted; and the Superintendent of the Vizagapatam school suggests the addition of a play-ground. At Rayapuram there are over 70 military students in the different years of study. The increase in their stipends from Rs. 9 to Rs. 12 and the revised rates of pay recently sanctioned for the Indian Military Sub-Assistant Surgeons have attracted a large number of applicants for the military branch, the number admitted for the year 1917-18 being as high as 40.

#### *Technical, Industrial, Commercial, Agricultural and Art Education.*

92. *Technical and Industrial Education.*—The history of the development of technical education in Madras is described in full detail in a note presented by



the Hon'ble Mr. (now Sir A. G.) Cardew to the Industrial Conference of 1908. The Conference divided the subject into two parts, Industrial Instruction and Technical Education, the object of the former being "instruction in the performance of definite operations, such instruction not necessarily involving the teaching of general principles but only their application," while the object of the latter is to train a student to apply theoretical principles to practical purposes, and it then proceeded to pass a number of resolutions on the subject. Among other things it recommended that the control both of industrial instruction and technical education should rest with the Department of Industries and that a whole-time Inspector of Industrial schools should be appointed. Government accepted this recommendation in respect of Industrial instruction, but decided that technical education should remain under the Director of Public Instruction. The School of Arts and the Reformatory school at Chingleput, as well as all purely commercial schools, were also retained under the Director of Public Instruction, and eventually in 1909, 35 industrial schools were transferred to the Department of Industries. Most of these schools were carefully inspected by the acting Director of Industries (Mr. C. W. E. Cotton), and on his report the Government proposed in 1910 the appointment of a full-time Inspector of Schools. But very shortly afterwards the Department of Industries was abolished under the orders of the Secretary of State, and the control of industrial schools was resumed by the Director of Public Instruction, Mr. Chatterton being appointed Superintendent of Industrial Education under that officer. As already noted, however, in May 1911 Mr. Chatterton was placed on special duty in connection with the pumping and boring department and Mr. Tressler succeeded him as Superintendent of Industrial Education. Finally, as noted in an earlier part of the report, the Department of Industries was reconstituted in 1914.

93. *The Madras Trades School.*—In the meantime, however, Mr. Chatterton had submitted a scheme to Government for the industrial education of workmen such as smiths, moulders, pattern-makers, turners, fitters and general machine men. The main feature of the scheme was a system of State apprenticeships by which each boy would be apprenticed to a particular trade for a period of years, and it was also proposed to establish a school in an industrial centre like Perambur where the apprentices would receive such elementary technical instruction as their educational attainments would permit them to assimilate. The scheme was referred to a committee which was composed largely of gentlemen connected with the various engineering firms and workshops in Madras, and this committee passed a number of resolutions, the most important being that a system of State apprenticeships should be established among the engineering shops north of Madras, and that some provision should be made for technical training in a school outside the workshops. The Government accepted generally the recommendations made, and called, in August 1912, for definite proposals for the establishment of State apprenticeships and the opening of a technical school on the lines advised by the committee. Tentative proposals were submitted shortly afterwards, but the consideration of them was delayed pending the receipt of the orders of the Secretary of State on the constitution of the Department of Industries, and the question also arose whether in addition to mechanical engineering, the facilities for technical education in the proposed school should not be extended to other branches of work such as motor engineering. Another committee was appointed to consider this question in 1914 and also to work out detailed proposals both for the school and for the system of apprenticeships. This committee, which was composed largely of men of practical experience, considered that such technological education as was necessary in the Presidency might, for the present, be conveniently arranged for by means of scholarships to the Victoria Technical Institute at Bombay, and three scholarships of the value of Rs. 30 per mensem each for four years are now awarded to students of the Madras Presidency for the study at the above institute either of mechanical engineering, electrical engineering, textile manufactures or technical chemistry, as well as three scholarships of the same value for the study of mechanical and electrical engineering at the Madras College of Engineering. The committee also proposed that extension classes should be provided in the proposed Trades School for subjects such as



fitting and turning, blacksmith's work, foundry work, carpentry and joinery, plumbing and sanitary work, brick work and masonry, electric wiring and fitting, motor-car work and motor-car driving, weaving and dyeing, metal work and metal spinning. Government decided to begin work experimentally in a rented building, and much difficulty was experienced in obtaining a building in a suitable locality. Eventually, however, a building was secured in Georgetown and a beginning has been made with classes in mechanical engineering and plumbing. The classes are held two days a week in the evening and are limited to twenty pupils each. The lecturers are Europeans actually engaged in the trades they teach, and admission to the classes is confined to workmen and apprentices actually engaged in plumbing and fitting and turning respectively. The proposed system of State apprentices has been held in abeyance for the present.

94. *Madura Technical Institute.*—Among the industrial schools transferred to the control of the Department of Industries in 1909 in pursuance of the recommendation of the Industrial Conference were the two technical institutes maintained by the District Boards of Madura and Tinnevely. Subsequently both institutes were taken over by Government, and while the Tinnevely institute was abolished, it was decided to rebuild and remodel the Madura one on a more ambitious scale. The institute will comprise weaving, dyeing and mechanical departments, the central idea being that the technical and industrial education provided should be connected with the industries of the town. In the mechanical department a small workshop will be established well equipped with different kinds of machinery, and ten apprentices will be admitted yearly for a three years' course which may be extended to five in the case of promising lads. The workshop will undertake repairs for private oil-engines and pumps as well as for the pumping and boring department, and will also undertake demonstration of up-to-date agricultural and industrial machinery. The apprentices will thus be provided with practical experience, and three afternoons a week will be devoted to lectures on materials and simple forms of mechanism and to mechanical drawing. The idea is not to turn out engineer subordinates or draftsmen, but an intelligent class of mechanics somewhat resembling the old English mill wrights. Industrial classes will also be opened for carpentry and blacksmith's work. Five students a year will be admitted to each class, admission being confined to caste workmen, and the period of instruction will cover a period of five years. In the weaving department, for the present, industrial classes only will be opened. Twenty boys will be admitted each year, they will be apprenticed for five years and will be housed in a hostel. Details of the course of instruction have not yet been worked out, but roughly three hours a day will be devoted to general education and five hours a day to practical work. The practical work will be done in a weaving factory, the object being to train workmen capable of dealing with every stage of the processes of hand-weaving for every kind of cloth manufactured in Southern India. It was also proposed to tackle in earnest at the institute the question of the improvement of indigenous methods of sizing and with this object in view to obtain "drum winding, beam warping and dresser sizing" machinery from England as well as to import an expert European sizer. But it was decided that the restrictions placed by Lord Morley upon departmental work made it impossible to test the value of this machinery on commercial lines, and this part of the scheme (which included the higher technical training of students) has been held in abeyance for the present. In the dyeing class no industrial training will be undertaken, and it has been decided that "all that is required is higher education for prospective works-owners and managers, to place them in a position to understand the nature of the processes carried on in the works and to keep in touch with and appreciate the value of developments in methods and dyestuffs." Instruction for the present will be limited to the sons of dyers and of those engaged in business connected with dyeing, and the course which as at present arranged will last for one year, will include instruction in elementary science and chemistry of dyeing materials, technology of textile fibres and dyeing processes.

Various causes have conspired to delay the opening of the institute. The negotiations with the District Board of Madura as to the terms on which the old institute should be taken over were not concluded till 31st March 1910, and a new

site for the institute was not finally selected till the end of 1911. The site originally selected for the quarters of the Principal and lecturers was subsequently commandeered for the headquarters of the Ramnad district and the acquisition of the new site has only just been sanctioned. The preparation of plans and estimates was also delayed but final estimates for the institute and hostel amounting to Rs. 3,24,700 have now been sanctioned, and work is proceeding steadily. In the meantime the work of the old Technical School has been carried on in temporary buildings.

95. *Industrial Schools*.—In addition to Government institutions, there are 35 aided industrial schools under the control of the Director of Industries. They may be roughly classified as below :—

Schools where carpentry is the principal subject taught ... ..	15
Schools where lace-making and needle-work are the principal subjects taught ... ..	15
Printing schools ... ..	2
Agricultural school ... ..	1
Weaving schools ... ..	2
	—
Total ... ..	35
	—

These schools at present follow the curriculum prescribed for the Government Technical Examinations and prepare students for the examinations in the Elementary, Intermediate and Advanced grades. The majority of these are managed by different missions, and aided by grants awarded under the Grant-in-Aid Code. One hundred and ninety-nine scholarships are at the disposal of the Director and are awarded to deserving pupils. The whole question of the policy to be followed in regard to these schools is now under the consideration of Government.

I have been supplied with the following particulars regarding individual schools :—

*The Chengalvaraya Nayakar's Technical Institute, Vepery*, an institution managed by Pachaiyappa's Charities, is the largest of the Industrial Schools in the Presidency. Instruction is given in civil engineering, mechanical engineering, wood-work and cotton-weaving while special classes have been opened for the training of oil-engine drivers and motor-drivers. The number of students on the roll on the 31st March 1917 was 265 against 205 on the 31st March 1913. The school caters for two different grades of boys. The upper grade consists of boys who have passed the fifth form, who are put through a three years' course in mechanical and civil engineering. Half the time is devoted to theory and half to practical work, but apart from the difficulty of finding outlets for the boys when trained, the course could, with advantage, be supplemented by a two years' apprenticeship in a commercial workshop. In the lower grade the boys either have passed standard IV or attend a half-time school till they pass this standard. The course lasts about five years and the object is to turn out practical fitters and turners. These boys experience no difficulty in finding jobs. The institute is well equipped with machinery.

*The Anjuman-i-Mufid-i-Ahla-i-Islam* is another important Madras School. It is an institution intended for poor Muhammadan boys and has lately been housed in a new building to the cost of which Government contributed largely. The strength of the school is the same as it was five years ago, viz., 130, but great difficulty is experienced in securing the regular attendance of the pupils. Instruction is given in carpentry and carpet-weaving combined with literary instruction. The carpentry work turned out is of high quality and is above the bazaar standard, and the carpets woven at the school are very good. Unfortunately, however, the school has not succeeded in establishing a carpet-weaving industry in Madras, and to this extent the carpet-weaving department is a failure. The boys trained in weaving find no employment when they leave the school.

Among the smaller schools may be mentioned St. Joseph's Industrial School, Tindivanam, a school where a really comprehensive training in carpentry and blacksmith's work including mechanical drawing is given; the Wesleyan Mission

School at Karur, where instruction is given in cabinet-making, smithy work, rattan work and Drawing, and where as a new experiment a special weaving class has just been opened for Konga Pariahs; and St. Joseph's Industrial School at Trichinopoly. This last school has only just been recognized, and is a well-directed attempt at Industrial Education. The work turned out in the foundry and carpentry department will compare favourably with good work anywhere and the work in the fitting and turning shops is also good.

Schemes now under consideration include the extension of St. Aloysius School, Vizagapatam, the opening of a new Mechanical Engineering School at Cocanada and the opening of training classes for teachers in Industrial Schools at St. Joseph's School, Tindivanam.

The following statement exhibits the grants paid to the industrial schools in the last five years :--

Year.	Teaching grant.	Building grant.	Furniture and special grant.	Scholarships.
	RS.	RS.	RS.	RS.
1912-13	28,780	549	15,952	6,138
1913-14	29,760	24,819	17,315	6,150
1914-15	29,610	7,140	8,033	5,243
1915-16	33,273	9,639	6,104	5,259
1916-17	33,977	2,556	5,187	5,894

96. *Leather Trades School.*—Resolution No. 50 of the Industrial Conference ran as follows: "The Conference considers that the leather trade in the Madras Presidency is of sufficient importance to justify the establishment of a leather trade school which should be associated with a small tannery in which efficient practical instruction can be given, that provision should be made for technical education in tanning, and that in the Leather Trades School experiments may be fitly undertaken to determine whether or not the status of the Madras tanning trade can be improved." Government accepted the resolution and the Secretary of State sanctioned the school on condition that it should be a technical school pure and simple. In it workmen should be instructed in methods of chrome tanning and other processes of leather manufacture, the idea being that if the school were properly managed it would supply "a private capitalist with instructed workmen and with all the information he requires for a commercial venture." But no attempt was to be made to convert the school into a factory in order to demonstrate that articles can be manufactured and sold at a profit. On this understanding Lord Morley sanctioned the establishment of the school and the recruitment of a European expert in tanning for industrial purposes. Mr. Alan Guthrie of Messrs. Cooper, Allan & Co., Cawnpore, was appointed Leather Expert and joined his appointment on 1st September 1911. In the following year he submitted his proposals in regard to the establishment of a school. He reported that, except in the type of tools used and the methods of using them, and the treatment of water, there was very little that could be taught to the expert tanners, and that it would be better to aim at the improvement of leather tanned and dressed for use in this country. He proposed, therefore that a school should be established and worked as a small tannery, lectures being cut down to a minimum, and the greater part of the two years' course being devoted to practical work in tanning, currying and dressing and to chemical checks in the laboratory on the practical work done. Admission should be confined as far as possible to sons of tanners and of those connected with the leather trade, and at the outset it was suggested that the school should be devoted mainly to the training of operatives. These proposals were approved, and a model tannery has been constructed in Washermanpet. Space has also been reserved on the same site for a Government Trades School in which lectures will be given. Unfortunately, just as the school was opened, Mr. Guthrie went off on military service, and temporary arrangements have been made to carry on the school in the tannery under the charge of an Assistant Leather Expert. So far only a few students have offered themselves for training.

97. *Special schools under the Director of Public Instruction and Technical Examinations.*—It will be convenient now to turn to those special schools which remain under the control of the Director of Public Instruction and after a passing reference to individual schools of lesser importance and after such general remarks as may be necessary, to give some account of the working of the School of Arts, Madras, the School of Commerce, Calicut, and the Reformatory School, Chingleput.

The Madras School of Music was closed in 1915. There are a few schools which teach Indian music, but any large development of musical education in the future can be looked for only in connection with girls' schools. In Tiruvannamalai a School of Music started in connection with the Government Girls' School there has been recognized and aided. There are also schools for Indian music at Masulipatam and Mayavaram. Provision is made for agricultural education in connection with three secondary schools and there are agricultural instructors attached to certain training schools. It is, however, extremely doubtful whether it is either desirable or possible for the Educational Department to introduce agriculture as a school subject particularly in elementary schools with the existing class of teachers and it is from the Agricultural Department that developments must be looked for. Drawing continues to be taught in special as well as in general schools. Those who appear for the Technical examinations in Freehand and Outline Drawing often do so with the ultimate object of securing a Technical Teachers' Certificate of the Intermediate Grade, and so becoming qualified to be Drawing Masters in secondary schools. Of 77 who appeared in 1916 for the Technical Teachers' Certificate Examination in the various grades 50 passed. Drawing was beyond all comparison the most popular of the subjects for this examination, 64 in all appearing in the same year and 47 passing in the other 22 subjects included in it. A considerable number of small schools continues to exist which teach such subjects as Shorthand, Type-writing and Book-keeping. These schools are generally run by individuals as a private venture, and candidates appear from them for the Government Technical Examinations. Some of them are of considerably long standing, but others are incapable of development and, though visited by Inspecting Officers, receive neither formal recognition nor aid. Their existence is less necessary since the inclusion of commercial subjects under Group C. of the Secondary School Leaving Certificate Scheme. As to the organization of these schools, it was pointed out in the last quinquennial report that so far as Art, Industrial, Technical, Commercial and Agricultural education were concerned, the only existing organization was in connection with the system of Technical Examinations controlled by the Commissioner for Government Examinations—a system comprising a large number of subjects in three grades, Elementary Intermediate and Advanced. It is still true that this scheme provides the only framework to meet the needs of special schools and classes, and in the appendices and supplemental tables these schools are still classified as art, or technical or industrial and according as they take one or more subjects up to the standard of the technical examinations or teach only a lower or preparatory standard defined by the department and also as Government, aided and unaided. A scheme for special education which merely provides a system of examinations is, however, inherently defective and is a poor substitute for a considered policy. There are already signs that in some respects it has outlived its usefulness. Agricultural education is now organized by the Director of Agriculture, while the Director of Industries has been required to submit to Government after the inspection of all the schools under his control a draft code of industrial education. In fine, as special education develops, the mere system of technical examinations will have to be modified and adapted to the organization determined upon or replaced where the lessons of experience and the policy in consequence laid down make necessary the introduction of a different system. It must, however, be stated that the number of candidates appearing for the Government Technical Examinations has increased during the quinquennium. For the Advanced, Intermediate and Elementary grades there were in 1912-13, 425 ; 3,445 and 8,196 respectively. In 1916-17 the corresponding figures were 578 ; 4,604 and 9,435, of whom 31.6, 43.5 and 45.9 per centages passed.

There were very few changes in the scheme for these examinations. The most interesting was the inclusion of vernacular shorthand. Only four candidates, however, in all appeared and none of them passed.

98. *School of Arts.*—There was a decline in the strength of the school in the early part of the quinquennium, but towards the close of the period it rose again, and, what is more important, there has been a marked improvement in the average attendance. It is interesting to note that there has been an increase in the number of the sons of artisans, thus showing a better appreciation of the work done in the school on the part of the classes whose interest it is desired to secure. There has also been some improvement in the general educational attainments of those attending the school. Some women and girls are always to be found on the rolls—on 31st March 1917 there were 17. The total number on the rolls on that date was 286. The examination results have on the whole been satisfactory. As to students who have left the school, it is always difficult to get anything approaching an accurate list of even the majority of the students who leave the school and the work they do afterwards, but all who can be traced are doing work for which the School of Arts training has fitted them. The aim of the Superintendent is to conduct the school as much as possible with a view to the preservation of Indian art. He complains that “practically no help is obtainable towards this end from educated Indian people, except in very rare instances, as they invariably seem to prefer bad European to good Indian Art”. That there is appreciation in some quarters, however, is shown by the fact that the work done in the school, which is of good design and workmanship, finds a ready sale. This is so far satisfactory, but is not necessarily good for the school as a school. The Superintendent points out that the tendency to make articles purely with the idea of selling them, without consideration for the training of the students, might easily dominate the working of the various departments much to the detriment of the training. In general, however, the school is doing excellent work with sound aims in view. It works in eight departments which are as follows:—Wood-work, Carpet-weaving, Metal-work, Jewellery, Modelling, Engraving, Lacquer-work and Special Painting.

99. *Industrial Art Pattern Books.*—At the instance of the Government of India, the local Government ordered the production by the Superintendent of the School of Arts of pattern books of the various industries. The first book in this series entitled “Illustrated Pattern Book on Metal work” was published at the beginning of the quinquennium, while towards its end the second appeared—“Pattern Book of Decorated Cottons.” The publication of a third book is under consideration. It will deal with several minor industries not treated in the two previous publications, such as ornamental weaving and working in ivory, horn and tortoise shell.

100. *School of Commerce, Calicut.*—This school continues to do successful work. The examination results were generally satisfactory and a considerable number of students qualified for diploma certificates in commerce or for group certificates. The special commercial training class for teachers, which started in 1910, was discontinued after two years’ work as the demand then existing for teachers qualified to teach commercial subjects had been met. A further demand having arisen the class was reopened in 1914. Eighteen of the 24 students in it passed their examinations. They are mostly employed as commercial teachers in the high schools of the Presidency.

In 1913 the scale of salaries was revised. While the school had developed considerably in strength, in scope of work and in standard of instruction imparted, as evidenced by the fact that it now trains students for the advanced grade examinations in all the six commercial subjects and for the diploma in commerce, the salaries had remained unchanged. Further, as a model school, both the general and special qualifications of the staff had to be such as would secure and retain the services of graduates who have specialized in commerce. Moreover, teachers in this school have rarely chances of promotion outside it unlike those employed elsewhere. With the scale now introduced the staff is suitably remunerated and changes are likely to be infrequent. On 31st December 1916,

there were 183 in the English and 50 in the Vernacular section. There was a considerable number of enquiries from employers for students of the school and most get suitable appointments as teachers, mercantile assistants, accountants or clerks.

Rao Sahib S. Vaidyanatha Ayyar who had long been at the head of the school and to whom it owed much died in 1915.

Proposals for a hostel are at present under consideration.

Proposals for an 'Institute of Commerce' in Madras are also under consideration.

### *Reformatory Schools.*

101. The Reformatory School, Chingleput, has continued to work satisfactorily. The system of giving the boys greater liberty and reposing greater trust in them has been developed. An annual camp is now held for the boys at the seaside, the school is allowed to compete in games with other schools on their grounds, well-behaved boys are allowed to go into the town without escort and full advantage is taken of the monitorial system to encourage the boys to "police" themselves. In all these ways the knowledge that they are trusted has had a marked effect on the atmosphere of the school. Religious instruction has received attention. A mosque and a small Hindu temple have been constructed. A room has been set apart for the Roman Catholic boys in which mass is said, and service is held for the Protestant boys in the school room. The shift system has been developed, making increased supervision possible and providing for the separation of the juniors from the seniors during work and play. Fifteen former boys are at the front and several enlist every year, while boys at the school have contributed out of their own earnings towards various war funds.

Enquiries as to Madras boys after their discharge from the school are now made by the Educational officers instead of by the Chief Presidency Magistrate. The number of boys who permanently follow their trade is increasing and in the three years previous to 1916 totalled 49. The following statement gives particulars regarding the careers of boys discharged from the school:—

#### *Particulars about the careers of pupils discharged from the school.*

Number who left the school in last five years.	Number traced.						Untraced.	Percentage.
	Employed.	Unemployed.	Reconvicted.	Bad character placed under police surveillance.	Died.	Total.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1912 ... 58	37	...	13	...	2	52	6	
1913 ... 46	23	...	10	...	...	33	13	
1914 ... 43	27	...	8	1	2	38	5	Employed ... 63
1915 ... 54	31	...	7	2	2	42	12	Reconvicted ... 15
1916 ... 51	41	4	...	...	...	45	6	Untraced ... 16
Total ... 252	159	4	38	3	6	210	42	

## VII.—FEMALE EDUCATION.

102. *Expansion and control.*—The total number of girls in schools, public and private, rose from 223,012 to 321,540, thus showing an increase of 44 per cent as compared with 38 per cent in 1911-12 and representing a percentage of 1.5 against 1 to the total female population. As in the previous quinquennium the number of girls in boys' schools was still in the proportion of 11 to every 20 under instruction. The most marked increase is in the number of schools under public management. While there is little change in secondary schools in this respect, in the case of elementary schools Government schools increased in number by 16.

Municipal by 39 and Board by 352: that is to say, out of a total increase of 532—407 were schools under public management. Mission schools, aided and unaided, increased only from 541 to 556. In the last quinquennial report the hope was expressed that there would be a marked increase in indigenous effort. So far as schools under private management, both aided and unaided, are concerned, the addition of a little over 100 to the number of schools is not very encouraging, but there is no doubt that there is a growing demand for the expansion of girls' education through Board and Municipal agency and a desire for greater local control. In response to a circular letter from the Government of India on the subject of female education, a Conference was held in September 1916 which, among other things, dealt with this question of control. The resolutions were submitted to Government with my remarks, but orders had not been passed by the close of the quinquennium. I may say, however, that the replies of local bodies and of individuals to questions as to the local control of girls' schools revealed considerable diversity of opinion and that while there was a consensus of opinion that at present such control should be limited to elementary schools there was little agreement as to the character which it should take. Some form of local committees, advisory or with definite powers, was suggested by the Conference and the transfer to local bodies of the Government schools.

103. *Staffing of girls' schools.*—In the staffing of secondary schools for girls a general improvement is reported. The Inspectress of Girls' Schools, Central Circle, gives comparative figures for 1913 and 1917. In the former year, there were 9 teachers of the collegiate grade and 85 of the secondary, while in the latter year the respective numbers were 40 and 79. She adds that only 29 untrained teachers are employed, and that in aided schools at least two English graduates direct the teaching and make excellent arrangements for the working of the Secondary School Leaving Certificate scheme including the B Group subjects. The scales of salaries in force have been improved. Miss Lynch considers that they are still too low. Mrs. Shreenivasa gives the following scales as those obtaining in the Northern Circle—for women graduates pay ranging from Rs. 110 to Rs. 250 per mensem, for secondary teachers Rs. 30 to Rs. 80 per mensem in Mission schools and Rs. 40 to Rs. 100 in Government schools.

The total number of teachers in elementary schools has increased from 3,796 to 5,421: in 1912—2,354 were trained, in 1917 the number was 3,077. The percentage of trained teachers to the total number was 62 in 1912, but fell to 56 in 1917, thus showing that the supply has not kept pace with the increasing demand. The percentage was as low as 32 in Malabar and was considerably below the average in Kistna and in the Ceded districts. The average number of pupils per teacher rose from 23 to 24. There were only 96 trained teachers in 288 aided teacher-manager schools; and of these schools 66 received enhanced grant, 57 suffered a reduction for bad work, the remainder receiving the scale grant.

In elementary schools in the Northern Circle men still form the bulk of the teachers, only 30 per cent being women. There are about 200 more women employed, but a further increase is called for. There are reported to be in that circle only 10 women of the secondary grade on salaries of Rs. 30 to Rs. 35 per mensem, while of the rest about one-half were of the Higher or Lower Elementary Grade on salaries ranging from Rs. 10 to Rs. 14, the other half being untrained. In the Southern Circle similarly, while there are absolutely more females employed, relatively the number of women teachers is no higher mainly because the extra supply of such teachers has not kept pace with the great expansion of elementary education. In Government schools indeed the number of male teachers has decreased from 21 to 12, but in Board schools their number has actually increased though women are given preference, the reasons for this being not only that the demands of the many newly-opened Board schools largely outrun the supply but also that the pay offered is inadequate. In the Central Circle, however, there has been a marked improvement in this respect as is shown in the contrast drawn by Miss Lynch between the state of affairs existing at the time when she took charge of the Circle in 1911; and the existing conditions on 31st March 1917. On the former date there were 118 male and 91 female teachers: on the latter 49 male and 215 female.



Various expedients have been adopted with the double object of increasing the supply of female teachers and of so reducing the number of males employed in girls' schools. Obvious means are an improvement in the pay and prospects of female teachers in which connection a proposal has been made to fix their pay at a minimum of Rs. 12, an increase in the facilities for training and the making of the training course more attractive by the provision of enhanced stipends and of hostels, and an increase in the number of scholarships, a measure which has the effect not only of inducing the pupils to stay longer at school but also of increasing the supply of teachers possessing more satisfactory general educational qualifications. Government schools and schools under public management experience less difficulty in securing female teachers than aided schools. A suitable solution of the problem employed by some missions is to post married couples together to girls' schools in out-of-the-way places. One case in which a remarkable improvement has been effected deserves to be recorded. In the Trichinopoly Roman Catholic Diocese which comprises the southern Tamil districts more than 90 per cent of the male teachers have been replaced by Higher or Lower Elementary trained female teachers.

A special means by which it was hoped to increase the supply of female teachers was by securing for employment caste Hindu widows. The results of awarding scholarships to widows in the previous quinquennium had proved disappointing as those on whose behalf the scholarships were sanctioned were too old to profit by the instruction imparted to them. The Inspectresses were therefore unanimously of opinion that for the experiment to prove a success it was necessary to secure child widows. Scholarships are now awarded to young widows particularly in the two Widows' Homes attached in the Northern Circle to the Queen Mary High School, Vizagapatam, and in the Central Circle to the Secondary School in Triplicane, Madras. The Home at Vizagapatam has only recently been started and its success is not yet assured, but the Triplicane Home has more than realized the expectations of its promoters. It was opened in 1912 with six widows, a number which had risen by 1917 to 54. The success of this experiment is doubly gratifying, for not only do these widows after general education and professional training add to the number of female teachers but they also indicate an ultimate means of entirely replacing males by females at least in secondary schools, and thus removing one cause of the shortness of school life among Indian girls. As Miss Lynch says, "The establishment of this hostel should become a valuable source of supply for the teaching as well as the medical profession as the young Brahman child widows are for the most part distinctly intellectual and merely require the requisite opportunity to show what can be achieved by natural ability coupled with untiring application. Within the next ten years I venture to state that most of the secondary schools in this Presidency can be staffed by trained and well-qualified Brahman widows and when this is accomplished a powerful impetus will then be given to popularizing secondary education amongst the Hindu people. The multiplying of such hostels for Hindu widows would be the speediest means of spreading education and money thus expended must eventually produce the very best results both as regards diffusion of education and also in raising the standard of efficiency in all classes of girls' schools."

104. *Duration of school life.*—The question of the staffing of girls' schools and the replacing of male by female teachers has an intimate connection with the question of how to induce girls to stay longer in schools. That the duration of school life among girls is lamentably short is well-known. Hindu and Muhammadan parents will always be averse to keeping their daughters beyond a very early age in schools staffed by males. Where the staff is entirely composed of women the duration of school life tends to rise. Anglo-Indian headmistresses are reported to be popular among parents. As might be expected, Indian Christians stay longest in schools. In some districts again, such as Malabar and South Kanara, conditions are better than in others. Of the districts in her circle Mrs. Shreenivasa reports that there is improvement in Gôdâvari and Kistna only, Kammas in the former and girls in the urban areas in the latter staying generally till the age of 15. Statistics offer little evidence as to whether girls are or are



not staying longer at school. In the Central Circle, for instance, the fact that the number of schools with the fourth and higher standards rose during the last five years from 248 to 271 might appear to suggest an increase in the duration of school life were it not for the fact that during the same period there has been a large increase in the number of schools with, at best, the third as the highest standard. The following figures, however, are not without significance. In forms IV to VI there were on 31st March 1917 only 600 pupils altogether. In standards 4 to 7 of elementary schools the total was only 10,666. In the infant class of secondary schools there were 1,534; while in the same class in elementary schools there were 172,325. Approximately 58 per cent of the pupils in girls' Secondary and Elementary schools are in the infant standard. The disproportionate strength of the infant standard is even more marked now than it was in 1912. The comparative percentages to total strength in the infant, first, second and third standards were, in 1912, 55, 20, 12 and 8 and in 1917, 58, 18, 12 and 7. It has been suggested that admissions to the infant class should be restricted: but this might reduce the potential strength of higher standards.

In addition to the replacement of males by females two other methods by which the present state of affairs may be improved are suggested: these are firstly a further increase in the number of scholarships, particularly perhaps of those tenable in form IV upwards and of those for Muhammadan girls, and secondly the introduction of the teaching of English and Music in all schools. I have alluded to the popularity of English below. As to Music, Miss Lynch goes so far as to say "It is a well-known fact that Hindu parents would prefer to have their daughters taught Hindu Music to any other subject and if only adequate provision is made for its efficient teaching it will be possible to prolong the duration of Hindu girls' school life by at least 3 years; in other words the time between the date of the betrothal ceremony and the date on which the girl goes to her future husband's house would undoubtedly be spent at school if instruction in Music could be given for this period."

105. *Expenditure in girls' schools.*—The expenditure in Secondary and Elementary schools for girls rose from Rs. 8.09 lakhs in 1911-12 to Rs. 13.90 lakhs or by 72 per cent in 1916-17. Towards the total expenditure public funds contributed Rs. 8.6 lakhs or 62 per cent, fees Rs. .88 lakh or 6 per cent and other sources Rs. 4.42 lakhs or 32 per cent, the corresponding percentages for the previous quinquennium being 48, 7 and 45. The amount spent on Government institutions increased by Rs. 1½ lakhs, that on Board schools by Rs. 2 lakhs and that on Aided schools by Rs. 2½ lakhs.

106. *Medical inspection.*—Medical inspection is practically unknown in girls' schools. Government sanction has been accorded to the appointment of a lady doctor for the Government Brahman Widows' Hostel, Triplicane. At the Deaf School, Palamcottah, there is medical inspection. The girls in the Corporation Elementary Schools, Madras, were inspected in 1916. Apart from this nothing has been done, beyond the fact that in most hostels there are sick rooms with experienced matrons in charge.

107. *Moral and religious instruction.*—Religious instruction is given regularly in all Mission Schools. In schools under public management religious instruction is sometimes given out of school hours, e.g., in the Quran in Muhammadan Schools. For Mappilla Schools, instead of conductresses Mulla conductors have been appointed, their chief function being to attract children into the school by instruction in the Quran and so raise the strength. Most schools provide moral instruction in the form of stories by means of lessons from text-books.

#### COLLEGIATE EDUCATION.

108. There were at the beginning of the quinquennium two Arts Colleges for women, the Sarah Tucker College, Palamcottah, with a strength now of eight, and the United Free Church Mission, Rayapuram. The latter, which though not affiliated to the University taught girls up to the Intermediate Standard, has been closed and absorbed in the Women's Christian College referred to below. On the other hand, two colleges for women have been opened

and the fears that were expressed in the last quinquennial report that the expenditure involved in the establishment of such a college would not be justified by the demand for it or by the efficiency with which it was worked, have happily been falsified. Both are situated in Madras, one the Queen Mary's College for Women being under Government management, the other the Women's Christian College being under Mission management. Both are affiliated in Group V (History and Economics) of the B.A. Pass Course. The Women's Christian College is affiliated in Group IV also (Logic, Psychology and Ethics); and there is every prospect of affiliation in both cases in other branches also. Both are well staffed and well attended. There were on the rolls of the Government College, in 1916-17, 70 students and on those of the Mission College 73. The Indian Christian community is taking advantage in large numbers of the increased facilities for the higher education of women. The two colleges are largely residential, the Principals and lady members of the staff and students of different castes and creeds living in them. For the Government College a large and well arranged new building was completed in 1915 containing lecture rooms and living rooms for staff and students but even with this addition the accommodation has been found insufficient and since the close of the quinquennium the provision of additional buildings has been taken in hand or is in contemplation. As an encouragement to the students scholarships are sanctioned by Government. In 1916, 26 ordinary scholarships, varying in amount from Rs. 9 each to Rs. 14 per mensem, four widow scholarships at Rs. 25 per mensem and scholarships taking the form of remission of fees were sanctioned. Just after the close of the quinquennium a grant of Rs. 67,542 was sanctioned to the Women's Christian College for the construction of a large residential block for staff and students.

The establishment of these two colleges is of capital importance, and will probably result in an increase in the number of graduate women teachers and of women adopting medicine as a profession.

There were 46 women in Arts Colleges in 1912 compared with 184 in 1917. As mentioned in the chapter on University and Collegiate Education ten women were trained at the Teachers' College as against five in the previous quinquennium. As has been pointed out before the number trained there is never likely to be large as the University Regulations allow women to proceed to the L.T. Degree without producing certificates of attendance at a college. Both in 1915-16 and in 1916-17 there were 14 women in the Medical College.

#### SECONDARY EDUCATION.

109. *Number and strength.*—The number of schools rose from 35 to 39. There was also an increase from 16 to 20 in the number of complete high schools. In the Northern Circle there were on 31st March 1917 only two secondary schools against four at the beginning of the quinquennium, two schools having been closed one having been transferred to the Central Circle and one—the Queen Mary High School, Vizagapatam—having been opened. Of the 14 schools in the Central Circle 12 are aided and two of these 12 became complete during the period under review. Of the 23 schools in the Southern Circle 10 are complete.

The great majority of the secondary schools continued to be under Mission management. These, 32 in number, while open to all classes, provide special facilities for the Indian Christian community especially by means of boarding arrangements in centrally situated high schools, into which the most promising pupils of their incomplete secondary schools are admitted and so enabled to continue their studies. Only six schools in all were under Government management. Of these the Vizagapatam school has already been mentioned. The Secondary school, opened at Triplicane, Madras, has been very successful and has now 283 on the rolls with Form VI as the highest. It is attended by the Brahman widows from the hostel attached to it. The three in Form VI having been declared eligible for admission into a college have since joined the Queen Mary's College.

The total number of girls in Non-European public secondary schools has increased from 5,495 to 8,121. Miss Patterson thinks that the increase in her circle would have been much greater but for the war, plague and the absence of

adequate provision for higher education in places where girls would readily take advantage of any facilities offered. Indeed all the Inspectresses urge the necessity for more schools. In commenting on the increase in strength of schools in her circle Miss Lynch remarks that "out of this total it is gratifying to note that the number of caste girls has increased from 341 to 670 which indicates that at length the Hindu people are beginning to appreciate to some extent the advantages of secondary education and towards this increase the Triplicane school alone has contributed 247 pupils." It is clear then that the opening of more secondary schools for girls in suitable centres is the best means of promoting the development of secondary education among the caste community. Both the Conference of Inspectresses and the Conference on Female Education held in 1916 recommended that there should be a Girls' Secondary School in each district.

110. *Accommodation and equipment.*—Accommodation and equipment are generally satisfactory, 35 out of the 39 schools having buildings of their own. In the Northern Circle the school at Guntūr is well housed: negotiations regarding a site are pending in the case of Vizagapatam. In the Central Circle three Madras High Schools have made substantial improvement—St. Ebba's, the London Mission and the United Free Church Mission Boarding. In the Southern Circle the Government Girls' School at Cannanore, the Sacred Heart, Tellicherry, and the Gell Memorial School at Ootacamund have now good buildings. In the rented buildings at Vizagapatam quarters are provided for the Headmistress and the first assistant. A proposal to provide quarters for the staff at Cannanore has been approved but not yet carried out. The special grants for furniture, apparatus and appliances in 1913 and 1914 have resulted in improvements being effected and the equipment of high schools is on the whole very favourably reported on.

111. *Curriculum.*—The Inspectresses express themselves as generally satisfied with the methods of teaching adopted. Under the Secondary School Leaving Certificate Scheme there is a wide choice of subjects, and though this involves a heavy expenditure when the paucity of numbers in the high school classes is taken into account it has given Indian girls for the first time an opportunity of developing any marked tastes or aptitudes they may possess. Music, Needlework, Domestic Economy and Physiology are taken as C Group subjects in a number of schools; and the inclusion of these subjects not only means that the pupils receive a more suitable education but also that in future the staff of the lower forms of secondary schools will enter upon their work with a better mental equipment.

There is a fairly general desire that English should be the medium of instruction in the lower forms; and in centres where the classes are multilingual and the teachers qualified there is no great objection to this being the case. In the mufassal schools, which are more homogeneous in point of language and where the teachers of the lower forms are not generally so highly qualified as in larger centres, no hardship is involved in enforcing the rule that the Vernacular should be the medium of instruction up to the end of the third form course. The inspecting officer may, however, sanction a relaxation of the rules where this seems necessary. Along with the desire for English as the medium of instruction from an early stage, there is of course a corresponding demand for instruction in that language. The teaching of English in the lower classes of secondary and in elementary girls' schools is undoubtedly popular in many parts of the Presidency. Miss Patterson writes "The employment of so many secondary teachers in elementary schools has not only raised the general standard of education, but has considerably facilitated the introduction of English as a second language. It is taught in all Government schools and in a large number of the best higher elementary mission schools. English is a very great attraction. A parent, who thinks it quite unnecessary to pay a fee of 4 annas in the infant class of a secondary school when no English is taught, will send his child there as soon as he hears that it is one of the subjects. All the West Coast Convents are extremely popular on this account." The question of the curricula for girls' schools of different types and grades was discussed in detail in the Conference on Female Education to which I have already referred. The resolutions passed were submitted to Government with my remarks but orders have not yet been passed.

## ELEMENTARY EDUCATION.

112. *Number and Strength.*—There was an increase of 532 in the number of schools. Of these, schools having standards above the fourth rose from 232 to 271, and schools having standard four as the highest from 454 to 524, with respective increases in strength of 8,458 and 8,226. Of the 1,684 public elementary schools for girls, 699 were under public management and of the remaining 985 schools under private management, 556 were under Mission management. The 569 schools in the Northern Circle are classified as follows: Government 106, Board 198, Municipal 13, Aided 237 and Unaided 15. Of the 179 new schools in the Southern Circle 79 are under public management—6 Government, 60 Board and 13 Municipal. Of the total number of Government schools in this circle, viz., 39, 14 have risen in standard, 11 are complete Higher Elementary and 11 have standards above the fourth. The Inspectress of Girls' Schools, Central Circle, points out that there are still 74 villages and towns in her circle with a population of over 2,000 in which there are no girls' schools. The chief increase in her circle is in Board schools which have risen in number from 18 to 143, the total increase in the number of schools being 152. The proportion which schools under public management bear to the total number of schools has thus considerably increased during the quinquennium. The Inspectresses complain that the working of the Board Girls' Schools is far from satisfactory and this is attributed not only to the fact that their staffing is defective, but also to the impossibility of providing adequate supervision owing to their great numerical increase.

113. *Accommodation and equipment.*—Though a certain number of schools has been built there is still much leeway to be made up. For example, of 198 Board and 13 Municipal Girls' Schools in the Northern Circle only 6 of the former and one of the latter have been provided with buildings of their own. Equipment generally is not thoroughly up to date and this is due to a lack of funds.

114. *Curricula.*—The curricula in force remain the same as before and the inspecting officers comment not unfavourably on the methods of teaching adopted. Most of the Government Training Schools for Mistresses have industrial departments attached to them so that Needlework, Embroidery, Silver-braiding and the like are taught to the students under training and to the pupils of the school. The Blind and Deaf Schools for girls in the Southern Circle do Carpentry, Chair-caning, Mat-making, Weaving, Book-binding and Basket-work.

In the 16 Industrial schools for girls there were 611 pupils learning Embroidery, Lace-making and Weaving.

115. *Inspecting agency.*—I have already remarked that the inspecting agency is inadequate and that proposals have been submitted for the reorganization and strengthening of the inspecting staff.

## VIII.—EDUCATION OF EUROPEANS.

116. *The chief features of the quinquennium.*—The general policy remained the same, viz., the encouragement of privately managed schools under suitable bodies, while the progress which was made followed the lines indicated at the Conference, which was held at Simla in the third week of July 1912, and which was the most important event in the quinquennium. An immediate result of its recommendations was the sanctioning of a recurring Imperial grant of Rs. 30,000 for the extension of education among the poorer classes of the domiciled community in the city of Madras. This was in accordance with the expressed opinion of the conference that of the resolutions for which financial aid was asked "the most urgent are the education of those children who do not at present attend school, and the improvement of the pay and prospects of the teachers." This grant was followed six months later by allotments of Rs. 52,000 and Rs. 57,000 for the payment of enhanced teaching grants to improve the pay and prospects of teachers, for compensating managers for the remission of fees to deserving poor pupils and to meet the cost of their class-books, for awarding twenty-two additional scholarships to enable poor pupils of promise to continue their studies, for sanctioning additional boarding grants, and for starting a physical training and domestic

economy centre in Madras. A special allotment (non-recurring) of Rs. 1,00,000 for buildings and equipment was sanctioned early in 1912. The grant for equipment was distributed free of contribution from managers and was followed in 1914 by a further free grant of Rs. 28,370 for Madras poor schools. In addition to the usual allotments for building grants a special grant from Imperial funds of Rs. 5.5 lakhs was made in 1913-14. Of this sum 4.5 was temporarily resumed by Government in 1915-16 but subsequently a lakh was reallocated. The result of all these grants has been considerable building activity all over the Presidency, improvement in the equipment of all types of schools, a striking increase in the number of pupils reading in high standards and receiving collegiate education, and an improvement in the quality of the instruction given. The number of Europeans in Arts Colleges rose from 35 to 65. In Professional Colleges there were 28 as against 22.

During the quinquennium the 19 schools that used to be under the control of the Circle Inspectresses were transferred to the Inspector's control, the inspection of only the European Convent School at Tangasseri being conducted by the Inspectress of Girls' Schools, Southern Circle, and this because of the school's situation. The nineteen schools at Bangalore and the Railway School at Arsikeri were transferred to the Inspector of Schools, IX Circle, Bangalore, when that circle was formed in February 1914.

117. *Number and strength of institutions.*—Including two Industrial Schools under the control of the Director of Industries the total number of institutions on 31st March 1917 was 90 as against 85 at the beginning of the quinquennium. Four were closed, ten new schools opened and one school, viz., the Presentation Convent Infant School, Georgetown, was amalgamated with St. Mary's Orphanage. Of the new schools perhaps the most interesting is St. George's Homes, Kodaikānal, which have been started on the analogy of St. Andrew's Homes, Kalimpong, and which are maintained by private charity, both in England and in India, and by liberal grants from Government. It is too early yet to speak of the success of the Homes but their development and the result of removing Anglo-Indian children to the hills away from their ordinary environment will be watched with interest. The increase in the total number of schools is not altogether a matter for congratulation as there is still overlapping in Madras and there are a number of mufassal towns which are capable of supporting one strong school but in which there are at present two or more relatively small ones. This state of affairs, which is due to sectarian and other differences and to the natural desire of parents for religious instruction according to the denomination to which they belong, conduces neither to economy of state and private funds nor to efficiency. So long, however, as the initiative in the amalgamation of schools is left to the managers, I see no probability of anything being effected. Advice has been offered abundantly but I can recall only one case in which it was followed. There are now no schools having a college department, Doveton College having closed its college classes in 1912-13.

The total strength of the schools has increased from 7,189 to 8,415. It is satisfactory to note that the percentage of increase in the high school department is 81.2. The increase in the total number at school is due partly to the provision of additional accommodation and partly to the concessions, the grant of which was rendered possible by the Imperial assignments. According to the census of 1911 the total number of Europeans and Anglo-Indians up to the age of 15 was 12,731 and the annual percentage of increase was only 1.7. For estimating the school-going population, at least a third of these, i.e., 4,243, have to be left out of account as five is certainly the earliest age at which a child will be sent to school. Of those between 5 and 15 those have to be excluded whose parents, officials, non-officials or missionaries, intend to send them to Europe or to America for their education. With these deductions and even assuming that in the 6 years since 1911 Europeans and Anglo-Indians have increased by 10.2 per cent, it is impossible to believe that there is in this Presidency anything but a small number of children not in school. I wish to emphasize these figures in view of the statements that have been made to the effect that there are large numbers of European and Anglo-Indian children who receive no education.

118. *Curricula.*—The curricula drawn up in 1908–09 remain in force, and although a revision of them is admittedly desirable changes must await the decision of the Government of India as to the courses and examinations in European Schools with particular reference to the introduction of a School Leaving Certificate Scheme and to the continuance or otherwise of the permission now granted to certain schools to study for the Cambridge Local Examinations. Meanwhile the Inspector's reports indicate some improvement in the organization of the schools and in the methods of teaching adopted.

119. *Special subjects training centre.*—It is a general criticism of the existing curricula that they are insufficiently practical and fail to provide any form of efficient vocational training. Although, as I have said, a general revision of the curricula has had to wait, it has been possible, by a development of the special subjects training centre in Madras, to meet this criticism to some extent. This centre is under the guidance of the Inspector and provides instruction in Domestic Economy, Manual Training, Physical Training and Singing. The classes are in charge of qualified lecturers and instructors and certificates are awarded to teachers who pass the examinations which are held. Domestic Economy comprises Cookery, General and Medical Housewifery, Needlework and Dressmaking. The aim is to adapt the instruction thoroughly to the needs of life in India. Tours are undertaken by the lecturer and much has been done to popularise the teaching of Domestic Economy in girls' schools. Special class-rooms have been fitted up at most of the important schools and liberal grants have been given for equipment. There have been classes in Housewifery at Ootacamund as well as in Madras and there are 39 schools where practical Cookery is taught. For Manual Training there are at the Madras centre teachers' and pupils' classes as well as a special training course for stipendiary students who intend to become instructors in Manual Training. The type of manual training taught is woodwork with a very little metal work for the senior boys, and the system adopted is that in use under the School Board of Glasgow. The chief hindrance to progress in this type of training is the initial cost of equipment and materials. The teachers' classes in Physical Training have been remarkably successful. The Swedish system of free gymnastics is taught and the syllabus of the English Board of Education has been followed. The teachers' classes began in October 1913 and pupils were sent from neighbouring schools to the centre to afford the teachers practice in class-teaching. These classes have been continued with the addition of Morris dances and other forms of healthful exercise for girls. The instructor has toured four times in the Presidency and has effected marked improvement in the physical training of the mufassal schools. Teachers' classes have been held at Coonoor and Ootacamund in addition to those held at Madras. With the appointment of a peripatetic teacher of Music in 1916 an attempt has been made to place the teaching of music on an organized basis. In fine, the activities of the centre have been both varied and successful.

120. *Staff and training.*—There has been considerable improvement in the number of qualified teachers, the increase being 64 out of a total increase in the number of teachers of 89. Out of 670 teachers 473 were certificated. There were, however, 64 holding no professional or general education certificate. Teaching is becoming a popular profession, at all events for women, and the qualification of candidates for admission into training schools has very considerably improved. Of 25 applicants for the examination in school management and the art of teaching in 1916, 22 passed. Twelve stipendiaries were admitted into Sanawar during the quinquennium. Two of these are on service in East Africa. The existing facilities are still inadequate and the question of the establishment of a training college at Lovedale is at present under consideration.

121. *Examinations.*—The results of the European School Examinations have been none too satisfactory. For example in the case of girls in 1916, out of 72 candidates in the High School Examination only 27 passed, out of 96 in the Middle School only 39 and out of 26 in the Primary Grade only 14. Nor has the percentage of success been at all uniform from year to year, e.g., out of 75 boys in the Middle School in 1913, 14 passed while of 80 in 1915, 35 passed. The failures throughout were chiefly in English and the Inspector attributes this to "the severely high standard required" and to the neglect of grammar in schools.

## IX.—EDUCATION OF MUHAMMADANS.

122. *Progress of Muhammadan education.*—There has been a considerable increase both in the number of schools, public and private, chiefly intended for Muhammadans and in their strength. The number of schools increased from 2,291 to 2,668, i.e., by 377 or 16 per cent. Their strength rose from 109,039 to 142,628, i.e., by 33,589 or by 31 per cent against 23 per cent in the previous quinquennium. The percentage of Muhammadan scholars to the Muhammadan population was least satisfactory in South Kanara and Bellary and best in the Northern Circars and Tanjore.

The small number of Muhammadans in the higher stages of education has been a matter for regret in the past. The reasons assigned for this in the previous quinquennial report were a certain intellectual indolence, the absence of provision for teaching through the medium of Urdu, the postponement of secular to religious education, the claims of business and, one might add, in certain cases poverty. Efforts have been made and are being continued to offer sufficient inducements to Muhammadans to study in the higher grades of institutions. Fees in secondary schools are calculated at half the standard rates and managers are encouraged to admit Muhammadans at concession rates by adding to the grant calculated in accordance with the code half the fee income foregone on their behalf. Urdu munshees have been provided at public expense in six schools attended by a considerable number of Muhammadan pupils, additional schools have been opened and extra scholarships sanctioned. It is true that the percentage of Muhammadan scholars on 31st March 1917 to the total number of scholars in each of the secondary stages of school education was only four in the High and five in the Middle section; but the following figures will, I believe, show that the efforts which have been made have not been without result. In Arts Colleges the number of Muhammadan scholars has risen from 96 to 182, in Professional Colleges from 7 to 18 and in Secondary Schools from 5,507 to 7,088. The number of Government schools intended for the community rose from 60 in 1911-12 to 66 in 1916-17. Board and Municipal schools rose from 520 to 846. Aided schools increased from 501 to 603, while unaided decreased from 114 to 88. There was a decline also in the number of private schools from 1,096 to 1,065. Their strength, however, rose from 40,381 to 43,862. The majority of these private schools were maktabs in which the Quran only is taught and in which there are no regular courses of study or text-books. The fact that 36 schools with 2,325 pupils which were returned as Quran schools on 31st March 1916 have been brought to the list of recognized elementary schools and shown as public elementary schools for boys during the year 1916-17 indicates that some success is attending the efforts of inspecting officers to induce the teachers in Quran schools to add a secular side to their schools.

123. *Secondary schools.*—By the opening of two Government Incomplete Secondary Schools for Muhammadan boys in Georgetown, Madras, and at Vellore, the number of secondary schools for Muhammadan boys rose from 4 in 1911-12 to 6 in 1916-17. Three of these six are maintained by Government, and three are aided institutions. Three again are complete schools, viz., the Madrasa-i-Azam with 247 on the rolls, the Harris High School, Rayapettah, Madras, and the Islamiah Secondary School at Vaniyambadi with 347 and 405 pupils respectively.

124. *Female education.*—The number of schools, both public and private, for Muhammadan girls rose during the quinquennium from 245 to 268 and their strength from 10,309 to 13,934. There were 3,676 girls in Quran schools against 3,524 in 1911-12. As in the previous quinquennium, girls are still almost entirely in the elementary stage. The number, however, reading in secondary schools has risen in the period from 4 to 40. On 31st March 1917, there were 44 Government schools for Muhammadan girls including two training schools for Muhammadan Mistresses against 42 on the corresponding date in 1912.

125. *Special schools.*—As a result of the opening as a temporary measure of two Government Training Schools at Guntūr and Arcot the number of training schools for Muhammadan masters rose from 2 to 4. The number undergoing training in these schools in 1916-17 was 234. There were besides five sessional schools maintained by Local Boards. The number of training schools for Mistresses remained the same, viz., two. In all grades of Muhammadan schools



the supply of Muhammadan teachers is insufficient, and Hindus and Christians have frequently to be employed. This is particularly regrettable in the case of girls' schools, in which in any case it is difficult to secure regular work owing to the existence of the purdah system. As in the previous quinquennium, there are two industrial schools for Muhammadan boys, the Anjuman-i-mufid-i-ahla-i-Islam at Madras with a strength of 130 pupils and the Anjuman-i-Isha-Athul-Hasrath at Vellore with 32 pupils. Both these industrial schools are under the control of the Director of Industries.

126. *Education of Mappillas.*—The development of education among the Mappillas continues, the number of schools and scholars having increased by 112 and 13,664, respectively. The grant of special scholarships for Mappilla boys and girls has contributed largely to this result. Ninety-one per cent, however, of the public schools have only standards below the fourth and a larger number of schools with higher standards in the more important centres is desirable.

127. *Education in the Laccadives.*—I have no recent information as to the progress of education in the islands. As they were not inspected during 1916-17, no report on the condition of education in them was received.

128. *Employment of Muhammadans in the department.*—The following is the distribution of Muhammadans employed in the department, three in Arts Colleges, one each in the Law and Teachers' Colleges, 18 in Secondary Schools, 116 in Elementary Schools, 10 in Training Schools, one in the School of Arts, 18 as Sub-Assistant Inspectors of Schools and Supervisors of Elementary Schools and 14 in clerical appointments.

129. *Expenditure on Muhammadan education.*—The expenditure in Muhammadan and Mappilla schools rose from Rs. 4.84 lakhs to Rs. 8.20 lakhs towards which public funds contributed Rs. 5.59 lakhs or 68 per cent, fees Rs. .78 lakh or 10 per cent and subscriptions and other sources Rs. 1.83 lakhs or 22 per cent. In addition to this, scholarships to the extent of Rs. 10,450 were paid last year. The cost of 23 inspecting officers (viz., 9 in the cadre of Sub-Assistant Inspectors and 14 in the cadre of Supervisors) amounted to nearly Rs. 1.35 lakhs. There were seven hostels intended for Muhammadans and there were 400 boarders on 31st March 1917. Out of the recurring Imperial grant of Rs. 30,000, the amount spent during the year was about Rs. 14,000, out of which Rs. 4,000 related to Government Secondary Schools, Rs. 3,000 to Government Training Schools, Rs. 5,000 to scholarships and Rs. 2,000 to Municipal and Aided schools for the appointment of teachers for imparting instruction in Urdu.

## X.—EDUCATION OF BACKWARD AND OTHER SPECIAL CLASSES.

### (a) DEPRESSED CLASSES.

130. As pointed out in the last quinquennial report the term Panchama designates the great class of Parayars in Tamil districts and the cognate classes in other districts who are regarded by caste Hindus as 'untouchables,' such as Pallas, Malas, Madigas, Holeyas. It was also mentioned in that report that an accurate estimate of the progress of these classes was difficult as Panchamas who have become Christians are sometimes returned as Panchamas and sometimes as Christians with the result that the figures for the progress of the education of these classes are less favourable than the facts warrant. Though it is still true that most of the educational work among these classes is done by various Missions, there has been a considerable increase in the number of schools under public management. Moreover the Hindu community is evincing a greater interest in these classes. In the Second Circle, for example, there are Sanghams at Masulipatam, Gudivada and Ellore, which work among these classes and maintain schools. The Depressed Classes Mission does useful work. In Mangalore, Weaving, Carpentry, Sericulture and, not the least important, cleanliness are taught. In certain parts of the Presidency, however, prejudice is still strong and may operate to the disadvantage of Panchama Education by a refusal to admit pupils belonging to these classes or by placing obstacles in the way of securing a site for a school for them. Other difficulties in the way of progress are poverty and the want of teachers. Poverty proves a bar to education in two directions. The parent is naturally disinclined to send his child to school when his earnings may be of help



to the family. On the other hand, if his son is sent to school, he often comes half-starved and benefits little from the instruction given. The sources of the supply of teachers are limited, as caste Hindus will not generally take employment in schools for Panchamas. Indian Christians of backward origin are generally found in such schools, but it is difficult to secure qualified teachers in sufficient numbers. The number of institutions chiefly intended for Panchamas rose during the quinquennium from 3,781 to 5,691 or by 50 per cent and their strength from 100,881 to 158,593 or by 57 per cent. The total number of Panchama pupils in all classes of institutions rose from 72,190 in 1911-12 to 120,607 in 1916-17, being an increase of 48,417 or 67 per cent. The number of Panchama pupils in the secondary stage rose from 280 to 718. These figures are satisfactory, but there is still room for extension considering the high proportion these classes bear to the total population. The largest increase in the number of institutions is under aided schools. Board and Municipal schools rose in number from 439 to 665, while unaided schools decreased from 697 to 656.

The expenditure in Panchama schools rose from Rs. 6.08 lakhs to Rs. 8.74 lakhs, to which public funds contributed Rs. 4.8 lakhs or 55 per cent, fees Rs. .24 lakh or 3 per cent and subscriptions and other sources Rs. 3.7 lakhs or 42 per cent.

#### (b) ABORIGINAL AND HILL TRIBES.

131. Tribes included under this category are mostly to be found in the Agency Tracts of Ganjām, Vizagapatam and Gōdāvari. Of these the most important are the Khonds, Savaras and Koyas. As inducements to go to school, scholarships are sanctioned. In 1916-17, 614 were awarded, chiefly for Koyas. There is a Government sessional school for Khonds and one for Savaras; and at Bhadrachalam a temporary training class has recently been sanctioned as an adjunct to the Government secondary school. By these means it is hoped to secure better qualified teachers drawn so far as possible from members of the Agency tribes. Scattered tribes are found in other parts of the Presidency, such as the Todas and Kotas of the Nilgiris, the Malayalis of Trichinopoly and the Kanis of Tinnevely. An accurate classification is, however, difficult as emigrants from the plains are found on the hills. The Badagas, for instance, are scattered on the Nilgiris, but do not form a hill tribe in the same sense as the Todas. Again, of the same hill tribe some members may be criminal and some not, for example the Chenchus. Subject to these qualifications, 213 schools for boys with 4,607 on the rolls are returned as schools for aboriginal and hill tribes.

#### (c) CRIMINAL TRIBES.

132. I have remarked above that classification is difficult in the case of aboriginal and hill tribes. There is equal difficulty in the case of criminal tribes. The Kallars may be cited as a typical case. They are called a criminal tribe, as their name implies, with dacoity, blackmail and cattle-lifting as their hereditary avocations. All Kallars, however, are not criminals. Many have been induced by the stern arm of the law, the softening influences of education or the enhancement in the value of their land to settle down to a dull life of honesty. A further decrease in the number of criminal tribes may be expected to result from the measures taken by Government in recent years. Criminal Settlements have been established and provision has been or is being made for the education of the children of the tribes so settled. It may be hoped that the practical instruction given to them, often through the agency of the Salvation Army, will wean the rising generation from a life of crime. At present 297 schools for boys and 5 for girls are returned as schools for criminal tribes with a respective strength of 13,876 and 475.

#### (d) CONVICT SCHOOLS.

133. There being an intimate connexion between ignorance and crime mention may appropriately be made in this chapter of Convict Schools. Excluding the Reformatory School which has been dealt with elsewhere, there were 10 schools for convicts with 1,085 on the rolls. The schools are inspected by officers of the department. The curriculum is simple. In the Madras Penitentiary instruction is given for one hour a day in English, Tamil or Telugu according to the choice of the convicts and also some moral instruction by specially appointed honorary

lecturers. In Cannanore and Coimbatore where about 50 per cent of the convicts were illiterate, instruction is given in the 3 R's.

(e) CHILDREN EMPLOYED IN FACTORIES AND ON ESTATES.

134. It is unnecessary to give details here of the working of the Buckingham and Carnatic Mills School. Its excellence is well known and a detailed report on it has been sent to the Government of India at their request. There are four boys' schools with 1,193 on the rolls and one girls' school with a strength of 100 for children employed in factories. Their working has not in all cases been satisfactory and all employers are not as convinced as Messrs. Binny & Co. of the desirability of imparting education to their employees. There are no schools in this Presidency specially intended for children working on tea estates.

XI.—EDUCATION OF THE BLIND AND OF DEAF MUTES.

135. In 1916 a letter was addressed by the Government of India to the Local Governments on this subject. Various suggestions were made therein and it was pointed out that the existing facilities for the education of defective children were inadequate. As a result of the reference from the Government of India, proposals have been made to the local Government and it is hoped to arrange for enlarging the scope of some of the existing schools, to train a few teachers and to induce parents, who are at present extremely reluctant to do so, to send such children to school. That the existing facilities are exceedingly inadequate will be clear from the following figures. According to the census of 1911 the total population of the blind and deaf mutes in the Presidency was 33,982 and 32,490 respectively and the number of the blind at school on 31st March 1917 was only 147 and of deaf mutes 118 only.

For the blind there is a school for boys and a school for girls at Palamcottah, one at Rentachintala and one in Madras. There are two schools for deaf mutes, one in Palamcottah and one in Madras.

The Palamcottah schools have long been doing excellent work and it is found that, provided the pupils stay long enough to take full advantage of the industrial instruction given, they are able to be entirely self-supporting.

XII.—EDUCATION OF NATIVE CHIEFS AND NOBLEMEN.

136. *Proposals for a Chiefs' College.*—Progress has been made in the establishment of a Rajkumar College in the vicinity of Madras for the education and training of wards and generally of the sons and other near relatives of the Rajas, Zamindars and large landed proprietors of good family in the Madras Presidency, Coorg and adjoining Native States. I understand that the scheme has received general support from those classes of the community whom it is intended to benefit, but no final decision had been arrived at by the end of the quinquennium.

137. *The Court of Wards' Institution at Newington.*—Meanwhile Newington has continued to work with success. In 1916-17 the average number of pupils at Newington was eight, of whom two were not wards off the Court. Three wards appeared for the Matriculation examination and all passed—two of them with distinction. One ward studied at Newington for the Intermediate examination. Of former wards one graduated in Law at Oxford, two were nominated to the Madras Legislative Council and another was elected to it. An Association of Old Boys of Newington has been formed for the purpose of keeping former pupils and friends of the institution in touch with it and has proved a success.

XIII.—PRIVATE INSTITUTIONS.

138. *Classification, number and strength.*—In 1915-16 and in previous years a single statement was given in the report showing the number and strength of all indigenous institutions. Under orders from the Government of India, however, from 1916-17 onwards separate statistical information will be given for maktabas (Quran Schools), Mulla Schools (Arabic), tols (Sanskrit Schools) and Patasalas (indigenous pial schools), and maktabas or any other schools of an indigenous or religious order will be classified as follows:—I, those which are recognized and which teach secular subjects as "Primary"—school education—general; II, those

which do not teach any part of the primary course but are recognized or which teach recognized standards or present pupils at any recognized examination as "Special"—school education—special—other schools; and III, those which are not recognized and do not teach any part of the primary course as private institutions.

139. *Maktabas*.—According to this classification there were thirty-six maktabas under class I with 2,325 boys on rolls, with a total expenditure of Rs. 6,423, of which Rs. 968 was met from provincial funds, Rs. 91 from municipal funds and Rs. 85 from fees. Under class III come 817 maktabas for boys and 96 for girls with 32,993 and 3,676 respectively on the rolls. Of the total expenditure on these schools of Rs. 86,110 fees covered Rs. 45,497. With the strengthening of the subordinate Muhammadan inspecting staff it is to be hoped that a number of these schools will be transferred to class I.

140. *Mulla schools*.—There were under class III, 152 advanced schools for boys teaching Arabic and Persian with a strength of 7,193. The total expenditure on them was Rs. 39,467, of which fees met Rs. 4,108.

141. *Tols (Sanskrit schools)*.—Seven Sanskrit Colleges were recognized by the University on 31st March 1917 as qualified to provide instruction for the Oriental Titles examination. The first examination under the regulations for the Oriental Titles was held in 1915.

There were on 31st March 1917 in all 283 Sanskrit schools: (a) Advanced 228 for boys and six for girls, (b) Elementary 47 for boys and two for girls. Of these five, all in the Tinnevely district, are under Board management, while 52 are under Government supervision and are aided. The total expenditure on Sanskrit institutions of all grades was Rs. 2,39,340, of which provincial funds met Rs. 15,073, local and municipal funds Rs. 12,454, fees Rs. 2,305, and other sources Rs. 2,09,498. The reorganization of Sanskrit schools referred to in the last quinquennial report was brought into force at the beginning of the quinquennium. The scheme therein described was modified in 1915 with regard to scholarships in colleges and grants. In lieu of awarding thirty scholarships once in four years, the number has been increased to 32, eight being awarded every year, four for students preparing for the Siromani examination and four for those studying for the Vidwan examination. As to grants, it was decided to continue the existing system of aid to elementary schools under chapter VI of the Grant-in-Aid Code as it was found that the effect of introducing the proposed special scheme of capitation grants of Re. 1 per pupil per annum would be to reduce the aid previously given, while the institutions, under the new scheme of studies, have to incur increased expenditure for teaching subjects other than Sanskrit. The question was also raised as to whether the institution of a separate examination for the purpose of testing candidates seeking admission to colleges should be given up, as the preliminary examination which each college should hold under the University Regulations to determine the fitness of candidates for admission might sufficiently serve the purpose of the proposed departmental examination. Government, however, decided that a public examination at the end of the school course should be held as it would have the advantage of co-ordinating the work of the several classes of schools and placing before them definitely the aim to be followed. Further, it would obviate the necessity of holding a separate examination for the award of collegiate scholarships. It was also considered that the University would have no objection to accepting the examination in lieu of a separate admission test. The University have not come to a decision on this point but it is expected that they will accept the examination as a qualifying test for admission into colleges for the purposes of the Oriental Titles examinations. The examination is to be conducted by a Board consisting of the Professor of Sanskrit, Presidency College, the Superintendent of Sanskrit schools, the two Supervisors of Sanskrit schools and a Professor of a Sanskrit college and two non-official Sanskrit pandits, these three being appointed on the recommendation of the Syndicate.

The controlling staff for Sanskrit schools remains the same except that the designation of the officer in charge has been altered from "Sub-Assistant Inspector" into "Superintendent" of Sanskrit schools and that the post is now held by an officer in the Provincial Educational Service.

142. *Patasalas*.—There were 401 patasalas for boys and 22 for girls belonging to Class I, one for boys under Class II and 3,398 for boys and 22 for girls under Class III. Details are given in Volume II of the report. For purposes of comparison between the last two quinquenniums the following figures are here given. The number and strength of private institutions in 1911-12 was 5,193 and 127,179 respectively. In 1916-17 indigenous and other private institutions which do not teach any part of the elementary course but are recognized numbered 64 with a strength of 2,988, similar unrecognized schools numbered 4,705 with a strength of 123,973 or together 4,769 institutions with a total strength of 126,961. There was thus a decrease of 424 in the number of institutions and of 218 in their strength.

Of schools returned on 31st March 1916 as private indigenous, 461 were returned as public institutions on the corresponding date in 1917, one was taken over by a Local Board, 139 were brought to the aided list and 321 to the unaided list. The decrease in numbers of the indigenous schools is due to a variety of causes. Some disappear altogether, some are amalgamated with or taken over by other managements and some secure recognition. A considerable number of such schools continues to exist and this will long remain the case. It is open to any man, however ignorant, to maintain a school, and so long as this is the case so long will there be in backward localities and among backward communities teachers whose schools cannot come up to departmental requirements, modest as these are. They are ignorant, their schools are held on the pials of their houses in miserable sheds or in the front portion of a dilapidated temple or a mantapam. Equipment there is none. So long as the parents can see that their children can read and write on cadjan leaves and repeat vernacular verses and aphorisms and multiplication tables they are satisfied. Besides the indigenous schools which are not fit for recognition there are some which do not desire it. Such are those under hereditary village teachers, a type which is fast disappearing. They hold school all day long with few or no holidays, teach mechanically writing, computation by the application of arithmetical formulæ suited to village needs and devotional verses. Payment is made in money or kind, the amount being based on the status of the parent, and presents are received at festivals.

#### XIV.—SCHOLARSHIPS.

143. Considerable sums of money are expended annually on scholarships tenable in the various classes and grades of institutions and by particular classes of scholars, male and female. In the following brief account of the scholarship system, Endowed and University scholarships are excluded from consideration.

In general there are three grades of scholarships open to all classes, (1) in Elementary schools, (2) in Secondary schools, (3) in Colleges, commencing respectively in Standard 5, Form I, and the First Year University Class, of the value in the first case of Rs. 2, Rs. 2½ and Rs. 3 in standards 5, 6 and 7, in the second case of Rs. 3 in Forms I to III and Rs. 6 in Forms IV to VI, and in the third case of Rs. 9 in the Intermediate Classes increased to Rs. 14 in the courses for the B.A. Pass or Honours Degree. Those in the Elementary and Secondary schools are awarded by the Inspectors or Inspectresses concerned and those in Colleges by the Director. Two conditions are generally taken into consideration in making the award—merit and poverty, with the additional proviso that if a candidate belongs to a backward class or caste this fact is taken into account. Subject to specified age limits, the scholarships are tenable in recognized institutions and in affiliated colleges situated in British territory. They are liable to forfeiture for misconduct or failure to make satisfactory progress in studies. In addition to these general scholarships, there are special scholarships (1) for particular classes, e.g., Muhammadans, Mappillas, pupils belonging to hill tribes in the Agency, widows, (2) in particular institutions, e.g., in the Queen Mary's College for Women, the Queen Mary High School for girls, Vizagapatam, and in Sanskrit schools where 103 scholarships were awarded in 1916-17, (3) for particular (professional) courses; these are awarded, so far as the Educational Department is concerned, in the Law and Engineering Colleges, (4) for European schools; in these, the Primary, Middle and High School scholarships are awarded by the Inspector of European and Training schools in order of merit on

the results of the European School and Scholarship examinations. There are also some special scholarships of these grades tenable by intelligent but poor pupils who would otherwise be unable to continue their studies. The primary scholarships are tenable in the Middle section of European schools, the middle in the High school section and the high in the Intermediate classes. They are of the value respectively of Rs. 6 to 8, Rs. 10 to 12 and Rs. 15 to 20 per mensem. Further, collegiate scholarships of Rs. 20 to Rs. 30 per mensem are awarded on the results of the Intermediate examination and Final scholarships of Rs. 30 to Rs. 40 per mensem, on the results of the B.A. Degree examination for continuing for the Law, Engineering, Medical or L.T. courses or for the B.A. Honours course, (5) State scholarships. During the period under review, four technical scholarships were sanctioned, two for male and two for female candidates belonging to the domiciled community.

Excluding State scholarships, the total expenditure on scholarships in 1916-17 was Rs. 1.55 lakhs compared with Rs. .89 lakh in 1911-12. Particular items which may be mentioned are Rs. 3,000 allotted for expenditure in Mappilla Elementary schools for boys, Rs. 966 in Mappilla Elementary schools for girls, Rs. 3,880 in Agency schools, Rs. 9,540 for scholarships in the Brahman Widows' Hostel, Madras, and Rs. 13,000 in European schools. Part of the increase in expenditure was met from recurring Imperial grants.

The total number of scholarships awarded increased during the quinquennium from 742 for males and 154 for females to 1,294 for males and 773 for females.

#### XV.—HOSTELS.

144. The question of the proper housing of students in colleges and in training schools and of pupils in schools for boys and girls has excited considerable attention in recent years and there is a growing recognition of the fact that it is alike the duty of the managers of institutions and the interest of the State to see that the student population lives in a wholesome environment. The indifference of the past which left many undergraduates and school boys to live in insanitary lodgings, ill-fed and exposed to temptations, has given place to a lively interest in their moral and material welfare. While it is admitted that nothing can adequately replace the influence of a good home it is agreed that an extension of the hostel system is necessary for the benefit of the large numbers who do not live with their parents or guardians. It will be of interest therefore to indicate briefly the progress which has been made during the period under review in the extension of hostel facilities and to mention a few characteristics of hostel life. Taking expenditure as an index of building activity, a special non-recurring grant for hostels from Imperial Funds of Rs. 2.25 lakhs was sanctioned in 1913-14 and in 1912-13 a recurring grant of Rs. .96 lakh. The total expenditure during the quinquennium from public funds came to Rs. 9.38 lakhs. Moreover, in cases where managers were unable to provide half the total cost and could perhaps offer little more than a site, grants at special rates were sanctioned and paid in advance. Thirty-two applications for grant for hostels were received during the quinquennium from colleges and secondary schools for boys for non-Europeans and 29 institutions under public management were provided with new or additional hostel accommodation either in buildings of their own or in rented buildings.

In 1914 a committee was appointed by the Senate of the Madras University to enquire and report on the adequacy and nature of the hostel accommodation provided for the students in the affiliated colleges in Madras and to make definite proposals for the better accommodation and lodging of such students. In accordance with the recommendations of the committee made to the Senate in 1915 the University now obtains from each affiliated college an annual return showing the total number of students in the college, the number living (a) in hostels attached to the college, (b) with relations or guardians, (c) in unattached hostels or hostels approved by the college authorities and (d) in lodgings approved by the college authorities. The accommodation provided for college students is undoubtedly inadequate, especially in Madras. For the Victoria Hostel for example over 14 applications for admission were received for every vacancy. Large hostel schemes are on hand in the case of the Pachaiyappa's and Christian Colleges. Considerable additions have also been made in the case of seven other colleges. The colleges for women are residential. Supervision over college hostels is exercised by resident wardens.

One boy in every five in secondary schools in the Presidency comes from outside the town in which his school is situated. For such boys hostels are necessary and 75 secondary schools for boys have some hostel accommodation though much more is required. It is true that a wider distribution of secondary schools would probably reduce this proportion of boys studying in schools at a distance from their homes, and it is in this direction that a partial and perhaps better solution of the problem of accommodation for school pupils is to be sought: for hostels, however necessary, are not as good as parental control, are more expensive than living at home, and tend to be too luxurious as compared with the plain living and simple fare of the family. In particular, the hostels attached to the Board and Municipal schools are expensive as the charges in their case have to cover rent. The advantages of properly supervised hostels are clear enough—they promote *esprit de corps* and discipline, encourage games, and provide good food, opportunities for undisturbed and regular study, and protection from immoral or insanitary surroundings. Missionary societies maintain, largely from private funds, boarding houses for Indian Christian pupils. Hostels for Muhammadans are rare as in their case the number in any particular school is generally small. In the case of girls' secondary schools the provision of boarding accommodation is generally adequate. They are mostly Mission schools. In the Roman Catholic schools the nuns look after the hostel arrangements. Of the Palamcottah Church Missionary Society Schools, Miss Howard says that the secrets of success are the employment of educated matrons, effective control of evening preparation and organized play and occupation. In the chapter on female education I have already referred to the widows homes.

The Inspectress of Girls' Schools, Southern Circle, pleads for additional hostel accommodation for students in training schools for mistresses on the ground that a stipend with a guardian allowance is a very inadequate substitute. Most training schools for masters have hostel buildings or hostels held in rented premises, the rent and the cost of vessels and furniture being met from provincial funds in the case of elementary schools. Hostels in the case of elementary schools are exceptional. Some boarding schools are maintained by missions more especially for converts of backward origin, their most promising pupils being drafted into secondary schools or into the teaching profession. The provision of hostels is not so pressing in the case of European schools where many of the schools are boarding schools. During the quinquennium additions were made to the boarding accommodation of six schools. Probably further extensions would be made if an exceptional rate of grant could be offered.

145. *Expenditure on hostels (boarding charges).*—As desired by the Government of India, some details regarding boarding charges are given. Out of Rs. 16·53 lakhs being the total hostel (messing) charges, Rs. 11·37 lakhs pertains to non-European schools towards which boarding fees contributed Rs. 5·84 lakhs, subscriptions and other sources Rs. 5·19 lakhs and public funds Rs. 34 lakh. The average monthly cost of boarding in a college is Rs. 11, in a secondary school Rs. 6–8–0, in an elementary school Rs. 4, and in a training school Rs. 6. In the Victoria Hostel, Madras, which is considered to be a costly institution and where the boarders are college students, the average cost is Rs. 20, which includes about Rs. 14 for boarding, Rs. 4 for room rent and Rs. 2 for electric light. It will be seen from the following statement showing the average cost of boarding in typical hostels that the cost varies in different classes of institutions. As regards European schools, out of the total expenditure of Rs. 5·17 lakhs, fees met Rs. 1·51 lakhs and provincial funds, viz., boarding grant Rs. 1·39 lakhs, the balance of Rs. 2·26 lakhs being met from private subscriptions and the funds of the management. The average cost of boarding in a European institution is Rs. 12 and the average fee is Rs. 5. In the case of high and middle schools, the average cost is Rs. 19 and in a primary school Rs. 4.

<i>Non-Europeans.</i>					Average cost.
					RS.
(1)	Pachaiyappa's College hostel	...	...	...	14
(2)	St. Joseph's College, Trichinopoly	...	...	...	11
(3)	Kumbakonam College	...	...	...	9
(4)	Teachers' College, Saidapet	...	...	...	10
(5)	Madrassa-i-Azam	...	...	...	20
(6)	Raja's High School, Ramnad	...	...	...	8
(7)	Sabha Nayaka Mudaliyar's High School, Shiyali	...	...	...	11

*Europeans.*

					Average cost.
					Rs.
(1) St. Joseph's Boarding School, Coonoor	...	...	...	...	26
(2) Stanes' High School, Coimbatore	...	...	...	...	20
(3) St. Joseph's Convent, Trichinopoly	...	...	...	...	15
(4) St. Patrick's Orphanage, Adyar	...	...	...	...	14

## XVI.—BOOKS.

146. *The Text-book Committee.*—It has again been found necessary to raise the maximum number of members on the Text-book Committee. It was raised in 1912 from 24 to 30, and again in 1916 from 30 to 40. The necessity for making these increases has been the same as when in 1909 the maximum number was raised to 24, viz., the steadily increasing activity of publishing firms. The number of books dealt with was the greatest on record, and a relatively large number of them was accepted as suitable for use in schools or for school libraries. The Committee continued to work in sub-committees with the Rev. W. Meston as Secretary. Half-yearly meetings of the whole Committee are held in February and September.

147. *The Oriental Manuscripts Library.*—On the retirement of Rao Bahadur M. Ranga Acharya, Professor of Sanskrit, Presidency College, and Curator of this Library, M. R. Ry. S. Kuppaswami Sastri succeeded him as Professor and Curator of the Library. In order to facilitate the acquisition and examination of manuscripts Government sanctioned in 1914 the employment of a temporary peripatetic search party which tours systematically throughout the Presidency. To this is mainly due the large increase in the number of manuscripts acquired during the quinquennium from 3,057 to 3,646. Most of the manuscripts acquired are in Sanskrit, the remainder being in South Indian vernaculars. During the last six months of the quinquennium the search party worked, under the orders of Government, in the Tanjore Palace Library in connection with the cataloguing and valuing of the Sanskrit and vernacular manuscripts there.

With a view to making known to scholars and to those interested in Sanskrit and vernacular literature the discovery of new manuscripts and their contents, arrangements were made for the issue of a descriptive catalogue and considerable progress in this publication has been made.

The number of visitors to the library and the number of manuscripts consulted by them increased except in the last year of the quinquennium. As usual, books on poetry and religion were most numerous consulted.

It has not been possible to give effect to the orders of the Government of India sanctioning the amalgamation of the Library with the University Library, as the University buildings have not been constructed. The existing accommodation of the library is inadequate.

148. *Registrar of Books.*—On the death of Mr. Ranga Acharya in 1916, Rao Bahadur A. C. Pranatartihara Ayyar was appointed Registrar. The total number of books registered during the five years from 1911-12 to 1916-17 came to 21,726 as compared with 14,356 during the previous quinquennium. During 1913-14 Government sanctioned a temporary increase of establishment for preparing a card catalogue of the books in the Registrar's office. This work has been completed and the Library has been thrown open to students who are readers in the Connera, University and Oriental Manuscripts Libraries.

149. *Dictionaries.*—With the help of aid from the local Government and from the Government of Bihar and Orissa an Uriya dictionary was published. Five hundred copies of the Telugu-Savara Dictionary by M. R. Ry. Rao Sahib G. V. Ramamurti referred to in the last report were printed at the Government Press at Government cost. The question of grants for Malayalam and Telugu dictionaries was raised in 1914 but was subsequently dropped. It has been mentioned elsewhere that a Tamil dictionary is being prepared under the auspices of the University and with the help of a grant from Government and after this is completed it may be possible to take up again the question of dictionaries for other languages.







## XVII.—MISCELLANEOUS REMARKS.

150. *Scheme of instruction in literary and non-literary subjects.*—As in previous reports of this nature, a diagram is given on pages 75 and 76 showing for 1916-17 the number of pupils in each year of the school or University course separately for non-Europeans and for Europeans. Marked changes, due to the expansion of education, have been dealt with in the various chapters of the report. It is unnecessary therefore to comment on the figures at this stage.

151. *Provident funds and pensions.*—Pending a decision by the Government of India regarding the establishment of a general provident fund for teachers, a considerable number of institutions under private management have started provident funds. A set of draft rules was drawn up by the department in 1915 and circulated to managers of schools. These were so framed that the incorporation of provident fund schemes embodying these rules with any general scheme started by the Government of India would present no difficulty. A specific clause in the rules makes it mandatory on the management to merge their fund in any general fund to be hereafter started by Government. Where the managers of schools adopt these rules in toto or with such modifications as meet with the approval of the Director of Public Instruction, aid amounting to half the contribution paid by the management is given, the contribution by the management and by the teachers being normally equal and amounting in each case to  $6\frac{1}{4}$  per cent or to one anna in the rupee. There were 54 funds with approved rules in secondary schools under private management on 31st March 1917 and others have been started since. The amount of grant paid on behalf of 45 of these funds amounted to about Rs. 12,700. Comparatively few elementary schools under private management have such funds. A number under public management (Board and Municipal) have them. Teachers in Board and Municipal Secondary schools claim, not without reason, that their position would be much more satisfactory if all Boards and Councils instituted such funds and if the teachers could be transferred from one Board or council to the service of another and carry with them their provident fund benefits.

152. *Conferences.*—Reference has been made incidentally in the course of the report to conferences which have been held during the quinquennium. It will be convenient, however, to enumerate together those that have been held and to indicate briefly their terms of reference. Two departmental conferences were summoned, one of Inspectors in 1914 and the other of Inspectresses in 1915. The Inspectors discussed subjects of administrative and educational importance such as the duration of school life and the relation between elementary and secondary education. The conference of Inspectresses decided the order of precedence in which additional secondary and training schools should be opened and such matters as the award and number of scholarships, the staffing of schools and the pay of teachers. In March 1916 a large and representative conference of officials and non-officials met to discuss points in connection with the Madras Educational Rules and the Grant-in-Aid Code, more especially fees in elementary schools and the reappropriation of fees, capitation grants and allowances, the list of backward classes, fee concessions and grants to secondary schools. Another conference of officials and non-officials was held in September 1916 to consider various questions relating to female education such as the control of female education, curricula, fee concessions, classes of schools and inspection. The orders of Government on the resolutions of these last two conferences and my recommendations in connection therewith had not been received by the close of the quinquennium.

153. *Educational associations and reading rooms.*—Educational Associations have increased in number from 864 to 1195. There has been a corresponding increase in membership which now comprises 44,195 males and 591 females. The number of reading rooms and literary societies, both registered and unregistered, has increased. In all there were 764 with a membership of 133,480.

154. *Exhibitions.*—Exhibits were sent from this office to two educational exhibitions, one at Erode in 1914 held under the auspices of the Erode Elementary

School Teachers' Association and one at Lalgudi in 1916 which was arranged by a special committee. Early in 1917 an exhibition was held at the Teachers' College, Saidapet. In addition there was an educational exhibit at the Park Fair in Madras in December 1915.

155. *Schoolmasters as postmasters.*—The system of utilizing the services of Government and Local Fund schoolmasters as branch postmasters continued throughout the quinquennium and was reported by the Postmaster-General each year to have worked satisfactorily. There are now 640 such teachers so employed on monthly allowances varying from Rs. 2 to Rs. 12. The percentage of branch offices in charge of schoolmasters of all classes on the total number of extra-departmental branch offices during 1916-17 was about 35 as in the previous quinquennium.

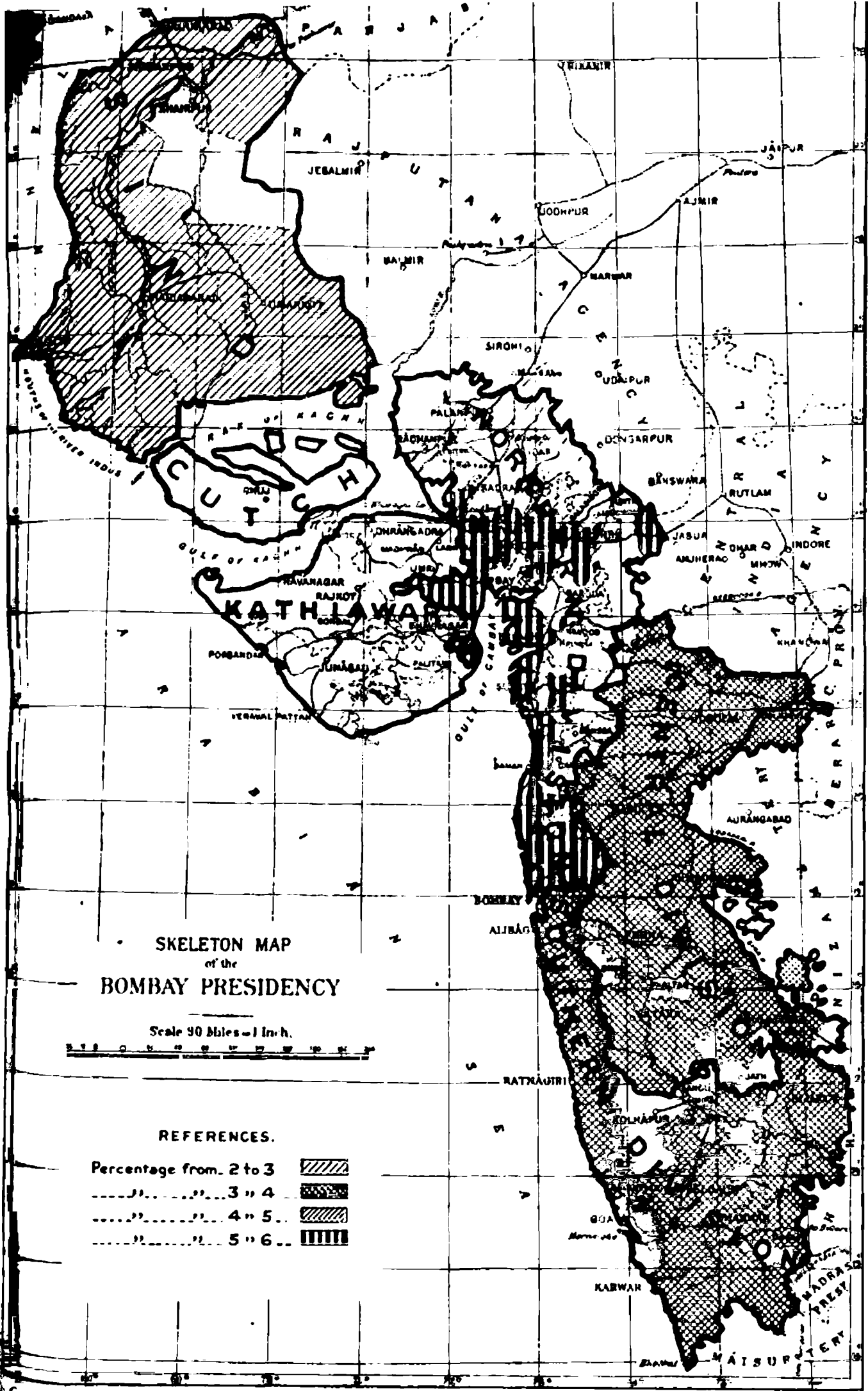
156. *Service Registers and inventories of valuable stock.*—Service registers and verified copies of them and the inventories of valuable stock are reported to have been properly maintained.

I have the honour to be,

Sir,

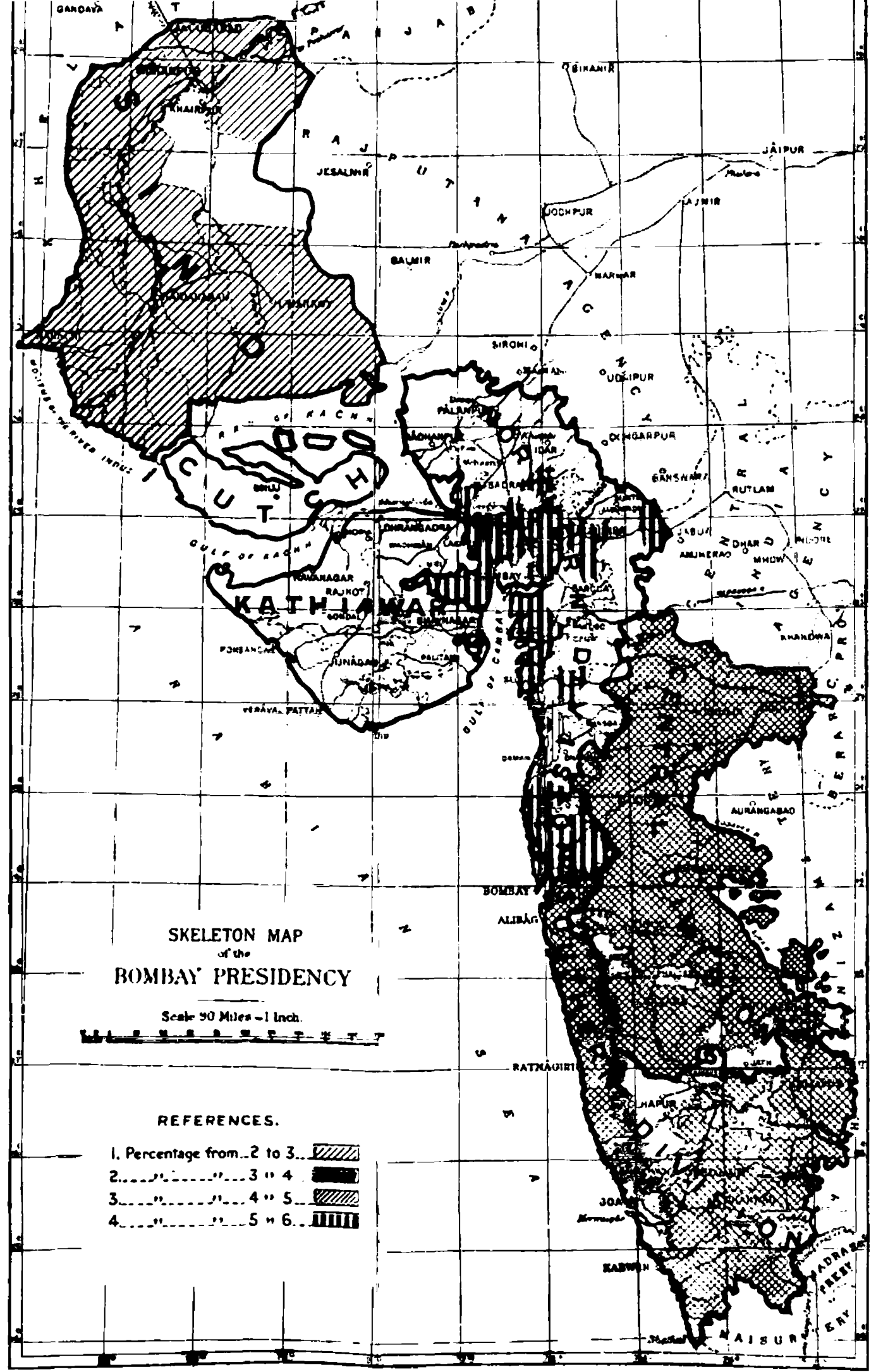
Your most obedient servant,

J. H. STONE, M.A., C.I.E.,  
*Director of Public Instruction.*



Govt. Photodup. Office, Poona, 1917	Percentage.
Bombay Presidency	3.6
Sind	2.8

Percentage.	
Northern Division	5.2
Central do	3.5
Southern do	3.2



Govt. Photodup. Office, Poona, 1917	Percentage.
Bombay Presidency	4.
Sind	3.

Percentage.	
Northern Division	5.7
Central do	3.8
Southern do	3.4

# Government of Madras

HOME DEPARTMENT (EDUCATION)

**G.O. Nos. 31-32, 11th January 1918**

## **Report on Public Instruction**

Reviewing the — for the quinquennium ending with the 31st March 1917.

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### **Order—No. 31, Home (Education), dated 11th January 1918.**

The Director of Public Instruction submits his report on the state and progress of education in the Madras Presidency during the quinquennium which ended with the 31st March 1917.

2. The report is very interesting and contains a record of steady and substantial progress in almost every direction. The chief features are clearly summarized in the opening part of the report. The Government have read with special interest the chapter relating to female education ; and the opening of two new colleges for women in Madras will, it is hoped, bring about a steady increase in the supply of qualified female teachers for employment in girls' schools. The progress made in the education of Muhammadans and of the depressed classes was also very gratifying.

3. The Governor in Council desires to congratulate the Hon'ble Mr. Stone and the officers under him on the successful administration of the department. The thanks of the Government are also due to Mr. R. G. Grieve for the careful manner in which he has compiled the quinquennial report.

(True extract)

R. RAMACHANDRA RAO,  
*Secretary to Government.*

To the Director of Public Instruction.  
,, Surgeon-General.  
,, Accountant-General.  
,, Registrar, University of Madras.  
,, Officer in charge of the Department of Industries.  
,, Local and Municipal Department.  
,, Revenue Department.

Editors' Table.

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### **Endorsement—No. 32, Home (Education), dated 11th January 1918.**

Copy to the Government of India, Department of Education.

R. RAMACHANDRA RAO,  
*Secretary to Government.*