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Four Lectures on Imperial Commerce-

Delivered in Rangoon in October November and December 1919 under the Auspices of the Imperial Idea Committee

BY

E. R. HOLDSWORTH, A.C.A.



, RANGOON
SUPERINTENDENT, GOVERNMENT PRINTING, BURMA
1920

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NOTES ON VACCINATION IN THE UNITED PROVINCES FOR THE YEAR 1923-24.

Brief notes on Vaccination in 1923-24.

A detailed report for the triennium 1920-21, 1921-22 and 1922-23 having been submitted last year, this report deals briefly with vaccination in 1923-24 as compared with 1922-23.

Area and population.

2. The area of the province excluding the estates of Rampur, Benares and Tehri-Garhwal was 107,167 square miles and the population 45,375,787.

Constitution and strength of the department.

(Statement II.)

The following officers were in charge of the several ranges during the year under review:—

I RANGE.

Major W. A. Mearns, I.M.s., from 1st April, 1923 to 12th February, 1924. Captain D. Clyde, I.M.S., from 13th February, 1924 to 31st March, 1924,

II RANGE.

Major T. D. Murison, I.M.S., from 1st April, 1923 to 25th November, 1923.

Major W. A. Mearns, I.M.S., from 26th November, 1923 to 27th February, 1924.

Captain D. Clyde, I.M.S., from 28th February, 1924 to 31st March, 1924.

III RANGE.

Dr. A. Sousa, D.P.H., throughout the year.

IV RANGE.

Dr. K. P. Mathur, D.P.H., throughout the year.

The number of Assistant Superintendents of Vaccination (49) remained unaltered, but that of vaccinators decreased from 909 in 1922-23 to 905 during the year under report.

Expenditure on vaccination.

(Statement II.)

Health and their establishments and an increase of Rs. 650 excluding these charges as compared with 1922-23 the total amounts during the two years being Rs. 4,62,588 and Rs. 4,62,830 and Rs. 3,87,344 and Rs. 3,86,694 respectively. The decrease and increase mentioned above being slight call for no comments.

Average cost of each successful case of vaccination in these provinces during the year under report was the same as in the preceding year, viz, annas 4 and pies 10. The following table shows the average cost of each successful case of vaccination in these

provinces during the year under report as compared with other provinces:—

	Province.											
			-			Rs. s. p.						
United Provinces	••	**.				0 4 10						
Assam	••	•••	•••			0 4 5						
Bengal	••		••									
Punjab	••		••	•••								
Burma	••	••	••	••	•	098						
Bihar and Orissa				•		0 2 4						
Delhi Province	••	••	••	••		0 5 0						
Central Provinces		••										
North-West Frontier		••				0 2 9						
Madras	• .	••	••	••	••	* *						
Bombay	••	•• ,	••	**								

"Information not received.

During the year under report 1,266,930 persons were vaccinated by the special (district) staff and 512 by the dis-General operations. pensary staff, or a total of 1,267,442, as compared (Statement I.) with 1,224,252 in the preceding year, indicating an inceease of 43,190. The number of vaccination operations performed in 1923-24 also exhibited an increase of 71,739 as compared with 1922-23, the actual numbers for the two years being 1,310,148 (1,251,387 primary and 58,761 re-vaccination) and 1,238,409 (1,175,212 primary and 63,197 revaccination) respectively. The number of secondary operations rose from 14,157 in 1922-23 to 42,706 in 1923-24. The number and percentage of successful vaccinations in which the results were known during 1923-24 amounted to 1,127,602 and 91.53 in the case of primary vaccinations and to 33,220 and 63.70 in the case of re-vaccinations as against 1,119,849, 96 44, 40,027 and 69 89 respectively in 1922 23. Each vaccidator vaccinated on an average 1,400 persons during the year under review as against 1,346 in the preceding year. The district staff successfully vaccinated 25.57 persons per mille of the population as compared with 25.55 in 1922-23.

It will be seen that there was an increase under all heads during the year under report except under the heads "number of re-vaccinations" and "percentage of successful cases in which the results were known," both in the case of primary vaccinations and re-vaccinations.

Successful primary number of successful primary operations performed in 1923-24 over that of 1922-23. Of these Moradent districts.

(Statement I.) followed by Bahraich with 4,799, Almora with 3,561, Fyzabad with 2,209, Sitapur with 1,995, Kheri with 1,863 and Bijnor with 1,602. Of the 18 districts showing a decline the most conspicuous are Rae Bareli with a falling off of 5,004, Jaunpur with 4,373, Bara Banki with 3,782, Budaun with 2,679, Allahabad with 2,148, Banda with 2,025 and Bulandshahr with 1,835.

The causes of the decrease in these districts were :-

Rae Bareli.—A considerable reduction in the number of chowkidars, the deputation of four permanent vaccinators to Adh Kumbh fair, Allahabad, and the effects of the disturbance of 1921, which have not yet been shaken off by the public.

Jaunpur.—Climatic condition, epidemic of cholera and deputation of four permanent vaccinators to Adh Kumbh fair, Allahabad, and appointment of inexperienced men in their stead.

Bara Banki.—Slackness on the part of some vaccinators who have been punished and deputation of three permanent vaccinators to Adh Kumbh fair, Allahabad.

Budaun.—Slackness on the part of some vaccinators who have been suitably dealt with.

Allahabad .- Bad supply of lymph in October.

Banda - Opposition of the public to vaccination.

Bulandshahr.-Prevalence of plague in an epidemic form.

8. The number of persons successfully vaccinated per 1,000 of the Successful vaccination and degree of 1922-23. Among the districts showing the best protection afforded. (Statement I.)

1922-23. Among the districts showing the best protection, Almora which had been second for the last three years headed the list with a ratio of 41.53. Garhwal which had been first for the last several years stood second with a ratio of 37.91. Then in order came Hamirpur, Jalaun, Saharanpur, Pilibhit and Muzaffarnagar giving a ratio of 35.11, 34.09, 33.98, 33.63 and 33.56 respectively. The districts showing the least protection were Rae Bareli (14.74), Bara Banki (16.97), Ghazipur (17.35), Azamgarh (18.17) and Farrukhabad (18.95).

9. In 1923-24 the percentages of successful vaccination operations in Vaccination in proportion to births show a general decrease as portion to births and compared with the preceding year, the ratios for the two years being 49.57 and 54.16 in the case of children under one year of age, 17.43 and 20.11 in the case of those between one and under six years of age, and 68.95 and 76.71 for all ages respectively.

An analysis of the figures of the different ranges shows that 56·17 children under one year of age were successfully vaccinated per 100 births in the first range during the year under review as against 61·21 in the preceding year. These figures for the second, third and fourth ranges were 41·15 against 44·91, 55·68 against 61·28 and 44·63 against 48·25 respectively. This year the first range shows the best protection in domparison to the other ranges.

- 10. Seven hundred and forty-seven deaths from small-pox were recorded in 1923 against 242 in 1922. The death-rates for the two years were 02 and 01 respectively, and the average for the past five years '09.
- 11. A diagram illustrating the death-rate from small-pox in each district during 1923 and the proportion of population is annexed.

- 12. In 1923-24, 512 vaccination operations (215 primary and 297 re-Dispensary vaccination) were performed by medical subordition.

 (Statement III.)
- There was an increase in the vaccination work performed in municipalities during the year under review as Vaccination in compared with the preceding year, the total number municipalities. of persons vaccinated being 107,045 and 101,815 and that of vaccination operations 112,863 (100,896 primary and 11,967 re-vaccination) and 103,646 (91,751 primary and 11,895 re-vaccination) respectively. The number of successful primary vaccinations and that of successful re-vaccinations amounted to 87,498 and 4,786 in 1923-24 as against 85,729 and 6,538 in 1922-23 respectively. The ratio of persons successfully vaccinated per mille of the population in 1923-24 was practically the same as in 1922-23, the figures for the two years being 31.73 and 31.72 respectively. Among the municipalities showing a large num. ber of persons successfully vaccinated per mille of the population Etah and Gonda which stood third and fourth last year are first and second this year with a ratio of 68.25 and 56.47 respectively. Then came Mussoorie with 51.44, Unao with 48.08 and Konch with 43.44. The municipalities in which the least protection has been noticed are Mainpuri (12.75), Rae Bareli (17.92), Kananj (19.61), Azamgarh (20.22) and Farrukhabad-cum-Fatehgarh (20:59). Farrukhabad-cum-Fatehgarh and Rae Bareli show an improvement over last year, while Kanauj is gone worse this year. In Mainpuri the decrease is ascribed by the District Superintendent of Vaccination to a smaller number of re-vaccinations being performed this year. In Azamgarh it is attributed to the supply of lymph of poor quality. Appendix B to these notes will show the number of successful vaccinations performed on children under the age of one year in different municipalities during the year under review.
- Vaccination in cantonments.

 Vaccination in cantonments.

 Vaccination in cantonments.

 Vaccination in cantonments of these provinces against 8,840 and 9,017 (5,352 primary and 3,665 re-vaccination) respectively in the preceding year. The number of successful primary vaccinations and successful re-vaccinations during the two years were 4,928 and 2,719 and 4,884 and 2,485 respectively. The number of persons successfully vaccinated per 1,000 of population was 38.23 in 1923-24 as against 36.84 in 1922-23. An examination of the above figures will show an increase under all heads.

In 1923 it was brought to my notice that the returns of vaccination operations performed by military medical officers in cantonments were not received by District Superintendents of Vaccination and were not included in the district returns. I accordingly addressed the Deputy Director of Medical Services, Eastern Command, on the subject who did not agree to furnish the information on the form in use in this department, but issued instructions to the military officers concerned to send half-yearly vaccination returns to my office on the form prescribed by the Army department. These returns show that military medical officers performed 16,705 vaccination operations (531 primary and 16,174 re-vaccination)

during the year under report. Of these the number of successful primary vaccinations was 336 and that of successful re-vaccinations 5,679. As the returns received from military authorities do not contain all the information required for our standard statements, the statistics contained therein cannot be included in any of the statements appended to these notes.

- The number of persons vaccinated and that of vaccination opera-15. tions performed in the notified areas in 1923-24 Vaccination in were 11,841 and 12,209 respectively, as compared notified areas. with 11,771 and 11,922 respectively in 1922-23. Of the 12,209 operations performed 11,776 were primary and 433 revaccinations, as compared with 11,388 and 534 respectively in the preceding year. The total number of successful primary vaccinations amounted to 10,544 and that of successful re-vaccinations to 189 in 1923-24 as against 10,826 and 304 respectively in the previous year. The number of persons successfully vaccinated per 1,000 of the population was 31.62 in 1923-24 as against 32.46 in 1922-23. Of the well protected notified areas, Shahganj (Jaunpur), Mainpuri Civil Station and Bhimtal (Naini Tal) retained their last year's position as first, second and third with a ratio of 62°11, 56°50 and 49°97 respectively. Then came Bhinga (Bahraich) with 49°75 and Badshahpur (Jaunpur) with 46°92. Among the notified areas showing the least protection, the most conspicuous are Shikohabad in the Mainpuri district (10.99), Auraiya in the Etawah district (12.36), Bhowali in the Naint Tal district (19.10), Mubarakpur in the Azamgarh district (19:12) and Deoris in the Gorakhpur district (19.90). Auraiya went three steps down this year as compared with the previous year. The decrease in Auraiya is due to an outbreak of plague. In Bhowali it is assigned to the fact that a few children were left unvaccinated as they were not keeping good health. In Shikohabad, Mubarakpur and Deoria the decrease is ascribed to the supply of lymph of low potency in the earlier part of the season.
- Vaccination Act is in force in all cantonments and municipalities and in 46 out of 48 notified areas. Steps are being taken to extend the Act to the notified areas of Rikhikesh (Dehra Dun) and Ganj Dundwara (Etah). The proposal to extend the Vaccination Act to rural areas has been shelved by Government for the present.
- General results of Superintendents of Vaccination.—There has been a decrease of 30,463 in the inspection work done by the Assistant Directors of Public Health and District Superintendents of Vaccination during the year under report as compared with the preceding year, the actual number of cases inspected during the two years being 145,559 (145,156 primary and 403 re-vaccination) and 176,022 (174,655 primary and 1,367 re-vaccination) respectively. The percentage of inspections to total number vaccinated in 1923-24 was 12.01 in the case of primary and .69 in the case of re-vaccination as against 15.04 and 2.17 in 1922-23 respectively. The reasons for the decrease are as follows:—
 - (1) Deputation of Dr. A. Sousa, Assistant Director of Public Health, III Range, to supervise the sauitary arrangements

- of the last Adh Kumbh fair, Allahabad, from November to February;
- (2) Transfer of Major T. D. Murison, I.M.S., Assistant Director of Public Health, II Range, to Assam as Director of Public Health in November, 1923, and the post remaining vacant for about three months; and
- (3) Curtailment of tours of District Superintendents of Vaccination.

The largest number of inspections was done in the districts of Gorakh-pur (10,658), Azamgarh (8,868), Sultanpur (7,212), Bulandshahr (7,169), Jaunpur (6,572) and Bijnor (6,199). Of the districts in which the smallest number of inspections was performed the most conspicuous were Lucknow (123), Almora (143), Garhwal (238), Banda (897) and Naini Tal (942). All these districts have shown a further decline in the number of inspections as compared with the previous year. In the case of Lucknow, however, the District Superintendent of Vaccination is not required to make vaccination tours.

(b) By Assistant Superintendents of Vaccination and other inspecting officers.—There was a decrease of 7,382 in the number of inspections of primary cases done by these officials in 1923-24, but an increase of 4,270 in respect of re-vaccinations, or a net decrease of 3,112 as compared The district of Gorakhpur, where there are two Assistant with 1922-23. Superintendents of Vaccination, stood first as usual on the list of districts showing the largest number of inspections (35,779) performed during the year under report and was followed by Jaunpur with 16,008. Then came in order Basti, Sultanpur, Bahraich and Moradabad with 15,968, 15,171, 15,048 and 14,700 respectively. Among the districts which were backward in respect of the number of inspections performed the most conspicuous were Dehra Dun (4,130), Garhwal (5,089), Naini Tal (5,116), Mainpuri (6,374., Rae Bareli (6,828) and Jalaun (7,689). Of these Dehra Dun showed an improvement over last year. Considering the percentages of inspections done by these officials to total number vaccinated during the year under report, there is a decrease in respect of primary vaccinations, but an increase in that of re-vaccinations as compared with the preceding year, the actual ratios being 43.72 and 37.00 for 1923-24 and 46.14 and 27.45 for 1922-23 respectively. The percentage of cases found successful to the total number inspected during the year under report was 90 33 in the case of primary vaccinations and 48.14 in that of re-vaccinations, as against 95.46 and 47.31 respectively in the preceding year.

The District Superintendents of Vaccination concerned will be asked to warn the Assistant Superintendents of Vaccination to devote more attention to this part of their duty.

Provincial Bovine the year under report. The contract for the supply Lymph dépôt; Patwa of calves was given to one Abdul Rahim of Bareilly Dangar (district Naini Tal).

Were not supplied on due dates, no difficulty was experienced in the manufacture of lymph, and on the whole the supply was satisfactory.

The number of calves purchased or obtained on fees during the year 1923-24 was 342 (64 cow and 278 buffalo) as compared with 332 (85 cow and 247 buffalo) in 1922-33. The disposal of 342 calves is given below:—

		,		Cow calves,	Buffalo calves,
Successfully vaccinated	••	••		62	266
Failed	·-	••		Nil.	
Died before vaccination	••	••	••	1	2
Died after vaccination	••	**		Nil.	8
Retained in the depôt unvalive-stock.	colnàted a	od transferre	đ to	1	Ril.
		Total		64	278
	*				342

A few cases of feet and mouth disease were found amongst calves brought in by the calf contractor, but the disease was soon stamped out by segregation and the usual treatment. Pleuro-pneumonia broke out as usual amongst the buffalo calves and accounted for 39 deaths. Seven animals also died of natural causes. The total number of deaths in 1923-24 thus amounted to 46 as compared with 138 in the preceding year. The decrease was due to the fact that no vaccination was carried on during the latter half of December and the whole of January when pleuro-pneumonia was especially prevalent.

The total quantity of crude lymph obtained during the year under report was 15,1670 grammes from 328 successfully vaccinated calves giving an average of 46.2 as against 15,097.5 grammes from 298 successful calves and an average of 50.7 in 1922-23. The average yield of crude lymph per cow and buffalo calf in 1923-24 was 184 and 52.7 respect tively against 286 and 588 grammes in 1922-23. From this crude lymph 80,314 grammes of glycerinated lymph and 1,643 grammes of glycerine paste were manufactured during the year as against 115,114.3 grammes of glycerinated lymph and 981.2 grammes of glycerine paste in the preceding year. Of the 80,314 grammes manufactured this year 26,630 were lymph of a strength of 1 in 2, the rest being of a strength of 1 in 6. Lymph of the strength of 1 in 2 would be brought to the strength of 1 in 5 before issue, thus providing 120,259 grammes This procedure will continue in future as there is reason to in all. believe that the potency of lymph will be higher than it was when the lymph was diluted to 1 in 6 immediately after manufacture.

The table appended hereunder exhibits the annual output of lymph, the number of areas in which arm-to-arm vaccination has been replaced.

by calf lymph vaccination and the income and expenditure of the depot:—

	Qı	uantity of l	ymph issue	i.	natio	to-arm n repla ymph ition ir	ced by vacci-		
Year.	Glycerina	ted lymph.	paste.	paste.		ities.	eas.		ğ
	Tubes.	In bulk.	Glycerine paste	Lanoline paste.	Districts.	Manioipalities.	Notified areas.	Income.	Expenditure.
	·	Grammes. Grs.	Grammes. Grs.	Grammes. Grs.				Rs.	Rs.
1904-5 1905-6	21,049 74,800	Nil. 98 0	Nil. Nil.	79 0 120 0		5 14	*-	106 2,057	
1905-6	113,945	205 0	1.367 0	19 0		28	:	8.527	
1907-8	198,224	Nil.	668 12	161 0		58	5	6,118	6,717
1908-9	243,722	8,806 3	749 0	4 0	4	79	19	8,572	
1909-10 i	249,974	9,147 0	414 0	4 0	8	87	82	8,527	10,524
1910-11 1911-12	858,939 198,256	9,892 0 41,460 12	45 0 44 0	6 0 Nil.	18 22	87 87	87 45	14,211	12,097 18,090
1912-19	180,445	58.427 13	83 3	Nil.	85	87	45		14,894
1918-14	199,932	70,296 10	79 7	Nil	87	86	46	28,867	17,247
1914-15	296,423	94,547 13	882 0	8 7	41	84	43	89,174	20,703
1915-16	150,347	83,110 7	66 0	Nil.	47	84	47	80,789	21,228
1916-17	169,880	82,960 0	86 7	Nil.	47	84	45	81,086	
1917-18 1918-19	172,462 185,699	86,658 12 91,658 0	Nil. 34 0	Nil. Nil.	48 48	83 88	44 45	82,631 82,836	21,910
1919-20	178,817	94,354 10	6 11	Nil.	48	84 84	44	35,430	
1920-21 :.	137,633	89,609 4	14 0	4 0	48	84	43	87,144	
1921-22	135,448	87,098 12	6 0	Nil.	48	85	41	39,169	
1922-28	331,663	69,436 12	50	Nil.	48	84	39	41,854	
1923-24	89,639	86,993 12	11 0	Nil,	48	84	40	87,967	86,014

86,993.75 grammes in metal collapsible tubes, 89,639 capillary tubes and 11 grammes of glycerine paste, sufficient to vaccinate 2,264,758 persons, were issued during 1923-24 as against 69,436.75 grammes in metal tubes, 331,668 capillary tubes and 5 grammes glycerine paste in 1922-23. Of the total quantity of lymph issued 12 capillary tubes and 125.75 grammes in bulk costing Rs.72 were issued free during the year under report as against 153 capillary tubes and 75.25 grammes in bulk to the value of Rs. 55 in 1922-23.

Eighty-four municipalities and 40 notified areas were supplied with lymph on payment in 1923-24. The municipality of Mainpuri and the notified areas of Shikohabad, Mainpuri Civil Station, Aonla, Auriya, Moghal Sarai, Chunar Settlement, Badshahpur and Madhogani did not take lymph from this dépôt during 1923-24. Lymph costing Rs. 19,274 was sold to district boards, Rs. 6,244 to municipalities, Rs. 3,536 to Native States, Rs. 1,631 to private persons and by value payable post, Rs. 959 to notified areas and Rs. 572 to cantonments as against Rs. 22,126, Rs. 5,868, Rs. 4,947, Rs. 882, Rs. 1,043 and Rs. 483 in 1922-23. Lymph worth Rs. 20,067 was supplied to the Military department during the period from 1913-14 to 1923-24, while the total amount received from them by the contract system for the same period amounted to Rs. 19,300 resulting in a net loss of Rs. 767.

The question of revision of the contract amount is under considera-

The sale-proceeds of lymph from the depot in 1923-24 amounted to Rs. 35,216 and those of miscellaneous articles to Rs. 2,751, or a total of Rs. 37,967, as against Rs. 41,354 (Rs. 38,349 from sale of lymph and Rs. 3,005 from that of miscellaneous articles) in the preceding year.

The decrease in the receipts from the sale of lymph is due to the issue of capillary tubes during the year being less than in the preceding year when a larger amount of capillary tubes had to be issued owing to the late receipt of collapsible tubes.

The total expenditure incurred during the year under report was Rs. 36,602 as against Rs. 35,731 in the year before—indicating an increase of Rs. 871. This increase is due to the fact that a sum of Rs. 1,401 was expended on the construction of quarters for two malis and Rs. 210 were paid on account of glass tubes purchased through Assistant Director of Public Health, Lahore, this year owing to the delay in the arrival of tubes from England. Rupees 250 were also paid to the municipal board of Naini Tal for the supply of water as they did not agree to supply the same free of charge. Comparing the receipts with expenditure there was a credit balance of Rs. 1,364 in addition to lymph worth Rs. 44,883 in stock for issue next year.

During the year under report 1,309,636 operations (1,251,172 primary and 58,464 re-vaccination) were performed with calf lymph as against 1,236,903 operations (1,174,008 primary and 62,895 re-vaccination) in the preceding year.

The results of vaccination performed during the years 1923-24 and 1922-23 are exhibited in the following table:—

	ĺ	Primary vaccinations.									
		Succes	ssful.	Unsuco	essful.	Percentage.					
	1	1928-24.	1922-28.	1928-24.	1922-23.	1923-24.	1922-22.				
April to September .	.	23,087	27,154	11,367	2,418	66.96	· 91·82				
October to March .	.	625,426	522,883	68,481	23,854	90.13	- 95· 6 4				
Total .		648,468	550,987	79,848	26,272	89.04	95 45				
	\exists		Re-vaccinations.								
		Succe	essful.	Unsuce	essful.	Percentage.					
		1928-24,	1922-23.	1928-24.	1922-28.	1928-24.	1922-28.				
April to September		8,108	8,044	2,429	2,246	47.50	57*54				
October to March		17,509	16,318	10,078	6,845	62·47	70-45				
Total		20,612	19,862	18,507	9,091	60-41	68.03				

The percentage of successful vaccinations dropped from 95.45 in 1922-23 to 89.04 in 1923-24. The decreuse was due to the deterioration

of a quantity of lymph which led to the destruction of all the lymph manufactured at that time.

Lymph issued towards the end of the year was of good quality and high potency.

The cold storage plant worked very satisfactorily during the year under report. 137,230°3 grammes of glycerinated lymph and 345°0 grammes of glycerine paste were kept in the cold storage last year for issue during 1923-24, out of which 31,667 grammes of lymph manufactured during the previous year were destroyed as lymph issued from this stock had been giving doubtful results. The remainder was issued during the hot weather and the first four months of the vaccination season.

88,266.0 grammes of glycerinated lymph and 375.0 grammes of glycerine paste have been manufactured and placed in the cold storage for issue during 1924-25.

The lighting plant has worked satisfactorily during the year. The new plates (positive and negative) which were purchased during 1922-23 were fitted during the hot weather.

The post of the electrician was made superior and permanent but nonpensionable,

The staff of the dépôt carried out their duties satisfactorily. Captain E. H. Morbey, Superintendent of the dépôt, has again kept the dépôt in excellent order and effected economies in many directions. I am glad that his valuable services have been recognised by Government by granting him an increase in pay.

19. District annual vaccination returns were again received late from District annual several districts and had to be returned for correcvaccination returns. tion. The attention of the District Superintendents of Vaccination concerned will be drawn to this.

C. L. DUNN, D.P.H.,

LIEUT.-COL, 1.M.S.,

Director of Public Health and Superintendent-General of Vaccination,

United Provinces.

NAINI TAL: The 12th June, 1924. of a quantity of lymph which led to the destruction of all the lymph manufactured at that time.

Lymph issued towards the end of the year was of good quality and high potency.

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C. L. DUNN, D.P.H.,

LIEUT.-COL., 1.M.S.,

Director of Public Health and Superintendent-General of Vaccination,

United Provinces.

NAINI TAL: The 12th June, 1924.

STATISTICAL STATEMENTS

AND

APPENDICES.

STATEMENT No. I.—Showing the particulars of vaccination

_	-		is to	Per	vac- oyed	<u> </u>			per- by	Prima	ry vaccir	ation.
	Ra	nges and districts.	according 1921.	pulation ile.	mber of vac- employed at the year.		umber of				Succe	essful.
Number.	***************************************	THE CO. WITH THE PARTY OF	Population accord	Average population square mile.	Average number of cinators empl	v	accinated	!	Average number of sons vaccinated each vaccinator.	Total.	Under one year.	One and under six years.
1		2.	3	4	5		6		7	8	9	10
						Male.	Female.	Total.				}
11 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	First Range.	Dehra Dun Saharanpur Muzaffarnagar Meerut Bulandshahr Aligarh Muttra Agra Mainpuri Etah Bareilly Bijnor Budaun Moradabad Shahjahanpur Pilibhit Garkwal	1,066,519 1,061,745 619,138 924,155 748,027 829,760 1,013,875 740,182 975,347 1,198,653	178 439 475 639 559 546 427 498 447 480 642 394 485 524 486 320 86	7 18 14 29 20 21 15 22 13 17 19 17 20 23 18 9	5,200 18,226 14,147 23,712 19,330 16,767 8,836 16,180 8,805 13,296 15,115 11,427 13,617 18,938 12,802 7,925 12,449	8,545 15,715 13,385 22,034 17,557 16,635 8,654 14,631 8,492 11,854 13,790 10,929 12,739 18,728 11,506 7,679 8,798	8,745 84,041 27,532 45,746 86,837 33,402 17,490 80,811 17,297 25,150 23,905 22,350 26,356 87,716 24,208 15,604 21,242	1,249·28 1,724·50 1,966·57 1,577·45 1,844·35 1,590·60 1,166·00 1,400·50 1,380·54 1,479·41 1,521·81 1,314·70 1,317·80 1,639·88 1,344·89 1,733·77 1,634·00	18,428 31,681 17,583 24,934 30,565 28,035 26,528 38,741	2,579 28,323 24,245 84,701 31,251 27,911 14,041 20,259 18,100 17,501 18,692 18,999 20,869 32,083 16,990 11,524 5,175	1,323 1,974 2,816 5,717 2,441 2,140 1,783 4,237 1,816 4,762 5,652 1,740 2,066 2,788 3,818 2,554 5,495
`		Total	14,376,356	418	295	236,422	217,060	453,482	1,587 · 23	4 50, 4 73	338,243	52,627
18 19 20 21 22 23 24 25 26 27 28 29 30 31	Second	Naini Tal Almera Lucknow Unao Rae Bareli Sitapur Hardoi Kheri Fyzabad Gonda Bahraich Sultanpur Partabgarh Bara Banki	1,089,481 1,084,410 913,475 1,171,930 1,473,098 1,065,377 1,003,912 855,130	102 99 749 458 587 484 486 807 677 524 408 586 598 585	12 19 15 15 16 20 20 26 21 25 20 18 15	4,924 15,913 10,465 10,293 7,719 15,996 13,447 12,929 13,433 14,770 17,933 9,892 10,401	3,789 12,847 9,111 9,590 6,896 15,616 18,366 11,668 14,485 16,092 16,796 7,589 9,581	8,713 28,760 19,576 19,888 14,604 31,612 26,813 24,917 25,101 29,255 33,992 33,829 17,481 19,932	726.08 1,513.68 1,298.28 1,325.53 912.75 1,530.60 1,340.65 958.25 1,195.28 1,170.20 1,699.60 1,879.39 1,165.40 1,049.05	19,242 17,410 20,565 15,084 81,936 27,06, 24,792 25,500 28,748 83,546 83,887 17,318	4,817 9,813 11,402 11,271 4,987 23,603 21,764 16,612 12,209 15,579 21,141 11,939 5,695 9,906	1,720 7,055 3,961 5,003 7,555 6,315 4,127 6,648 7,843 11,675 10,134 16,929 9,378 6,700
		Total	12,973,855	403	261	175,114	159,354	334,468	1,281-49	223,590	181,788	105,048
32 23 34 35 36 37 38 39	Third Bange.	Farrukhabad Etawah Cawnpore Fatehpur Allahabad Jalaun Hamicpur Banda	856,683 733,582 1,148,664 652,392 1,404,445 606,499 405,489 440,245 613,114	509 434 484 397 491 167 262 192 207	16 13 23 12 28 26 14 13 18	10,226 10,915 18,722 8,785 17,037 11,872 7,683 8,271 8,697	7,994 9,551 16,473 7,778 15,945 10,329 6,766 7,759 7,709	18,220 20,466 35,195 16,563 32,982 21,701 14,449 16,030 16,406	1,138·75 1,574·81 1,530·22 1,380·25 1,177·98 894·65 1,092·07 1,253·07 911·45	17,134 20,522 82,947 18,143 31,421 21,962 14,251 15,460 15,694	12,945 14,971 22,918 12,293 15,730 18,209 11,414 13,109 11,954	1,975 1,985 6,998 2,207 11,152 1,251 1,371 1,428 3,107

		Re-vaccination.		tion.	succe case whic	tage of essful es in h the s were wn.	ocessfully per 1,00 n,	unki cases t	itage of nown o total ses.	Average and number of persuccessfully nated during ous five year	rsons vacci- previ-	nual r of deat smal during	nge an- number hs from ll-pox g provi- e years
Total of all ages.	Uaknown.	Total,	Successful.	Unknown.	Primary.	Re-vaccina- tion.	Persons succes vaccinated per of population,	Primery.	Re-vacoina-	Number,	Batic per 1,000.	.Number.	Ratio por 1,000.
11	12	18	14	15	16	17	18	19	20	21	22	28	24
4,005 80,497 26,597 40,509 39,781 30,131	242 221 98 618 322 481	4,079 2,051 67 617 784 1,247	1,605 1,959 56 214 295 555	131 1 82 24 65	93.41 95.82 85.31 90.64 91.81	51.71 70.78 84.85 40.00 41.54 46.95	26·43 33·98 33·56 27·16 31·95 28·90	67 95 1:29 86 1:44	23.90 6.39 1.49 12.29 8.27 5.21	91,184·60 25,284·40 44,867·00 36,498·00 30,090·00	25·29 32·20 31·50 29·86 33·15 26·77 28·22	11 59 12 56 81 86	• 08 • 00 • 01 • 04 • 08 • 08
15,837 24,581 15,017 22,569 24,510 20,834	138 846 298 175 1,562 489	123 2,011 283 1,000 783 161	46 148 84 571 270 71	161 88 28 175	79•72 86·88 91·15 64·51	37 40 7 78 43 08 58 44 44 41 49 80	25.65 26.75 20.19 27.89 24.44 28.24		8.00 16.31 2.30 22.35 10.55	26,487.80	28.22 23.25 23.05 25.69 24.98 26.39	108 38 74 37 25	•10 •06 •06 •08

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STATEMENT NO. I - Showing the particulars of vaccination

	ding	8	loyed year				per- by	Prima	ry vacci	nation.
	accor of 1921.	population mile,	aber of vac- employed t the year.	Total r	umber of	persons	number of vaccinated	gr. 3. 4 1. 71	Succ	essful.
Ranges and districts.	Population according to census of 1921,	Average popul square mile	Average number of vac cinators employed throughout the year	v	accinated		Average number sons vaccinate	Total.	Under one year.	One and under six years.
2	3	4	5		6		7	8	9	10
				Male.	Female.	Total.			1	
OTAL OF ALL RANGES	901,312 724,183 1,155,105 832,289 831,003 3,266,880 1,925,228 1,528,657 11,164,613	894 138 745 598 668 721 687 691 559	14 22 19 13 14 50 30 24 186	11,436 11,522 17,052 7,626 12,243 43,791 28,698 15,683 143,051 661,295	10,853 11,204 16,257 7,165 10,504 42,715 26,827 18,392 138,917 605,635	22,726 83,309 14,791 22,747 86,506 55,525 29,075	1592.07 1083.00 1758.10 1187.77 1624.78 1780.12 1850.83 1211.46 1542.84 1,399.92 28.44	22,037 22,776 32,945 14,823 22,170 90,871 53,935 80,008 289,565 1,251,172	12,496 14,023 22,198 7,893 12,509 41,931 38,574 12,441 157,065 810,589	8,249 7,594 8,054 5,920 7,341 29,511 15,674 12,903 95,186
STAFF. POTAL OF OTHER AGENCIES (PRIVATE MEDICAL PRACTITIONERS).										
GRAND TOTAL	45,875,787	423	905	661,607	605,835	1,267,442	1,399 92		810,651	285,068

SUM

			Total number	er of persons		umber of s performed.
		1.	Primary.	Re-vaçeina- tion.	Primary.	Re-vaccina-
			*			
special staff (statement I)	•	• •	1,203,564	58,866	1,251,172	58,464
dispensary staff (statement II	I)	•	215	297	215	297
other agencies			• •	••	••	
	Total	•	1,208,779	58,663	1,251,387	58,761

L THE U	nrtea	PTOV	MCSS	CONTENT	ng one	yeun	1040-43						
ages.		Re-va	occinat		Percent succes cases which results know	sful in the	full 1,00,1	Percer of unk cases to cas	nown total	Average a number of sons succe vaccinated previous fi	of per-	Average nual nual nual fideath small during ous five	imber s from -pox provi-
Total of all ages.	Unknown.	Total.	Successful.	Unknown.	Primary.	Re-vaccina-	Persons success vaccinated per of population.	Primary.	Re-vaccina-	Number,	Ratio per 1,000.	Number.	Ratio per 1,000.
_ 11 }	12	13	14	15	16	17	18	19	20	21	22	23	24
21,075 22,271 31,589 14,361 20,511 74,590 51,221 27,358	44 68 190 124 157 8,085 1,626 447	586 160 444 90 920 619 2,034 556	439 84 401 82 570 439 970 419	1 3 3 54	98.05 96.44 97.70 93.18 84.92 97.92	76 · 88 52 · 83 90 · 93 94 · 25 65 · 82 76 · 35 93 · 63 78 · 61	30·87 27·69 17·35 25·37 22·97 27·11	20 28 58 84 71 3 34 3 01 1 49	2-56 62 67 8-83 5-87 7-11 49-06 4-14	27,218 • 4 24,237 • 0 36,608 • 0 19,288 • 6 23,489 • 0 81,565 • 8 52,196 • 6 35,632 • 2	00 83·45 00 81·67 30 23·05 00 27·97 30 25·27 30 27·94	110 58 191 290 15 507 189 411	13 08 16 84 02 16 07 27
262,976	5,686	5,409	3,404	 	92.64			_	21.09	<u> </u>		1,721	15
1,127,423		1]	91.59		į	1.22	11.29		80 26.76	4,386	•00
179	19	297	115	13	91.33	40.49	••	8.84	4.38		**		
1,127,602	19,471	* 58,761	33,220	6,613	91 53	63.70	25.57	1.55	11.25	1,287,139	80 26 • 76	4,386	•09
(total of secondar	colum	ns 8 and	of 42,7 I 13) ar	06 bet	ween th total 1	e nun umbe	aber of primer of person	ary vac 18 vacc	cinatic inated	ns and re-v (total in o	accination column 6	s perfo) repre	rmed sents
MARY.													.
Percentagiul cases results v	in whi	ch the	водь у		ber of p ted by e		Number of cocessfully v	hildren accinat	suc-	Ratio of successful vaccina-	Total co	ost o	verage ost of
Primary		-vacci- ation.	Vacci tor emplo	s	cinated sach va	rsons vac- inated by och vacci- nator.		One unde yea		tion per 1,000 of popula- tion.	of depa ment.	c	ch suc essful case.
91'	58	63.83		905	1,399-92		8,10,589	2.5	34,980	25.57	387,5		s. a. j
91	ł	40.49			.,		62	-	88	••			••
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					د لا عبد رجي ال		ew te g				••		_
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											•	Expen
		Ranges and	. districts.		tors of	nt Direc- Public alth.	Assistan intend Vaccin	ents cf	Vaccin	nators.	Cle	rks.
,					}. <u></u>		 					
Number.					Number.	Pay.	Number.	Pay	Number.	Pay.	Number.	Pay.
f f						Rs.		Rs.		Rs.		Rs.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	First Range.	Dehra Dun Saharanpur Muzaffarnagai Meerut Bulandshar Aligarh Muttra Agra Mainpuri Etah Bareilly Bijnor Budaun Moradabad Shahjahanpur Pilibhit Garhwal					111111111111111111111111111111111111111	540 540 887 585 678 563 540 1,680 694 466 780 601 561 900 720 653 720	7 18 14 29 20 21 15 22 18 17 19 17 20 28 18 9	1,841 5,594 4,812 9,449 5,546 6,840 5,805 6,937 3,668 5,033 5,248 5,454 5,454 5,457 4,612 2,663 8,705	2 1 2 1	293
18 18A		Naini Tal Government I Dépôt, Pa	atwa Dar	mph ngar,	•••		. 1	900	$\begin{array}{c} 12 \\ 4(a) \end{array}$	3,21 7 2,580	 4(b)	6,003
19 20 21 22 23 24 25 26 27 28 29 30 31	Second Range.	District N Almora Lucknow Unao Bae Bareli Sitapur Hardoi Kheri Fyzabad Gonda Bahraich Sultanpur Partabgarh Bara Banki	aini Tal.				1 1 1 1 1 1 1 1 1 1	759 699 756 434 557 723 548 630 716 588 483 692 642	19 15 16 20 20 26 21 25 20 18 15	5,601 4,839 8,793 4,433 5,881 4,069 7,210 7,010 8,180 6,404 9,767 3,783 4,702	:	
32 33 34 35 36 37 38 39	Third Range.	Farrukhabad Etawah Cawnpore Fatehpur Allahabad Jhansi Jalaun Hamirpur Banda	**	**			1 1 1 1 1 1	720 315 1,260 540 780 540 540 503 615	16 13 23 12 28 26 14 13	4,495 3,670 7,286 2,962 7,474 7,638 3,942 3,875 4,933	1	210 210

in the United Provinces during the year 1923-24.

	<u></u>				•	<u> </u>	<u></u>				····			
dit	ıre.			<u>-</u>				Paid	from—			successful re-vacci- d by the only.	each suc- performed tion staff	
Number.	Pay.	Total pay of establish- ment.	Travelling allowance.	Contingencies,	Total cost.	Imperial funds.	Provincial funds.*	Local funds.	Municipalities.	Native States.‡	Total.	Number of all succe vaccinations and re-various performed by Vaccination staff only.	Average cost of each cessful case perforby the Vaccination only.	Number.
:	-Rs.	Rs.	Rs.	Rs.	Rв.		Rs.	Rs.	Rs,	Rs.	Rs.		Å, p.	
3222 11116221	112 221 282 125 60 126 438 126 174	2,381 -6,427 5,699 10,084 6,224 7,015 6,566 8,911 4,362 5,499 6,115 6,174 6,630 5,458 3,490 4,425	180 90 124 120 125 70 129 120 157 171 130 140 120 119 122 87 180	465 935 661 1,145 1,108 1,192 818 1,720 532 774 914 857 724 1,099 - 554 592 548	3,026 7,452 6,484 11,299 7,457 8,217 7,513 10,751 5,051 6,444 7,112 7,018 7,848 6,134 4,169 5,149		720 2,337 2,602 1,545 2,671 2,539 8,081 2,160 1,699 997 4,617 2,730 1,474 2,439 1,696 937 1,772	1,397 8,168 2,880 8,247 8,409 3,708 2,943 5,571 8,596 2,189 2,847 4,410 2,790 3,298 2,408 3,376	909 1,947 1,002 1,507 1,507 1,539 3,020 125 1,566 1,585 1,134 2,569 1,140 824	285	3,026 7,452 6,484 11,299 7,457 8,217 7,513 10,751 5,051 6,444 7,334 7,112 7,018 7,848 6,134 4,169 5,148	5,610 81,856 26,658 40,728 84,076 30,686 15,883 24,724 15,101 23,140 24,780 20,905 28,260 85,059 21,077 14,515 18,896	8 3 90 5 5 5 3 7 1 1 4 5 9 5 9 6 7 7 6 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
2 4(c)	197 776	4,314 9,359	256 617	1,331 26,038	5,901 36,014		2,221 36,014	2,412	1,268		5,901 36,014	7,201	13 1	18 18A
8 2	480 172 42 252 48 184 182	6,360 6,018 4,721 4,917 6,480 4,792 8,010 7,688 9,080 7,124 4,250 4,465 5,382	1,640 142 121 102 45 129 154 90 189 90 208 90 93	878 1,008 767 871 992 1,327 1,133 733 1,548 1,005 713 873 592	8,878 7,258 5,609 5,390 7,517 6,248 9,297 8,511 10,817 8,219 5,171 5,428 6,007		1,305 8,796 2,039 1,408 1,180 2,722 2,335 4,778 8,108 3,701 1,744 1,402 1,765	7,126 277 3,030 2,192 2,522 3,358 2,165 6,985 3,820 2,844 3,711 4,051	447 3,185 440 278 552 1,004 495 1,568 729 698 268 283 191	1,512 1,904 3,109 315 32	8,878 7,258 5,609 5,390 7,517 6,243 9,219 8,511 10,817 8,219 5,171 5,428 6,007	22,027 16,721 17,989 18,807 30,709 26,117 24,139 22,929 28,653 38,853 38,096 17,010 17,478	6 5 6 11 5 0 8 11 6 0 8 11 5 6 5 6	19 20 21 22 28 24 25 26 27 28 29 30 31
6 4 2	822 890 115	5,215 3,985 9,878 3,502 8,854 8,293 4,482 4,378 5,665	182 52 135 120 115 140 90 125 124	730 663 1,529 480 1,231 690 682 486 557	6,077 4,700 11,042 4,102 10,200 9,128 5,254 4,989 6,346	•••	1,887 1,420 2,655 1,802 2,699 2,459 2,257 8,314 2,034	3,857 2,696 5,887 2,148 5,559 5,481 1,398 1,675 3,775	833 584 3,000 152 1,942 1,183 725	874	6,077 4,700 11,042 4,102 10,200 9,123 5,254 4,989 6,346	16,235 17,845 32,658 15,573 28,715 20,038 13,820 15,457 16,134	6 1 3 5 5 3 5 5 3 6 3 6 3	33 34 35 36 37 33 39 40

(c) Includes two Mails.

* Government.

* District Boards Cantonments Town and Notified Areas.

			··. •		•	····			
1									Expen
mber.	Ranges and Districts.	Assistan tors of Hea	Public	intende	t Super- ents of nation.	Vacci	nators.	Cle	rks.
Number.		Number.	Pay.	Number.	Pay.	Number.	Pay.	Number.	Pay.
41 41 41			Rs.		Rs.		Rs.		Rs.
41 41 41 41 41 41 42 41 43 44 45 46 47 48	Benares Mirzapur Jaunpur Ghazipur Ballia Gorakhpur Basti Azamgarh		••	1 1 1 1 2 1	780 466 720 720 540 1,680 720 540	14 22 19 13 14 50 30 21	4,154 4,288 4,074 4,911 4,791 14,865 9,014 6,992	2 	108
	Total of District	• •	••	49	33,204	909	2,62,254	14	7,372
,	Office establishment of Assistant Director of Public Health, 1st Range.	1	16,142	••		••		1	753
	Office establishment of Assistant Director of Public Health, 2nd Range.	1	19,561	••		••	F.	1	866
	Office establishment of Assistant Director of Public Health, 3rd Range.	1	11,200	••	••	••	••	1	849
	Office establishment of Assistant Director of Public Health, 4th Range.	1	9,600	••	••	••	••	1	977
	Grand Totad	4	56,503	49	33,204	909	2,62,254	18	10,817

						_						·		
ditu	re.	_						Paid f	rom—	- <u>-</u>		ssful acci- the	suc- med staff	
Number.	Pay.	Total pay of establishment.	Travelling allowance.	Contingencies.	Total cost.	Imperial funds.	Provincial funds.*	Local funds.+	Municipalitics.	Native States.‡	Total.	Number of all successful vaccinations and re-vaccinations performed by the Vaccination staff only.	Average cost of each successful case performed by the Vaccination staff only.	Number.
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.		A. p.	
4 1 2 1	216 39 99 60	5,744 4,754 4,833 5,038 5,391 16,545 9,784 7,592	200 117 90 90 90 258 120 120	959 811 859 658 1,060 1,930 2,010 946	7,008 5,682 5,782 6,586 6,541 18,733 11,864 8,598	•••	2,371 1,123 2,702 2,488 2,220 9,509 3,127 3,000	2,194 3,711 2,757 2,867 3,935 8,529 8,497 5,839	2,438 848 823 894 386 551	837 144 2 0	7,008 5,682 5,792 6,586 6,541 18,783 11,864 8,598	21,514 22,355 31,990 14,449 21,081 75,029 52,191 27,777	5 2 4 1 2 10 7 3 4 11 4 0 3 7 4 11	41. 42. 48. 44. 45. 46. 47. 43.
68	5,958	3,08,783	8,368	70,198	3,87,344		1,52,646	1,76,743	48,703	9,252	3,87,844	11,60,528	(d) 4 10	
3	857	17,252	2,846	1,237	21,835		21,835	•••			21,335			
3	369	20,796	2,376	1,278	24,450	•••	24,450	••	••	••	24,450	•••	••	
3	378	12,427	1,717	866	15,010	•••	15,C10	••	••	••	15,010	••	••	
3	3 78	10,955	2,400	1,094	14,449	••	14,449	••	••		14,449	•••	••	·
80	7,435	3,70,213	17,707	74,668	4,62,588	••	2,27,890	1,76,743	48,703	9,252	4,62,588	11,60,528	(d; 4 10	

*Government.

[†]District Boards, Cantonments, Town and Notified Areas.

Including contributions from Court of Wards and private persons.

(d) Calculated on the total number of successful vaccinations and re-vaccinations performed by the special department only and the total cost of districts excluding that of the Government Bovine Lymph Dépôt.

,			Pers	ons prima	ily vaccina	ted.	Persons p	rimarily ated.
			1914	-15.	1915	-16.	1916	-17.
Number.	Range.	Establishment.	Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.
1 2 3		MEERUT DIVISION. Government	66,650 27,363 69,644	65,860 26,505 67,113	68,555 26,000 72,763	67,194 25,153 70,573	62,165 26,338 80,614	61, 154 25,70 4 78,771
. 4		Native States	••	. • • • • • • • • • • • • • • • • • • •				
5 6 7 8	ange.	Government	66,767 80,113 57,681 1,578	64,158 28,505 54,901 1,521	66,960 30,424 61,777 1,554	64,481 28,727 58,760 1,522	62,057 27,842 73,453 1,691	59,783 26,696 70,530 1,651
	First Range.	Romilemand division.	00.00	. na 000	00.051	00.000	00.001	DA H 00
9 10 11 12	F.	Government Municipal Local Funds Native States	98,095 40,096 46,845 3,531	92,809 37,479 44,763 8,320	83,251 37,075 56,349 3,350	82,630 35,620 54,277 3,255	88,021 36,393 62,941 1,881	84,183 24,993 60,469 1,852
19		Garnwat district.	7,832 8,1 8 1	7,727 8,080	7,277 7,954	7,202 7,861	6,472 11,016	6,395 10,947
14	,	Local Funds Total of First Range	524,326	502,286	526,289	507,255	540,884	523,128
		NAINI TAL AND ALMORA DISTRICTS.	-		:			
15 16 17 18		Government Municipal Local Funds Mative States	19,246 1,124 11,408	18,934 1,110 11,281	13,550 1,203 16,099	13,216 1,201 15,493	11,837 1,174 15,872	11,490 1,168 14,848
19 20 21	nd Range.	LUCKNOW DIVISION. Government Local Funds Municipal	73,815 18,503 66,296 30,793	71,206 17,771 64,519 29,985	78,624 19,927 51,682 29,941	75,622 18,631 49,957 29,107	76,463 20,618 60,644 84,484	73,891 19,494 58,796 33,568
22	Second	Native States FYZABAD DIVISION.	00,155	20,000	<i>∆</i> 3,33£	20,204	0403	
28 24 25 26		Government	85,146 12,171 70,584 18,691	83,059 11,769 69,066 18,046	87,581 12,567 77,893 . 3,793	85 432 12,225 76,266 8,709	82,700 12,658 82,543 8,889	80,921 12,212 89,900 3,785
		Total of Second Range	407,727	396,746	392,210	380,859	402,467	891,073

COMPARATIVE STATEMENT NO. IV:—Showing the number of persons primarily vaccinated and the number successfully vaccinated in the United Provinces in each of the undermentioned official years.

4	n each of the underment	tioned offi	cial year	8.	<u> </u>		
- }		Per	sons prima	rily vaccins	ted.	Persons ;	primarily nated.
		1914	l-15.	191	5-16.	1910	5-17.
Number. Range.	Establishmen t.	Total number.	Number successa fully vacci- nated,	Total number,	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated,
	MEERUT DIVISION.			,,			
1 2 8 4	Government	66,650 27,868 69,644	65,960 26,505 67,119	68,555 26,000 72,763	67,194 25,158 70,573	62,165 26,338 80,614	61,154 25,704 78,771
	AGRA DIVISION.				la se		
o co.a.ge. First Range.	Government Municipal Local Funds Native States ROHILKHAND DIVISION.	66,767 80,118 57,681 1,578	64,158 28,505 54,901 1,521	66,960 80,424 61,777 1,554	64,481 28,727 58,760 1,522	62,057 27,842 79,458 1,691	59,783 26,696 70,530 1,651
9 5 10 11	Government Municipal Local Funds	98,095 40,096 46,845	92,809 97,479 44,763	86,251 87,075 56,849	82,630 85,620 54,277	88,021 86,898 62,941	84,163 84,998 60,469
12	Native States .	8,581	3,820	8,950	8,255	1,881	1,852
	GARHWAL DIBIBIOT.	,),	:			, A	
18	Government Local Funds	7,892 8,181	7,727 8,080	7,277 7,954	7,202 7,861	5,472 • 11,016	6,395 10,947
; ;	Total of First Eange	524,828	502,236	526,289	507,255	540,884	528,128
	NAINI TAL AND ALMORA DISTRICTS.			2			
15 16 17 18	Government Municipal Local Funds Mative States	19,246 1,124 11,408	18,934 1,110 11,281	18,550 1,203 16,099	18,216 1,201 15,498	11,897 1,174 15,872	11,490 1,168 14,849
19 20 20 89	Government	73,815	71,206	78.624	75,622	76,468	73,891
20 21 Pu 21 Bu 20 R	Local Funds Municipal Native States FYZABAD DIVISION.	18,503 66,996 80,798	17,771 64,519 29,985	19,327 51,682 29,941	18,681 49,957 29,107	20,618 60,644 84,484	19,494 58,796 88,568
28 24 25 26	Government Municipal Local Funds Native States	85,146 12,171 70,584 18,691	88,059 11,769 69,066 18,046	87,581 12,567 77,898 8,793	85 492 12,225 76,266 8,709	82,700 12,658 82,543 8,869	80,9212 12,212 89,900 8,785
	Total of Second Range	407,727	896,746	892,210	580,859	402,467	891,078

JOMPARATIVE STATEMENT NO. IV.—Showing the number of persons primarily each of the undermentioned

						•	Persons
		1917	7-18.	1918	-19.	1919	-20.
Range.	Establishment.	Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.
	MEERUT DIVISION.					,	
	Municipal Local Funds	66,470 25,152 81,054	65,662 24,553 79,177	42,648 20,599 72,988	42,015 19,989 70,881	41,878 20,814 79,519	40,979 20,150 77,260
	AGRA DIVISION.		ļ			1	·
st Rango.	Municipal Local Funds	57,267 26,682 78,303 1,617	55,925 25,656 75,827 1,592	81,065 17,578 49,631 1,104	29,456 16,529 46,185 1,090	83,494 20,499 88,284 1,007	81,198 18,500 54,668 980
First	Municipal Local Funds	84,910 85,150 67,372 1.668	80,785 84,093 65,108 1,618	61 626 27,544 61,168 1,079	58,640 26,565 58,600 1,029	54,509 28,019 66,692 15	50,785 26,509 63,172 18
	GARHWAL DISTRICT.		"		3,000		
	·	7,832 13,100	7,690 12,991	5,187 9,238	5,09 <u>9</u> 8,969	5,641 10,288	5,514 9,964
	Total of First Range .	546,572	520,022	400,490	384,980	420,149	899,037
	NAINI TAL AND ALMORA DISTRICTS.						
	Municipal Local Funds	9,957 1,248 18,286	9,126 1,231 12,704	7,787 1,991 14,080	7,503 1,199 13,725	8,070 883 14,690	7,854 866 14,253
Second Range.	Government Municipal Local Funds	76,844 20,204 60,809 82,307	74,726 19,151 58,658 81,896	64,801 17,164 58,993 26,607	63,491 16,138 50,924 25,982	54,540 16,463 54,907 94,854	52,141 15,288 52,340 28,764
Be	Municipal Local Funds	87,432 18,037 95,009	85,859 12,787 93,242	69,001 11,621 85,426	66,951 11,169 88,654	70,944 9,173 86,871	68,412 8,806 84,755
	Total of Second Range	403,588	896,390	356,661	340,681	840,295	828,609

vaccinated and the number successfully vaccinated in the United Provinces in official years—(continued).

1920-1	1921.	1921-1	1922.	1922-	1928.	1928-1924		
To al number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number,	Number successfully vaccinated.	Total number.	Number successfull vaccinated	
89,200	38,222	80,088	29,188	81.407	80,449	25,965	24,85	
19,458	18,987	17,951	17,486	17,960	17,462	17,898	15,91	
83,874	81,526	92,196	89,962	92,130	88,698	102,068	94,61	
	***	••	••	de operation	•••	+ =	₩ ***	
30,531	29,226	28,666	27,461	26,149	24,703	25,403	29,82:	
19,632	18,419	15,964	14,150	16,907	15,755	16,569	14,72:	
61,597	56,509	68,797	65,179	70,384	66,775	75,869	68,46:	
1,645	1,606	2,289	2,248	2,285	2,148	1,691	1,61:	
51,549	47,763	45,960	48,072	40,055	87,248	40,697	86,85	
23,961	52,261	20,007	19,012	19,972	19,025	22,914	20,64	
70,556	58,609	70,885	67,891	78,874	75,515	89,952	81,64	
4,282	4,141	2,117	2,050	1,529	1,439	1,749	1,71	
9,134	8,958	9,404	9,150	9,194	8,969	9,438	9,01	
415,414	898,127	409,719	885,840	406,796	\$88,186	428,840	892,88	
			,					
7,461	7,185	5,707	5,449	5,468	5,210	5,097	4,78	
845	884	1,181	1,119	1,043	1,021	1,005	97	
15,066	14,659	14,692	18,828	15,000	14,067	19,974	18,87	
47,816	45,780	86,498	95,300	92,745	91,695	21,054	29,29	
15,999	15,802	14,718	14,064	14,598	18,903	14,548	18,77	
56,819	65,589	54,740	58,851	61,518	60,102	64,758	61,80	
25,657	24,972	20,769	20,838	23,418	22,952	28,432	22,78	
61,728	60,848	51,286		52,555	51,846	48,712	46,8	
8,950	8,721	7,845		7,960	7,678	8,758	8,8	
84,868	82,992	82,268		84,821	83,408	96,042	92,2	
2,828	2,299	2,749		8,737	8,662	4,128	4,0	
827,032	818,526	292,888	285,499	302,848	295,039	817,508	802,7	

[•] The total of these agures should be taken as 152,717 and not 158,568 as the Civil Surgeon, Bijnor, omitted to exclude 846 secondary operations in the district return.

COMPARATIVE STATEMENT NO. IV.—Showing the number of persons primarily each of the under

						•	Persons
		1914	l-15.	191	5-16.	191	16-17.
Ranga	Establishment.	Total. number,	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated,	Total number.	Number success- fully vacci- nated.
	Allahabad division.				·		
Third Range,	Government Municipal Local Funds Native States JHANSI DIVISION.	55,286 15,422 57,686 5,075	52,728 14,628 64,244 5,082	54,786 15,924 77,157	52,004 14,591 78,150	47,491 15,752 84,102	45,345 15,184 81,510
Third	Government	51,786 7,996 24,792 1,634	50,084 7,728 28,162 1,577	46,842 4,720 24,385 1,874	45,258 4,566 28,185 1,832	48,677 6,508 99,458 1,971	42,876 6,889 28,120 1,591
	Total of Third Range	329,627	219,178	224,588	214,586	228,949	221,815
	Benares division.						
Fourth Range.	Government	78,526 17,958 61,276 5,528	77,917 17,720 60,765 5,475	77,561 17,058 60,901 6,099	77,037 16,802 60,496 6,032	76,904 16,987 58,792 6,225	76,869 16,848 58,484 6,189
Fourt	Government	106,922 5,117 91,127 4,484	104,632 4,875 83,646 4,397	104,943 5,216 90,844 5,112	102,781, 4,918 89,066 4,906	103,948 8.779 90,523 4,790	101,878 8,590 88,850 4,568
	Total of Fourth Range:	870,949	864,427	867,729	862,038	861,943	856,771
	Total of all Ranges	1,532,623	1,482,587	1,510,816	1,464,738	1,534,248	1,492,287
	Total of Dispensaries	220	191	139	181	134	181
	GRAND TOTAL	1,532,843	1,432,778	(a) 1,510,939	(a) 1,464,908	(b) 1,584,416	(c) 1,492,454

⁽a) Includes 84 persons vaccinated by other agencies.

⁽b) , 89 a a n n

⁽c) 86 persons successfully vaccinated by other agencies.

viccinated and the number successfully vaccinated in the United Provinces in mentioned official years-(continued).

1917	r- 18.	1918	3-19.	1919	-20,	1920)-21.
	Number		Number		Number		Number
Total number.	successfully vaccinated.	Total number.	successfully vaccinated.	Total number.	successfully vaccinated.	Total number.	successfully vaccinated
				·		· · · · · · · · · · · · · · · · · · ·	
46,602 16,823 88,879	44,799 16,206 84,864	86,936 13,667 72,298	84,764 12,367 68,769	87,798 14,218 76,905	95,171 12,920 72,459	24,362 14,618 73,139 1,894	88,27' 18,73' 70,430 1,81'
					'		1 1
40,178 6,372 85,500 8,221	89,801 6,228 34,054 3,138	30,464 5,839 29,600 2,616	29,889 5,586 28,644 2,564	28,157 6,120 29,806 1,530	22,152 5,843 28,192 1,512	21,527 5,946 31,204 1,774	20,854 5,821 30,099 1,729
227,370	228,590	190,820	182,583	188,969	178,254	184,459	177,74
	., .		-	-	,-		
74,498 17,524 62,227 5,917	74,046 17,404 61,887 5,899	58,507 14,352 60,569 8,512	58,161 14,104 60,265 8,502	69,155 12,738 61,342 8,587	58,648 12,454 6,854 8,531	56,580 12,091 59,918 6,201	56,36 11,90 59,50 6,17
99,695	97,768	85,154	82,510	85,177	82,544	81,219	78,11
8,517 96,831 4,541	8,848 94,808 4,818	8,301 85,798 4,040	8,157 83,514 8,747	4,462 96,468 4,826	4,163 99,778 8,669	4,061 96,589 4,175	8,87 98,52 8,45
864,745	959,468	815,288	808,960	827,705	819,641	820,788	312,92
1,558,270	1,516,470	1,268,204	1,217,154	1,277,118	1,225,541	1,247,688	1,207,31
188	180	208	184	120	112	121	11
,558,438(d)	1 516 600/4	1,268,443(<i>f</i>)	1,217,855(g)	1,277,282(h)	1,225,694(4)	1,247,884(j)	1,207,457(/

Includes 95 persons vaccinated by other agencies.

,, 88 ,, successfully vaccinated by other agencies.

y, 34 ,, vaccinated by other agencies.

successfully vaccinated by other agencies. 86 34 17 44 41 25 25

vaccinated by other agencies.

successfully vaccinated by other agencies. vaccinated by other agencies. successfully vaccinated by other agencies.

COMPARATIVE STATEMENT NO. IV.—Showing the number of persons primarily vaccinated and the number successfully vaccinated in the United Provinces in each of the under-mentioned official years.—(concluded).

				Pe	rsons prim	arily vaccin	ated.	
			192	1-22.	192	2-23.	192	8-24.
Serial number.	Range.	Establishment.	Total number.	Number successful- ly vacci- nated.	Total number.	Number successful- ly vacci- nated.	Total number.	Number successful- ly vacci- nated.
		ALLAHABAD DIVISION.						,
27 28 29 30	Range.	Government	30,283 14,817 65,604 1,524	29,254 13,583 68,574 1,464	24,989 14,329 72,428	23,657 13,547 69,897	22,265 14,107 78,834	21,187 18,289 71,527
81 32 33 84	Third Range.	Government	22,182 6,016 84,524 2,229	21,610 5,844 83,000 2,165	19,277 5,749 88,581 2,196	18,837 5,535 37,659 2,143	20,566 5,817 86,644 2,422	19,918 5,622 85,040 2,278
		Total of Third Range	176,679	170,499	176,949	171,295	180,655	168,806
35 86 87 88	Fourth Range.	Benares division. Government	42,827 10,915 62,409 2,621	41,878 10,677 61,944 2,605	88,861 11,215 61,769 2,606	38,357 11,031 61,064 2,551	80,826 11,344 63,856 2,697	29,628 10,865 66,745 ,2,569
39 40 41 42	Fourt	Government	2,760	59,874 2,609 · 81,325 3,191	59,729 2,185 98,453 4,538	57,077 2,095 89,673 2,210	57,106 2,589 103,667 4,536	52,399 2,471 95,017 8,282
		Total of Fourth Range	271,662	264,038	274,356	265,058	281,561	262,976
		Total of all Ranges	1,144,398	1,105,936	1,160,949	1,119,578	1,208,564	1,127,428
		Total of Dispensaries	161	143	300	271	215	179
		GRAND TOTAL	1,144,559	1,105,079	1,161,249	1,119,849	1,208,779	1,127,602

In addition, 936 successful primary operations were performed by military medical officers in cantonmenta.

STATEMENT No. V.—Skowing the particulars of vaccination verified by
Inspecting officers in the United Provinces during the year 1923-24.

.			1			TOTAL NUMBE	B INSPECTED—
ber.	Ba	anges and Districts.		Total numi vacçi	oer of persons inated.	Public Heal Superint	t Directors of th or District endents of ination.
Number.			·.	Primary.	Re- vaccinations.	Primary.	Re- vaccinations,
1 2 8 4 5 6 7 8 9 10 11 12 13 14 15 16 17 20 21 22	First Range.	Dehra Dun Saharanpur Muzaffarnagar Meerut Bulandshahr Aligarh Muttra Agra Mainpuri Etah Bareilly Bijnor Budaun Moradabad Shahjahanpur Pilibhit Garhwal Almora Lucknow Unao	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4,674 81,990 27,465 45,129 36,158 82,155 17,367 28,800 17,064 24,150 28,127 22,189 25,869 87,222 23,916 15,294 11,176 7,216 18,860 16,767 19,407	4,071 2,051 67 617 734 1,247 128 2,011 238 1,000 778 161 487 894 292 310 10,066 1,497 9,900 2,809 476	3,968 2,898 7,140 4,456 1,046 2,159 3,218 2,087 6,199 2,486 1,662 2,004 8,860 216	29 5 5 28 29 56 19
28 24 25 26 27 28 29 80 81	Second Bange.	Rae Bareli Sitapur Hardoi Kheri Fyzabad Gonda Bahraich Sultanpur Partabgarh Bara Banki		14,581 31,577 26,799 24,661 24,682 28,562 38,478 88,810 17,288 19,875	23 35 14 256 469 693 519 19	2,721 4,848 1,762 1,340 5,672 1,813 1,245 7,212 2,544 8,968	25 15 2
83 84 85 86 87 83 89	Third Bange.	Farrukhabad Etawah Cawnpore Fatehpur Allahabad Jhansi Jalaun Hamirpur Banda		16,880 19,342 82,244 16,094 31,196 21,172 18,681 15,095 16,501	1,890 1,124 2,951 459 1,786 529 768 985 905	4,114 2,356 4,511 2,004 1,528 4,067 2,486 897	15 β 6
41 42 43 44 45 46 47 48	Fourth Range.	Beneres Mirzapur Jaunpur Ghazipur Ballia Gorakhpur Basti Azamgarh		21,708 22,566 82,866 14,701 21,827 85,838 53,491 28,519	586 160 448 90 920 618 2,034	1,876 1,876 6,572 8,598 2,928 10,650 4,695 8,852	92 ,8
	Tota)	for the Province	•	1,208,564	58,366	145,156	403

STATEMENT NO. V.—Showing the particulars of vaccination verified by

	<u> </u>			Total number	REPECTED-	P	BCENTAGE OF	
er.	Ranges an	d Districts.		By Assistant ents of Vac other Inspect	cination or	By Assistant Directors of Public Health or Dis- trict Superintendents of Vaccination.		
Number.				Primary.	Re-vaccina- tions.	Primary.	Re-vacci- nations.	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	First Range	Dehra Dun Saharanpur Muzaffarnagar Meerut Bulandshahr Aligarh Muttra Agra Mainpuri Etah Bareilly Bijnor Budaun Moradabad Shahjahanpur Pilibhit Garhwal		2,681 14,326 10,648 12,545 10,384 9,661 11,617 14,426 6,316 13,892 18,249 9,152 13,021 14,692 8,585 10,295 2,658	1,449 402 138 29 45 731 58 115 142 9 19 8 7 67 2,456	14.45 19.75 18.86 6.01 12.65 13.80 7.42 27.94 9.61 4.45 8.88 25.24 1.92	8.95 .40 1.50	
18 19 20 21 22 23 24 25 26 27 28 29 30	Second Range	Naini Tal Almora Lucknow Unao Rae Bareli Sitapur Hardoi Kheri Fyzabad Gonda Bahraich Sultanpur Partabgarh Bara Banki		3,965 11,415 8,640 10,845 6,828 9,857 9,495 8,738 8,797 10,271 14,987 15,171 1C,151	1,151 11,686 258 3 1 45 80 5 61	12·28 ·69 ·78 23·51 18·66 15·85 6·57 5·43 28·03 6·35 9·72 21·33 14·71 19·96	2.86 9.76 8.20	
32 83 84 85 36 37 88 89 40	Third Range	Farrukhabad Etawah Cawnpore Fatehpur Allahabad Jhansi Jalaun Hamirpur Banda		9,856 8,291 14,180 11,299 9,718 10,430 7,428 9,781 9,735	51 256 226 102 510 158 261 189	25·19 12·18 28·03 6·42 7·19 29·78 16·47 5·79	1•28 6•51 .64	
41 42 43 44 45 46 47 48	Fourth Bange.,	Mirzapur Jaunpur Ghazipur Ballia Gorakhpur Basti Azamgarh	••	10,225 11,975 15,903 8,092 13,225 85,746 15,785 10,618	225 105 247 33 183 78	8.64 8.31 20.00 24.44 13.30 12.40 8.66 31.04	10·00 1·29 2·88	
	Total for the	Province		528,437	21,597	12.01	-69	

nepecting officers in the United Provinces during the year 1923-24—(concluded).

						Downstand		
By Assistant Superintendents of Vaccination or other Inspecting officers.		By Assistant Directors of Public Health or District Superintendents of Vaccination.		By Assistant dents of Va	Superinten-	Percentage of success reported by vaccinators.		
				other Inspec	ting officers.			
Primary.	Re- vaccina- tions.	Primary.	Re-vaccina-	Primary.	Re-vaccina-	Primary.	Re-vaccina	
								
		ŀ			}			
57·36 44·78	85·59	,.		83.80	41.91	86.84	51.7	
38.77	19.60	91.88	.**	91.39	55.06	99-41	70.7	
27.80	22.37	63.43	` - -	90.54	***	95.82	84.8	
28-44	3.95	81.49	28 · 81	86-99	18.51	85.81	40.0	
90.04	8.61	94.56		86·08 89·41	28.81	90.64	41.5	
66.89		89.65	• • .	87.80	22.78	91.81	46.9	
€50-09	86 95	55 55	••	77.60	**0.00	86.59	87.4	
37.01	24 89	70.77	•	87.97	8.83	79 72 86 88	7·7 48·0	
57-59	11.50	89.28	66-67	91.39	48-82	91 15	58·4	
47 · 10	18.35	81 11	•	80·27	16.18	84·51	44.4	
41.94	5-59	86.11		93.67	80.00	92.41	49.3	
50.93	8-90	78.24		89-24	31.58	87.71	41:8	
39.36	2-08	93.91	••	85.54	50.00	9G-92	80:5	
35·90 67·88	2.40	76.56	• • • • • • • • • • • • • • • • • • • •	89·10		80.78	34.0	
23.56	21.61	92-27	55.55	90 51	32-56	88.70	79.6	
	24.40	96-20	26.81	90.17	20.50	96.60	82.9	
54·95 60·52	76-89	96.80	100.00	96.05	22-95	91 • 15	87.7	
51.53	118.04	100.00	· 100•00	95.88	57.67	94.45	56.8	
55.88	9·18 •63	69.56	•	92.78	52.51	90.79	45.0	
46.88		65.45	* *	76.12	88.38	86.61	81-4	
81-21	2.86	85·66 87·87	100.00	91.19		92-76	40.0	
85,48		90.52	100-00	97·50 95·40	100.00	96 47	71.8	
35.43	17.58	98.24	80.00	95.92	28.95	97.18	71.4	
85.71	6.89	87.66	100.00	86 92	66.67	96:90	88.2	
85.96	•72	90.15	100 00	96.52	100.00	90·51 98·16	49·0	
44.77	11.75	96 • 57	100.00	97.89	100.00	98.76	95.8	
44.87	••	98-84	••	98.94	100 00	98.17	88.8	
58-77	47 • 15	92 57	••	97.98	89 55	98.85	95.6	
50-71	15.79	79.86	**	82-64	25.00	87 45	44.7	
57·29 42·86	2·70 22·77	90-48	88.33	86 08	59-46	89.28	65.7	
48.98	7.66	91.10	••	78.84	41.21	64 81	57.4	
70-17	21.75	98-68	100-00	97.70	80.12	98.83	67-0	
31 13	28-55	88.78		77.16	49.02	85 18	75-4	
49-26	28.92	90.69	••	88·11 87·05	78.01	89 81	62.5	
54 •29	83.98	96.98	100.00	94-88	48.78	91.16	61 1	
64.80	14.22	98.15	50.00	88.40	20.00	98·84 95·60	92.4	
62-60	2.65	95.15	**	99 46	100.00	98-26	98·0	
47.11	88.89	87.71		97.86	82.70	95-82	76.8	
50.41	**	98.49	4.	97.82	1	98.05	52.8	
48.39	29.70	97.99	••	98.57	97.96	96.44	90-9	
55.04	00.05	95.68	20. 10.	95.71	••	97.70	94.2	
60·59 41·62	26·85 5·+4	94.70	80.49	98.54	48.65	98.18	65.8	
29.61	9.00	88·41 96·82	40.00	80.48	65.22	84-92	76.8	
37-28	18.18	91.80	60.00	98.82	98 18	97 92	98.6	
7 5	10 19	71.00	w.w	96•90	70.59	92.55	78.6	
48.72	87.00	88-85	65-44	90.88	48.14	91 58	63.8	

APPENDIX A.—Showing the number and ratio of successful vaccinations and ! Provinces for a

ì			<u> </u>				,			
		1914-15.				1915-16.				
Division.	District.	Successful primary Vaccinations.	Persons successfully vaccinated per 1,000 of population.	Deaths from small- pox in 1915.	Ratio of deaths from small-pox per 1,000 of population in 1915.	Successful primery vaccinations.	Persons successfully vaccinated per 1,000 of population.	Deaths from small- pox in 1916.	Ratio of deaths from small-por per 1,000 of population in 1916.	
GO- KU- BAKH- W. MAUN, PUR, BERARES, JEANES, ARAD, KHAND. AGRA. MERBUT.	Dehra Dun Saharanpur Muzafiarnagar Mearut Bulandshahr Aligarh Muttra Agra Mainpurl Etah Bareilly Bijnor Budaun Moradabad Shahjahanpur Pilibhit Farrukhabad Etawah Cawnpore Fatehpur Allahabad Jhansi Jalaun Hamirpur Banda Benarea Mirzapur Jaunpur Ghazipur Ballia Gorakhpur Basti Azamgarh Naini Tal Almora Garhwal Lucknow Unao		6,649 83,550 90,259 49,441 89,079 89,439 21,208 85,327 25,128 27,978 -32,699 28,645 18,023 19,100 21,979 23,690 20,684 41,174 28,450 15,149 20,721 18,231 29,126 23,647 44,925 57,427 40,951 9,835 21,490 15,807 22,715 23,679	44·82 85·47 88·16 92·68 85·09 94·81 81·83 90·08 85·42 80·32 90·48 87·60 21·99 29·12 80·40 81·14 48·51 46·96 28·32 83·37 82·69 82 82 82 82 82 82 82 82 82 82 82 82 82	125 4 5 7 17 8 4 8 1 7 20 8 4 2 5 9 2 3 1 5 5 5 8	01 02 01 02 01 02 04 03 04 04 06 01 01 02 01 02 01 01 02 01 02 01 01 02 01 01 01 01 01 01 01 01 01 01 01 01 01	5,860 28,227 29,529 52,559 41,745 40,183 28,106 28,814 28,181 28,6520 28,814 28,181 28,6520 21,339 15,746 22,033 21,339 84,935 21,0°8 40,805 22,224 15,957 18,508 18,152 29,258 22,408 45,500 29,969 39,233 103,033 54,667 48,771 7,705 22,205 15,038 21,735	85.58 84.99 87.65 85.10 87.65 85.38 84.74 83.49 86.02 86.01 29.65 81.73 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 84.87 85.88 86.02 86.03	2 4 6 9 1 1 5 1 1 4 1 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1	01 01 01 05 02 02 02 01 03 04 01 06 06 09 01 06
Luca	Rae Bareli Sitepur Hardoi Kheri Fyzabad Gonda Bahraich Sultanpur Partahgarh	***	27,879 32,796 45,612 81,300 32,805 41,772 81,453 25,683 26,178	27·16 29·00 41·04 23·29 29·31 80·22 30·66 24·74 29·82	9 4 86 10 43 14 126 29 30	·01 ·03 ·01 ·04 ·01 ·12 ·08 ·08	25,430 85,388 25,696 81,264 80,861 87,636 84,777 25,387 23,987	25-37 81-78 82-14 83-07 28-02 26-88 84-60 24-43 26-80	87 1 8 97 77 1 9	*03 *01 *02 *07 *01
,	Total	**	1,482,587	88-22	2,804	05	1,464,796	33.81	1,515	•08
	Total of Dispens Staff.	ary .	191	••		P.F	181	••	•	
	GRAND TOTAL	•• !	1,482,778	88-22	2,804	-05	1,464,903*	82.81	1,515	•09
	GO- KU- BAKH- LUCKNOW, MAUK, PUR, BERARES, JEARS, ARAD, KHAND, AGRA, MERRUES,	Dehra Dun Saharsnpur Muzafarnagar Meerut Bulandshahr Aligarh Muttra Agra Mainpurl Etah Bareilly Bijnor Budaun Moradabad Shahjahanpur Pilibhit Farrukhabad Etawah Cawnpore Fatchpur Allahabad Jhanai Jalaun Hamirpur Banda Senares Mirzapur Jaunpur Ghazipur Balia Gorakhpur Banda Azamgarh Naini Tal Alamora Garhwal Lucknow Unao Rae Bareli Sitapur Hardoi Kheri Fyzabad Gonda Bahraich Sultanpur Partabgarh Bara Banki Total Total of Dispens Staff.	Dehra Dun Saharanpur Muzafiarnagar Meerut Bulandshahr Aligarh Muttra Agra Mainpurl Etah Bareilly Bijnor Budaun Moradabad Shahjahanpur Pilibhit Farrukhabad Etawah Cawnpore Fatehpur Allahabad Jhanai Jalaun Hamirpur Banda Senarea Mirzapur Jaurpur Ghazipur Ballia Gorakhpur Basti Azamgarh Naini Tal Almora Garhwal Lucknow Unao Rae Bareli Sitapur Hardoi Kheri Fyzabad Gonda Bahraioh Sultanpur Partabgarh Bara Banki Total Total of Dispensary Staff.	Dehra Dun	District. District. Distr	District. District. Distr	District.	District. The color of the c	District. District.	District.

Includes 24 vaccinations performed by other agencies.

number and ratio of deaths from small-pox in each district of the United 51 series of 10 years.

1916-17.			\	1917	18.		,	1918-19.			
Successful primary vaccinations.	Persons successfully vaccinated per 1,000 of population.	Deaths from small- pox in 1917.	Ratio of deaths from small-pox per 1,600 of population in 1917.	Successful primary vacainations.	Persons successfully vaccinated per 1,000 for population.	Deaths from small- poz in 1918.	Hatio of deaths from small-pox per 1,000 of population in 1918,	Successful primary vaccinations.	Persons successfully vaccinated per 1,000 of popula-tion.	Deaths from amail-	Eatio of deaths from small-pox per 1,000 of popula-
4,466 38,374 29,500 54,757	28·54 35·50 36·91 36·75	8 15 13 25	*01 *01 *02 *02	5,026 34,978 30,120 56,875	90-03 87-02 87-49 87-97	5 14 2 79	-02 -01 -05	• 4,324 27,019 25,604 42,228	27.66 : 31.85 : 32.32 : 30.51 :	90 165 54 185	*1; *0; *1;
43,592 41,004 24,450 36,738 26,721	39·41 36·11 37·50 86·27 38·69	162 13 65	•14 •02 •06	43,998 41,918 24,381 35,494 27,268	39.78 36.66 38.52 36.16 34.41	21 11 5 16	·02 ·01 ·01 ·01	98,710 26,571 18,197 18,526 16,988	52·18 25·25 20·90 21·11 20·64	190 405 98 478 151	*11 *9/ *14 *47
29,752 30,862 29,266 38,059	54·74 28·70 36·84 31·46 82·88	24 52 19 164 60	03 05 02 15 05	29,851 38,142 27,685 82,864	34 · 51 80 · 40 34 · 76 81 · 50	8 7 4	01	18,528 29,440 19,694 27,198	21 · 64 27 · 76 24 · 61 25 · 96 26 · 75	839 88 28 991 205	* 8: * 0: * 0: * 9:
80,794 16,277 28,589 22,165	33·06 . 38·87 . 28·03 . 29·38 . 81•77	1 8 2 7	02 01 06	43,725 28,424 15,809 27,728 23,341	34 · 85 31 · 49 36 · 98 38 · 10 30 · 99	8 4 4 63 2	01 -01 -07	98,051 20,386 15,065 28,589 17,178	22·49 33·82 29·78 28·49	148 78 240 177	*** *** ***
21,584 189,400 25,555	82 81 27 26 41 19 42 73 46 08	66 118 4 1		21,370 37,997 26,278 15,097	81.79 81.86 26.89 48.63 40.41	1,288 148 47 2	1.08 .10 .07	82,199 17,762 25,172 20,013 18,599	84.57 26.74 17.51 40.58 86.74	836 12 214 288 85	- 19 - 19 - 19 - 19
18,566 29,160 24,835 41,080	29 88 38 54 84 41 85 80	13 50 42 51	· 05 · 06 · 04	20,784 20,567 30,865 26,870 41,228	47 · 00 31 · 91 35 · 85 37 · 18 85 · 94	2 7 25 88 50	•01 •08 •04 •04	15,948 17,128 27,445 27,618 86,210	38.04 26.75 32.23 38.23 31.81	97 87 239 58 567	- 2 - 2 - 3
55,628 48,570	86.07 40.46 81.17 81.65 29.44	66 8 860 129 118	•08 •11 •07 •08	90,066 80,712 98,020 59,593 42,619	36·10 87·58 30·70 38·24 28·93	22 494 62 75	-08 -15 -08 -05	20,618 24,146 89,687 52,088 91,208	26.80 29.00 26.08 29.47 21.22	206 18 865 918 706	
17,842 22,822 24,246	42·71 68·17 75·71 29·76 26·71	6 4 8 25	·02 ·01 ·01 ·03	7,289 15,782 20,621 26,016 24,888	45 90 65 36 65 66 96 84 26 95	1 10 1 50 8	-02 -06	6,516 15,911 14,001 25,150 20,586	29·92 54·87 48·75 87·04 22·66	20 43 21 516 166	0 0 0 0 0 0 0
89,881 81,777	29 22 84 09 85 20 88 66 28 54	66 1 31	·08 ·08 ·01	25,787 88,811	25.55 34.19 34.13 82.68 29.92	12 2 4 2 86	-01	24,049 82,245 80,917 24,163 27,752	24.06 28.77 27.28 25.71 25.81	288 84 299 10 358	- 2 - 0 - 10 - 10
	28 21 34 86 23 07 26 79 18 17	30 136 4 26 9	02 •18 •08 •01	41,469 87,602	29.60 36.09 29.54 34.92 33.98	28 245 18 29	-02 -23 -01 -08 -01	30,822 80,049 30,626 17,890 25,185	22 27 29 84 29 27 19 41 28 82	142 379 101 81 85	0 0 0
1,492,287	88.44	2,011	*04	1,516,470	88.95	2,908	•06	1,217,154	27.84	10,998	.2
1,492,4547	89-44	2,011	-04	(a) 1,516,638	88-95	2,903	•06	(<i>b</i>) 1,217,855	27 84	10,998	

[†] Includes 36 vaccinations performed by other agencies.
(a) " 88 " " " "

APPENDIX A.—Showing the number and ratio of successful vaccinations and

									P	rovinc	es for a
					1919		1920-21,				
Number.	Division.	District.		Successful primary vaccinations.	Persons successfully vaccinated per 1,030 of population.	Deaths from small pox in 1920.	Ratio of deaths from small-pox per 1,000 of population in 1920.	Successful primary vaccinations.	Persons successfully vaccinated per 1,000 of population.	Deaths from small- pox in 1921.	Ratio of deaths from small-pox per 1,000 of population in 1931.
21 22 23 24 25 26 27 28 29 30 81 32 88	KU- GORAKH. ALLAH. MAUN. PUR. BENARES. JEANSI. ABAD. ROSILKHAND. AGRA. MEERUT.	Dehra Dun Saharanpur Muzaffarnagar Meerut Bulandshahr Aligarh Muttra Agra Mainpuri Etah Bareilly Bijnor Budaun Moradabad Shahjahanpur Pilibhit Farrukhabad Etawah Cawupore Fatehpur Allahabad Jhansi Jalaun Hamirpur Banda Benares Mirzapur Jaunpur Ghazipur Ballia Gorakhpur Basti Azamgarh Naini Tal Almora Garhwal		44,191 35,827 80,129 14,044 21,584 18,852 20,732 27,158 22,287 24,526 31,536 20,486 14,436 25,520 16,937 30,268 16,207 31,218 19,257 11,591 12,414 14,442 27,743 25,586 35,394 21,641 24,223 87,821 53,083 43,250 6,798 16,175	88·17 92·20 24·05 93·06 96·17 91·70 28·50 29·65 27·66 80·06 29·48 26·30 53·37	15 107 3 100 6 8 11 5 6 15 78 86 38 4 162 157 9 4 18 1 202 20 10 2 227 98 27 239 1,031 19 20 19 20 19 20 19 20 19 20 20 20 20 20 20 20 20 20 20 20 20 20	.07 .11 .01 .02 .07 .11 .04 .28 .01 .01 .02 .07 .11 .04 .03 .02 .01 .01 .02 .01 .02 .07 .13 .01 .02 .07 .01 .02 .07 .01 .02 .00 .01 .02 .00 .01 .00 .00 .00 .00 .00 .00 .00 .00	4,076 28,051 25,218 46,019 85,251 129,025 15,024 22,835 19,641 21,685 25,006 21,887 23,777 82,622 21,178 14,163 24,867 17,490 84,074 18,794 29,091 19,778 11,967 12,247 14,497 27,800 22,958 85,584 22,199 52,544 42,496 6,524 16,104	24·09 81·25 81·22 91·18 82·54 25·28 23·35 22·14 24·65 23·67 27·55 24·29 26·12 22·68 82·85 29·11 23·45 20·02 81·90 81·14 20·99 20·02 81·49 20·14 20·28 81·49 20·14	5 7 1 5 6 2 16 5 4 12 9 17 9 88 8 2 24 5 10 10 54 92 55 5 95 96 54 179 4 2 2	.02 .01 .02 .01 .01 .01 .01 .01 .01 .02 .04 .01 .02 .03 .03 .03 .03 .03 .03
87 89 40 41 44 43	D. LUCKNOW.	Lucknow Unac Rae Bareli Sitapur Hardoi Kheri Fyzabad Gonda Bahraich		21,165 29,010 90,182 28,639 29,251	22·80 26·85 25·81 24·80 26·60 23·25	3 11 3 8 8 97 59 60 57	·01 ·01 ·03 ·09 ·06 ·05 ·04	13,099 15,884 22,469 19,198 80,298 22,879 23,870 21,913 29,913	57·52 20·86 24·90 18·95 26·75 26·71 25·04 20·79 21·70	1 6 3 18 6 29 9 58 8	·01 ·01 ·03 ·01 ·05
45 46 47 43	FYZABAD.	Sultanpur Partabgarh Bara Banki		31,502	20·15 20·52 22·59	182 55 182 24 6,354	·17 ·05 ·20 ·02	27,457 81,864 18,634 24,654 1,207,318	27·00 80·42 21·32 22·80 27·18	47 7 181 8 1,499	·04 ·01 ·21 ·01
		Total of Dispens	агу	112		٠.		114	•		
		GRAND TOTAL	. .	1,225,694 (c)	27.84	6,354	•13	1,207,457(d)	27-18	1,439	-08
	(c) Includes 41 vaccinations performed by other agencies										

⁽c) Includes 41 vaccinations performed by other agencies.
(d) ,, 25

number and ratio of deaths from small-pox in each district of the United series of 10 years—(concluded).

series of 10 years—(concluded).									
	1921-	22.			192	1923-24,			
Successful primary vaccinations.	Persons successfully vaccinated per 1,000 of population.	Deaths from small- pox in 1922,	Ratio of deaths from small-pox per 1,000 of popu- letion in 1922.	Successful primary vaccinations.	Persons successfully vaccinated per 1,000 of population.	Deaths from small- poz in 1928,	Ratio of deaths from small-pox per 1,000 of popu- lation in 1928.	Successful primary vaccinations.	Persons successfully vaccinated per 1,000 of popula-
4,438 27,873 25,042 42,484 35,840 29,139 15,678 28,191 18,096 22,934 28,357 18,758 26,310 27,279 20,078 14,198 14,198 16,518 29,308 18,748 29,152 20,590 21,370 35,545 18,657 21,147 70,990 45,496 80,528	24·14 81·59 89·10 84·28 86·38 86 86 86 86 86 86 86 86 86 8	1 21 4248812 11100 H1600918865	01 04 01 01 01 01	3,765 29,988 25,549 41,771 85,616 80,017 15,685 24,003 15,774 23,992 23,620 19,282 25,789 29,049 19,758 14,895 16,206 16,988 80,294 13,762 29,906 20,671 12,547 13,690 17,286 21,128 21,844 85,968 18,465 21,084 78,462 50,252 28,841	20.22 32.78 32.14 38.85 28.85 26.42 29.47 20	3 15 8 18 69 59 59 16 52 10 10 2 4 4 19 7 8 1 17 28 6 14 12 12 12 12 12 12 12 12 12 12 12 12 12	01 08 01 06 05 06 05 06 05 06 05 06 05 06 05 06 05 06 05 06 06 06 06 06 06 06 06 06 06 06 06 06	4,005 80,497 26,597 40,509 88,781 15,837 24,561 15,017 22,569 24,510 20,834 23,060 34,940 20,894 14,508 15,017 17,228 80,724 15,226 27,758 19,770 18,136 14,686 15,261 21,075 22,371 81,569 14,361 20,571 74,590 51,321 27,358	26.45 88.98 88.56 27.16 81.95 28.90 25.65 20.19 27.89 24.44 28.25 25.12 89.65 25.12 89.65 28.49
6,126 14,268 11,200 14,970 20,049 18,264 24,995 24,968 20,807 17,568 27,088 84,868 82,210 17,858 22,415	97·18 87·77 46·08 91·55 24·59 19·70 23·08 98·04 22·38 16·74 18·85 28·14 80·11 21·41 21·77	12 1 2 2 3 4 2 3 1 2 4 2 3	•01	6,450 13,648 10,408 15,684 18,223 18,608 28,661 20,499 27,292 28,090 82,704 16,261 21,248	27.78 99.47 40.90 22.48 22.45 20.18 26.88 28.81 28.08 18.49 18.77 27.23 82.60 19.64 20.64	18 15 15 15 15 25 27 27 28 38 38 38 38 38 38 38 38 38 38 38 38 38	03 02 05 01	6,706 17,409 10,728 15,510 17,611 13,709 90,686 26,107 23,921 22,708 28,025 82,889 83,086 16,895 17,461	26.00 41.53 87.91 28.08 21.96 14.74 28.19 24.08 26.42 19.56 19.45 81.81 82.97 19.89 16.97
, 148				271			••	179	
1,106,079	25 28	24/2	01	1,119,849	25•56	749	od by milite	* 1,127,602	25:57

In addition, 836 successful primary operations were performed by military medical -officers in Cantonments.

APPENDIX B.—Showing the number of vaccinations performed in the municipal towns of the United Provinces on children under one year of age during the year 1923-24.

·		1		<u> </u>	Number	1 27	
-]		•	of	Number of	
		ì		(deaths	successful	
		1		Number	amongst	vaccinations	
	_'				children		Date of extension of
_	District.	Municipalit	у.		under	under one	Vaccination Act to the
Ä		1	-	during		year during	municipality.
Number.		.		1922.	one	the year	1
. 🖺 🗋	ľ	l l		i	year	ending 21st	1
2		I		Į.	during	March, 1924.	<u> </u>
				.t	1923.	10000-, 1000	l
1	2	3		4			7
		_{		} *	5	6	1
		_			I	l	
1	l	(Dehra Dun		1,040	277	509	14th May, 1891.
2	Dehra	Mussooree	•••	224	57	213	Ditto.
. 3		Saharanpur	•••	3,334	1,047	1,179	28th April, 1892.
. 4		Hardwar Union				716	5th ditto.
5	Saharanpur	Deoband		1,090	325		7th June, 1894.
6	_		••	984	209	629	
7		Roorkee	••	525	169	305	7th August, 1891.
8	Muzaffarnagar	{ Muzaffarnagar	••	975	194	518	21st December, 1892.
9		{ Kairana		661	132	. 558	7th June, 1894.
		(Meerut		3,209	717	2,136	12th March, 1891.
.10	Meerut) Ghaziabad		543	113	262	7th June, 1893.
11) Hapur	••	1,058	271	489	16th October, 1894.
.12		Baraut	٠.	345	69	189	5th March, 1924.
.18		(Bulandshahr		1,008	236	285	16th July, 1891.
14	Bulandshahr	Khurja	•	1,488	458	917	28th June, 1894.
15		(Sikandrahad	••	982	272	665	16th April, 1394.
16		Koil		8,397	995	2,067	24th November, 1891.
17		Hathras				1,523	4th May, 1894.
18	Aligarh	Atrauli	••	2,181	533		21st December, 1892.
19		Sikandra Rao	• •	768	163	521	Ditto.
20	[<u>:</u> _	(Muttra		428	143	250	f
21	Muttra			2,502	594	1,771	5th October, 1891.
22		Brindaban	- i	497	165	851	6th August, 1891.
23	Agra	Agra		9,448	2,058	3,371	5th June, 1891.
24	1	{ Firozabad	••	874	243	643	Ditto.
25 25	Mainpuri	Mainpuri	••	317	67	135	15th June, 1891.
		(Etah	- 4	372	87	234	6th May, 1891.
26	Etah) Soron	••	547	153	291	Ditto.
27) Kasganj		944	193	595	Ditto.
28		(Jalesar		573	188	239	Ditto.
29	Bareilly	Bareilly	•.	3,564	605	1,998	17th August, 1891.
30	-	f Bijnor		891	172	318	3rd July, 1891.
31		Chandpur	••	714	137	4/98	6th July, 1891.
32	Bijnor	Dhampur		362	78	180	16th April, 1894.
23	,	Nagina	••	1,138		290	6th July, 1891.
34		Najibabad	•••	1,048	216		Ditto.
35		Budaun			208	613	D
36	Budaun	Ujhani	••	2,008	601	1,077	29th July, 1892.
37		Sahaswan	••	839	97	240	1st July, 1891.
28	1			801	234	530	3rd July, 1891.
39		(Moradabad	••	4,636	1,140	2,550	19th December, 1892.
	Moradabad) Chandausi,	••	1,326	394	622	9th March, 1898.
40	1) Amroha	••	2,230	392	1,248	Ditto.
41		Sambhal		2,224	459	1,248	1st April, 1898.
42	Shahjahanpur	Shahjahanpur	••	3,002	472	2,119	14th September, 1891.
48		U Tilhar	• •	921	245	485	2nd January, 1892. 📑
44	Pilibhit	{ Pilibhit	••	1,908	508	805	9th July, 1891.
45	**********	Bisalpur	••	503	131	211	25th April, 1892.
46		(Farrukhabad	cum	2,314	739	764	5th June, 1891.
	Farrukhabad	} Fatehgarh.		}	l	1	i i
47	1	(Kanauj		558	145	918	16th September, 1921.
49	Etawah	Etawah		2,239	633	1,184	15th November, 1899.
49	Cawnpore	Cawppore	••	7,778	8,849	4,529	1st August, 1888, 11th
30	COMPLETE.	1		[','''	1 5,020		December, 1888, and
i				(ł	ł	
	71-1-1	Fatchpur		105	OF.	999	7th August, 1891.
. 50	Fatehpur		**	495	95	832 6 476	4th June, 1891.
51	Allahabad	Allahabad	**	6,522	1,826	2,476	2md May, 1891.
	l		·_	1	J.	1	
						-	· · · · · · · · · · · · · · · · · · ·

APPENDIX B.—Showing the number of vaccinations performed in the municipal towns of the United Provinces on children under one year of age during the year 1923-24—(concluded).

	•							
Number.	District.		Municipalit y .		Number of births during 1923.	Number of deaths amongst children under one year during 1923.	under one year during	Date of extension of Vaccination Act to the municipality.
1	2		3	_	4	5	6	7
52 53 54 55	Jhansi	٠٠٤	Mau Lalitpur		2,528 662 579 400	748 244 120 67	1,576 447 989 281	1st July, 1891. 5th May, 1892. 24th May, 1894. 22nd July, 1891.
56 57	Jalaun	}	Kalpi	•	492 754	155 197	988 592	5th December, 1892. 14th May, 1891.
58 59	Bands Benares	***	· · · · · · · · · · · · · · · · ·	•	618 9,695	167 2,890	979 - 9,055	24th March, 1893. 10th April, 1891.
60 61	Mirzapur Jaunpur	••		rJ :	2,579 1,187	602 200	1,567 1,076	9th October, 1891. 26th February, 1892.
62 68	Ghaziput Ballia	••	Ballia	•	696 495	105 75	566 268	4th May, 1898. 6th May, 1891.
64 65 66	Gorakhpur Azamgarh	:: ,	Azamgarh .		2,208 487	456 78	1,398 124	18th January, 1898. 8th February, 1898.
67 68	Naini Tal Almora	{	Kashipur .	•	395 557	55 119	199 890	1st June, 1891. 5th May, 1894.
69 70	Lucknow Unao	••	Lucknow	•	240 10,222 501	40 2,949 . 125	152 4,416 266	9th March, 1893. 4th February, 1893. 18th March, 1890.
71 72	Rae Bareli	** /	Rae Bareli	•	742 989	224 295	266 480	1st June, 1891. 27th July, 1891.
78 74	Sitapur	: }	Khairabad		581 478	129 123	296 819	12th April, 1892. 26th March, 1891.
75 76	Hardoi	~ {	Shahabad .		872 818	156 248	562 570	17th March, 1892. 2nd January, 1892.
77 78 79	Kherl Fyzabad	{	Fyzabad-Ajodhya .		116 1,628	39 498	198 1,025	1st June, 1891. 11th June, 1891.
80 81	Gonda	}	Gonda	•	896 435 737	196 66 154	278 523	18th July, 1891. 25th June, 1891. Ditto.
82 88	Bahraich Suitanpur	`	Bahraich	•••	872 891	158 98	589 282	5th December, 1892 11th November, 1884
84 85	Partabgarh Bara Banki	••	Bela		169 401	92 106	104 249	1st June, 1891. 2nd December, 1889.
					<u> </u>			
			Total		183,415	85,623	69,579	



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N. B.—Owing to the calls of other work, I could not devote sufficient time to the writing of this address. The whole of the address was written in four days from April 11th to April 14th. My obligations to several educationists and authors are apparent on every page; but, as far as possible, I have tried to keep it clear of quotations and footnotes.

FELLOW-TEACHERS, LADIES AND GENLLEMEN-

It is a source of deep satisfaction to me to receive this token of appreciation and confidence from my brother teachers, and my first duty is to tender my thanks to the enterprising organisers of this Conference, for inviting me to preside over this session, and express my sincere pleasure at the opportunity that has been afforded me of expressing my views on the burning topics of the day. I confess I possess neither the experience nor the knowledge requisite for an office of such responsibility, but I am sustained by the belief that my shortcomings will be overlooked by a body that regards mutual help and toleration as its basic principles.

I should certainly have felt considerable difficulty in accepting your kind and generous offer, had I not been sustained by the conviction that at the present times we need workers, more workers, and still more workers for the cause which all of us have at heart. The War has tended to shift our angle of vision, and has left an infinity of problems for solution by the Indian people. They have the great heritage of a common tradition, they have the noble legacy of a noble civilisation, but tradition was of the past, and if, as to the past, they were but creatures, they had to remember that as to the future, they were creators. and in that work of creation no more potent instrument could be brought to service than the instrument of a common educational purpose, ideal, and outlook. easy to theorize, and simple to float about in the ether and discuss idealistic schemes, but in the schools, where living children have to be dealt with, it is a different thing altogether. The practical teacher's problem, when

they came down to fundamentals, was this: There were two things—the child and the environment, or heritage of culture;—and his problem was to bring those two into relation to one another. That seemed a simple thing at first sight, but as one looked into it more closely, complexity came in. The child was a variable, and the culture was a variable, and they were looking for laws and principles which would connect the two variables—a most difficult problem. From a bundle of instincts they had to get to a stage where the child's instincts were controlled by his intellect, and there was a continuous state of change and development. On the cultural side they had a gradual growth of knowledge, an alteration in the standards of æsthetics and morality, and a great variation in religious ideals. But through long experience a number of rules and precepts have been gathered together in a body of practical knowledge, but, curious to state, there has been very little attempt at systematisation. scientific method in education consists in trying systematise all those precepts and rules, to get something coherent, to show how all could be related one to the other. That method has been adopted with very great success during the last thirty years, and it is undoubtedly the method of the future. Education could be made and was already, a science.

The need of something vital and energising was felt. By means of psychological, biological, sociological, physiological and neurological study of the child there has been built up a really scientific method which would give to the teachers' work a scientific quality that had up to very recent times been quite unattainable. The use of statistical methods and other experiments in pedagogy are also helping them forward, and they were on the way to making education a real science in every sense of the word. I can testify from personal experience to the enthusiasm and zeal of the

leaders of the new movement. Their devotion, vigour and learning are vividly remembered by all who have had the good fortune to sit at their feet, and I cannot speak without emotion of the fervent piety that breathed through the lectures of Professor John Adams. He knows how to distribute figures in a given space with perfect balance, and how to mass them together in animated groups agreeable to the eve. He caught varied and transient shades of emotion, and expressed them by an analysis that is remarkable for its simplicity and vigour. His power of telling a story by gesture and action is remarkable in its peculiar appeal to the understanding. There are no ornaments or accessories in his lectures. Relying on his knowledge of human nature, and seeking only to make his subject intelligible, lecturer is more unaffectedly pathetic, more consciously majestic. I will not mention others, as this will only weary you, but I should like to emphasise the importance of the new science. It is not a science in the sense in which Mathematics or Chemistry can be called a science. The time, however, is not distant when the theories evolved by a long line of distinguished investigators will possess the same degree of certitude, will command the same general assent, as the principles of Mathematics, or Chemistry, or Physics. There is much that strikes us as both crude and pedantic, at the same time infantine and pompous, in the systems elaborated by these pioneers of "New Education." They lack the vigorous simplicity that gave its force to Luther's intuition, the sublime unity of Spinoza's deductions. The dross of erudition mingles with the pure gold of personal conviction; while semi-scientific phrases, ill suited to express educational doctrines, lend an air of unreality to the sincerest efforts after a rational system of education. Intellectually, the pioneers of the new movement are equal to the task they have set to themselves. They have called to their aid poetry and history and legend; they

have ransacked the literature of the ancients, and coined, with inventive prodigality, names of awful import, and systems of deep meaning. Who has not shuddered at the vocabulary of Stanley Hall? Who can help a feeling of regret, mixed, I confess, with something allied to pleasure, at the everincreasing list of new formulas, and newer names, which one finds in the "Journal of Experimental Pedagogy", or the "Journal of Educational Psychology?" Boccaccio supplies them with the garden scene of youths and damsels dancing among roses, while from Petrarch they have borrowed the mystic robes of Death herself. The leper houses and the charnels have been ransacked for forms of grisly decay. Leaving aside the extreme expressions of this tendency in education, we may say that it has, on the whole, exercised a remarkably healthy influence on the revival of learning in modern times. It has infused new life into the school, and revolutionised the structure of educational thought. We in India know so little about the forces that have wrought marvellous changes in the educational system of England after the War that it is not surprising to come across people whose faith in educational progress is as weak as their faith in her political progress. Nay, I will go further, and assert that there are very few Training Colleges in India that keep abreast of the marvellous discoveries of the new science. The lessons of New Teaching may be summed up by saying that education is adjustment to environment. This is not a catch-word, as any one who has followed the dreary and mechanical process of education in India can testify.

Its significance.

What is the significance of this new tendency in education? The answer has already been given by implication. Education is a social service, and the school is a social agent. "All that society has accomplished for itself must be put through the agency of the school at the disposal of its future members." It is the motive power

in the organisation of modern nations, and its value receives added emphasis from the democratisation of our institutions. Let me quote the following from Professor John Dewey: "The school can not be a preparation for life, unless it reproduces within itself the conditions of social life. Education, progressing in a school organised as a social laboratory, is not merely a preparation for citizenship; it is an apprenticeship in citizenship." This practical grasp of the essential basis of educational process serves to emphasise alike the sociological tendency in education, and the democratic nature of modern educational progress.

The position of the Teacher.

The teacher has come to his own, and the time is not distant when his position will enable him to mould the age in which he lives. True, we have been accused of being too fond of the limelight. Our vanity has been pointedly commented upon, and there are not a few persons who regard vanity as the principal instrument whereby the teacher is induced to resign to his lot. The Master of Marlborough College told the story not long ago of the plumber who shook hands with the headmaster, sympathising with him warmly: "For I, too, belong to a despised profession." Nor must we forget the comment of the old woman in Dickens about "chaps as is too lazy even to be schoolmasters." But lack of appreciation outside is compensated by the atmosphere of respect within the school building. It is undeniable that teachers share a very general human preference for places reasonably near the front, and from the circumstances of the case our occupation rather lends itself to the gratification of the desire for prominence. Outsiders are fond of comparing the schoolmaster to Gulliver among the Lilliputians. The comparison is not by any means flattering; but the fact remains that whether he will or no, the mere stature of the schoolmaster gives

him a position of importance among the youngsters, and all the circumstances of the relation between master and pupils give a prestige that enables him, at least figuratively, to deal with them de haut en bas. A prominent lecturer on education takes a special delight in pointing out to teachers what he regards as the principal vice of the profession,—talking too much. He had the curiosity to test his theory by means of stenographic records, and thus to discover how much time the teacher occupied in talking during a lesson-period, and how much time was given to pupils to speak. The relation between teacher-speech and pupil-speech was represented by a ratio in the teacher's favour that sometimes amounted to as much as 20 to 1. It may be that the experimenter was prejudiced against the teachers as a class, and selected only the garrulous ones for the pillory. Later investigations are much more reliable, for America, the home of educational experiments, supplies results more favourable to the fair play of the teachers. Sixty to forty appears to be a fairly common ratio, and sometimes the pupils have a better chance. Only in one case, however, did the pupils have more than 50 per cent of the whole talking-time.

The Modern Teacher.

I have quoted these examples merely with a view to showing the blurred vision, and violent prejudice which characterise the attitude of a section of the public. The teaching profession is regarded as the refuge of the misfit, as the last resort of the needy graduate, and as the dumping ground of disappointed men. That there is a certain amount of truth in the charge cannot be denied; nor can we deny the force of the contention that teachers as a class have a tendency to get into a kind of groove, from which it is often difficult for them to free themselves. But the position of the capable, successful and enthusiastic teacher—and this class, I assert, and assert

without any fear of contradiction, forms a very large part indeed of the members of our profession—is so radically different, that I am astonished that any one should have entertained such opinions. True, they possess not one of the qualities, nor cultivate one of the arts that recommend men to the favour and protection of the great. Nor are they made for a minion or a tool. As little do they follow the trade of winning the hearts, by imposing on the understandings, of the people. At every step of their progress in their own profession, and at every rung of the ladder, they are obliged to show their passports, and again and again to prove their title to the honour of being useful to their country, by a proof that they are not wholly unacquainted with its laws, and the intricate, and complex system of its education.

The Future of Education.

I am one of those who look forward to the time when education, interpreted in a broader sense than any with which we are familiar to-day, would become the dominant concern of every civilised community. the dominant interests are the political and the economic, and education is merely a satellite to these. I do not deny the importance of political or economic interests; nor do I think there is anybody who will ignore their importance. They are undoubtedly real and important,but they have no right to dominate the claims of the community for ever, and the evolutionary progress of mankind would not allow them to do so. The fate of this country depends upon their being able to change the present order, under which education danced attendance on political and economic necessities, and had to satisfy itself with crumbs that fell from their table. We must aim at making education, not a side-show, or appange of the State, but an equal partner in a community of interests. teacher of to-day would be the statesman of to-morrow,

٧.

but he would be a different kind of statesman, in a different kind of state, with wider vision, larger aims, a more humane spirit, and a more efficient State-machinery.

The Platonic conception, and its application to Modern Times.

Plato's conception of a state organised for the children of its members is no doubt familiar to you. He outlined a constitution, of which the outstanding feature was that the Minister of Education held the position of the Prime Minister of the State. He was placed in that position because the interests for which he was responsible were the pivot on which the entire fortunes of the community turned. His work was the first charge on the resources of the State, because, said Plato, "he is the chief aim of the national service." Plato's conception could not, of course, applied to modern conditions, without considerable modifications. Insuperable difficulties to-day prevented them from claiming that education should dominate everything else. But they could, and I think they ought to, claim that education should not be dominated by anything else. We claim for it the status of an equal partner with the other great interests of the community. The politician and the economist had no right to treat the teacher as the servant of their designs. Education must be master in its own household. At present education was mixed up with far too much foreign matter. It was subject to many necessities outside its own sphere of business; it was directed by persons whose services were too often required for the management of other things.

Wanted Swaraj for Teachers.

In the matter of education I am a convinced Home Ruler. The idea of Swaraj had long been familiar in the political field, and had come into special prominence of late. Is it unreasonable to expect but he would be a different kind of statesman, in a different kind of state, with wider vision, larger aims, a more humane spirit, and a more efficient State-machinery.

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management of other things.

In the matter of education I am a convinced Home Ruler. The idea of Swaraj had long been familiar in the political field, and had come into

that our Indian statesmen may one day be persuaded to entertain the proposal of giving Swaraj to education? Were the teachers of the community such a dangerous lot that they could not be entrusted with self-government? The British Parliament had consented to give an instalment of self-government in 1919. Why should the Indian statesmen think it impossible to transfer some of the functions of the Education Department to the teaching community itself? Could not the three interests—the political, the economic and the educational—adjust and co-ordinate their respective spheres of action? That so much creative work had actually been done under the type of officialdom which now controlled the education of the country was hardly less than a miracle; but it was nothing in comparison to what would be done when creative thought became free, when the liberty of experiment was untrammelled, when education enjoyed the Dominion status which was its due and its destiny.

The indifference of the public to education had been exaggerated, or at least misunderstood. I have found hundreds -nay thousands of people keen for education, but they do not like what was offered them, and they greatly disliked the present system of management and control. suspected the motive; they thought that the system of education now in vogue was not relevant to their needs. The first remedy was to get rid of the pernicious idea that education was divided into three parts—elementary education for the poor, secondary education for the well-to-do middle class, and higher education for the rich and the elite. Education would cease to be a class product, just in proportion as they linked on the higher stages to the lower, so swept it clear of intellectual snobbishness. Instead of being a mark of superiority separating one class from another, education would become the ground of union, uniting them all. The choice would seem to be between education and ignorance. Real appreciation of the the Eeducation Commission of 1882. It stated that hitherto the state has mainly relied for the extension of education upon departmental effort or upon voluntary effort. But the former is obviously limited by financial considerations, and is therefore inadequate to the needs; while it moreover tends to discourage local effort and selfreliance. The latter is necessarily partial and uncertain, and is least likely to be forthcoming where it is most needed. What is now required seems to be some measure that will not only meet the present necessities in each Province, but be capable of expansion with future necessities. is not thereby intended that any one large measure should regulate the details of legislation throughout all India. On the contrary, the recommendation cited is carefully guarded in its reference to the circumstances of each Province." The Commission, after pointing out that even in England, where jealousy of central action is notorious, it was never advanced, in the prolonged discussion which resulted in the Education Acts passed between 1870 and 1880, that if a national and adequate system of primary education was to be established, it would be established otherwise than legislation." The Report concludes thus: "Legislation is the only way in which all or any of the recommendations of the Commission, after approval by Government, can be made to live and last." The question naturally arises whether any legislation was undertaken after 1882, the year in which the Report of the Commission was published? We know unfortunately that the Government of India slumbered, once the masterful personality of Ripon was withdrawn from the scene; and it was not till after Mr. Gokhale had knocked loud and long that they condescended to acknowledge the existence of the evil, and professed, as usual, sympathy with the proposal. That their sympathy was not translated into vigorous action, shaking the dust and cob-webs of the drowsy Local Governments over whom they exercised thier authority with

characteristic vigour, will be evident to any one who goes through that mournful story of heroic endeavours and unrealised ideals. Let me quote the words of Sir Harcourt Butler, then Member for Education, Government of India: "I should rejoice as much as they (Mr. Gokhale and others who supported his motion) to see a condition of things in which elementary vernacular education could be made compulsory and free in India. The Government of India are deeply concerned to bring about such a condition of things." This was the promise—what about the deed? Needless to say, no serious effort was made in that direction. The old system continued in all the luxuriance of its pristine vegetation, and neither the thunders of a Gokhale, nor the ceaseless efforts of his followers, could produce any impression worth the name.

The Policy of the U. P. Government.

However, the resolution of April 21st, 1913, seems to have infused some energy and vigour into the lethargic It indicated as its aim the body of our Government. doubling of primary schools and pupils in the "not distant future." But its characteristics feature was the allotment of imperial grants which, with the assistance of provincial revenues, raised the public expenditure on education by over 50 p.c. The sum received by our own Government amounted to Rs. 70,86,000 recurring, and Rs. 66,57,000 non-recurring. The amount was not spent by the end of the financial year, 1917, for we find no less a sum than Rs. 22,33,000 entered in the column as "unspent". Probably the system under which large sums were made available at irregular intervals and not as part of an orderly financial programme conduced on the one hand to discontinuity of policy, and on the other to spasmodic and reckless expenditure. Schemes which accommodated themselves to the amount of the allocations may not have been ready. The ultimate cost of a project may far exceed the sum

available, and uncertainty regarding the future may deter a local Government from embarking upon schemes, the first instalments of which will involve subsequent enhanced expenditure which they have no certainty of being in a position to meet. It is true, as pointed out by Sir Henry Sharp, that when a department or a local Government was suddenly provided with unanticipated funds, there was likelihood of waste in expenditure. For the funds at the disposal of the Department lapsed at the conclusion of the year, and there might be difficulty in re-including them in the budget. It cannot, however, be denied that in some cases the grants were expended, not in increasing the number of schools, but in the quest of a fanciful and unnecessary standard of efficiency.

The effects of the policy of the Government of India.

That these criticisms possess some force, is undeniable, nor is it less true that the irregularity, characteristic of the Government of India grants, militated against the success of this policy. These criticisms would have possessed considerable force if the local Government had not formulated a programme of expansion. The critics seem to forget that material resources never have supplied, nor ever can supply, the want of unity in design, and,—what is of far greater importance,—constancy in pursuit. But unity in design, and perseverance and boldness in pursuit have never wanted resources, and never will. And what was the plan to which so many references are to be found in the Reports of the Director of Public Instruction, and in the proceedings of the Legislative Council? Did it tour round the country, collecting data, and organising a body of documents that are a sine qua non of any policy that is rationally conceived, and intelligently carried out? Did it consider the fundamental question of the relation of local bodies to provincial bodies, as regards taxation? Did it consider the incidence of taxation, as it is upon the determination

of this question that the solution of this thorny problem will depend? Did it interview members of the municipal boards. district boards, educational associations of the Hindus and Mohammadans, with regard to the feasibility of a scheme of free primary education? Did the Committee consider the principles upon which the proportion of expenditure on primary education to that on secondary and education should be based? Were district officials consulted? Was any attempt made to elicit the views of the sections of the Hindus and Muslims on the principle of compulsion? Did any member consider the possibility of the introduction of a system of compulsory education? Were any proposals formulated by the Committee, or member of the Committee, with regard to the adjustment of local to provincial finance? The answer, is no. Committee did certainly consult "selected" chairmen of district boards, and "inspectors of schools who present in Naini Tal." The leaders of a few institutions were also consulted, and then it seems to have regarded its work as finished. This is not the procedure that has been employed in England; this is not the procedure that has been employed in America, and this is not the procedure that has been employed in other European countries for the solution of this problem.

The Work of the Committee of 1913.

It is a question that affects every member of this large, historical province; a question in which political, financial, economic and educational interests are so inextricably involved that it is only by patient labour, a searching enquiry, by consultation with leaders of every class, of every district, of every religion, of every caste and of every profession, that success is possible. That these questions are of fundamental importance will be clear to anyone who has studied the history of the organisation of elementary education in European countries.

Yet, we find neither an enunciation of the principles that should guide us in outlining the policy of the local bodies towards education, nor a consistent, well thought-out estimate of expenditure on compulsory primary education. It may the object of the Committee replied that was essentially different from that pursued by a committee appointed specially for the purpose of devising methods for the organisation of compulsory education. There is considerable force in this reply, but my argument is directed not against the work performed by the Committee-the work done by it, is undoubtedly of some value to the educationist value-but against the view that there is no need for any inquiry into the state of elementary education in this Province. The implication is that the Report of the Committee embodies principles, and conveys information, that are of the highest value to the modern educationist. Against this it is my duty to protest, and assert in no unthat the whole sphere of elementary certain terms. education needs careful, elaborate and systematic survey; and that the problem is of such complexity as to need the closest attention to the minutest details of the political and economic factors.

The Principles underlying the organisation of State Education in European Countries.

What are the principles underlying the systems of State education in European countries? They may be summed up in the following remarks of Thomas Jeffersen, uttered as far back as 1786. "It is an axiom in my mind that our liberty can never be safe but in the hands of people themselves, and that, too, of the people with a certain degree of instruction. This is the business of the state to effect, and on a general plan." As President Madison put it: "A popular government without popular information on the means of acquiring it is but a prologue to a farce, or a tragedy, or both."

From a cultural point of view, education is the effort to preserve the continuity, and to secure the growth, of common tradition. Without the inheritance of racial experience by participation in social institutions, the individual becomes an abstraction. The individual is educated by assimilating within his own experience the summarised achievements of the race; social stability is secured by this process, and social progress through the modification and slight increment which he may furnish to tradition.

The German system.

To Germany must be assigned the credit of recognising the principle that education lies at the basis of the economic prosperity, the political growth, and social well-being of the people, and the relation of the State to education in Prussia is still defined by the Allgemeine Under the first clause of this law Landrecht of 1794. of the constitution, "schools and universities are state institutions charged with the instruction of youth in useful information and scientific knowledge." By the provisions of the third clause, "all public schools and educational institutions are under the supervision of the State, and are at all times subject to its examinations and inspection." I need not go into the details of the system, but may refer here to the curious view of Bismarck on the nature of educational He impressed on the educational administrator process. doctrine, which in any case was not new the Germany, that "the German child, when handed over to the teacher, is like a blank sheet of paper, and all that is written upon a child during the course of elementary education is written with indelible ink, and will last through life. The soul of a child is like wax. Therefore, he who directs the school directs the country's future." Though the objects served by the educational system of Germany were not admirable, the methods employed by the Government to make the schools efficient will repay close study. The care and attention that are devoted to securing an efficient administrative machine are well rewarded in at least one direction. Prussia has few rivals in the efficiency with which the attendance of pupils is secured. Under the present laws pupils must be enrolled in schools on the registration days, of which there are two each year, nearest to the sixth birthday, and remain at school usually until confirmation, or about the completion of their fourteenth year. The efficient administration of the school attendance law is due not merely to the popular desire for education, but also to the fact that it is entrusted to the police, who keep all the vital records of the population.

The American system.

Let us compare the system of elementary education in operation in the United States of America. In this country, the elementary school is the foundation of the whole educational system. It is not an institution for a particular class of people. It receives its pupils at the age of six, or thereabouts, and trains them normally for eight years. The Southern States and New England represent exceptions to this, seven and nine years of elementary schooling respectively being the rule. In elementary schools the pupil is supposed to acquire the fundamentals needed in any walk of life. The total number of children enrolled in 1913 was 18,375,225. The perfection of technique attained by the system of instruction in America is remarkable, and there is no country in the world which has shown the same zeal and enthusiasm for education. The public school system of the country, free in many places, from the kindergarten to the University, summarises in brief an almost superstitious belief in education that is rooted, not merely in the idea of equality of all its citizens, but in the truer conception that the welfare of democracy depends on the intelligent co-operation of every

individual in promoting its ideals. The economic appeal is, in fact, a very bad second to the more genuinely natural ideal—to give every child rich or poor. equipment that will make him a better citizen, better able to cope with the problems that confront him to-day. The emphasis to-day, in urban or rural schools, in kindergarten or college, is on the social value of education. children in ten remain in school to the age of fifteen, and one in ten to the age of nineteen, while the estimated total cost of all kinds in 1915, amounted to no less than The public elementary schools £171.007.902. 18,375,225 pupils, and the public high schools 1,328,984, pupils, and the Universities, colleges and professional schools enrolled 303,223 students, while a total of 22,435,538 persons was accounted for, as under instruction of some kind. public and private. This achievement was attained not through a centrally organised national department of education, but in fotry-eight states that are autonomous for educational purposes, and include within their boundaries smaller independent and With all this vast diversity of educaautonomous authorities. tional administration created by the co-existence of state and city systems, village and district systems, the country presents a remarkable uniformity of outline. The system of education is an expression of faith of the people in education. In that the public is willing to make the financial sacrifice that has filled the country with admirable school buildings for the free and universal use of its children in elementary, secondary, and higher education. The fear, uppermost in the English educationist when mind of the considering a publicly supported system, that voluntary effort and initiative may be crushed by it, is not justified by American experience. Side by side with the publicly controlled systems, there has sprung up a large number of privately supported agencies, such as the Carnegie Foundation for the Advancement of Science, the Russell Sage Foundation, and the General

Education Board, that co-operate with the public bodies or branch out into new enquiries and experiments that the public may be unable to undertake. That the public support of education has not affected private philanthropy may be judged from the fact that gifts and bequests of from 5 to 6 million pounds a year are made to educational institutions, both private and public

Education in France.

The other European country to which I should like to draw your attention is France. Ever since the Revolution. France has acknowledged her responsibility for the education of all her citizens; and her realization of this duty has since then been progressively maintained. In 1833, the establishment of boys' schools was made compulsory in every commune, and an effort was made to set up a system of higher primary education. In 1868 a directorship of primary education was created. The Franco-German war gave an enormous impetus to the improvemet of the peoples' schools, for France recognised that it was to a great extent the German elementary schoolmaster who had won the The statement of Moltke is famous: "It the schoolmaster who had won the battle of Sedan." Since 1881 primary education has been free, and since 1882, obligatory for all children from six to thirteen. In 1870, the State budget for primary education amounted to about 10 million francs; in 1913 it had reached the sum of 235 and a quarter francs.

Statistics of expenditure on Education in Germany and America.

Let me give the following figures of expenditure on German primary schools. The cost of elementary education in Germany amounts to over 75 per cent of the total cost, of the middle schools to about four per cent, and secondary education nearly 20 per cent. How inequitable this is will be clear from the

fact that nine out of only ten pupils are attending the elementary schools. The actual figures in 1911 were 897 per cent in the elementary schools, 29 per cent in the middle schools, and 7.4 per cent in the secondary schools. The inequality is still further itensified by the comparison of the per capita cost for each pupil in the three types of institutions. The cost per pupil in the elementary schools was 64 marks, in the middle schools 143 marks, and in the secondary schools 296 marks, or nearly four and a half times the cost of the elementary school pupil. In the United States the cost of educating a child in an elementay school in 1913 was 26:17 dollars, while the per capita cost of each high school pupil was 50 dollars 54 cents. Compare this expenditure with that on secondary and higher education in these Provinces, and you will be astonished to find the enormous difference in the relative cost of the three grades. I will go. further, and assert that there is no civilised country in the world which spends such a large proportion of her expenditure on secondary and higher education as India, while the lack of even the rudiments of instruction in the so-called primary schools is in flagrant contrast with the professed aims of the organisers of these mushroom undertakings.

The system of State Education in England.

I will conclude my survey of primary education in Europe by citing the example of England. From 1839 to 1870, the Education Committee carried on the heavy task of administering a rapidly growing grant under the Regulation, first issued in 1839, that later became the well-known Code. The work of inspection was carried on with great thoroughness, and the reports of the inspectors are some of the most valuable documents extant for the social history of mid-Nineteenth Century. Macaulay,

Brougham, and Russell fought with peculiar energy to destroy the empire of ignorance. Russel proposed in 1852 that rates should be made available for education. Bill after Bill followed; Bill after Bill disappeared, while the conditions of childhood grew steadily worse. Bills were introduced in 1867 and 1868, intended to strengthen the voluntary system, but they were clearly inadequate. It is true that in 1869 a million children were at school, but of these 400,000 were under six, and only 640,000 were examined; while there were a million children between six and ten, and half a million between 10 and 12 not on the registers at all.

The Machinery employed for the organisation of Compulsory Primary Education in England.

Compulsory attendance and compulsory rating were beyond doubt essential, and with the Act of 1870 a new system was inaugurated, and the whole country was divided into school districts. Beyond the ordinary divisions of municipal or parochial boundaries, there were certain modified forms of these school districts which could be applied at the discretion of the Education Department. Such being the division of districts for the purposes of the Act, the next step was to provide a machinery by which the supply might be obtained. The Educational Department was required to call for returns of the state of educational provision from the local authority in each district. Having thus set the machinery in motion, the Department was to test the returns it received by an army of special officers appointed for the purpose, and named Inspectors of Returns. As regards revenue. a school fund was established, which consisted of fees, of Parliamentary grants, of such other sums as might come to the School Board, and lastly, of that elastic element, from which all deficiencies were to be met—a compulsory local rate. The success of the Act was immediate. The

accommodation was nearly doubled between 1869 and 1876, and 13 millions of the population were under School Boards. When we gaze into the perspective of the history before 1870 we are able to see more signs of hope than the generation actually engaged in the struggle could foresee.

Educational reconstruction in England.

period from 1870 to 1917 occupied long struggle. keen with one and the contest was desperate, but the victory was with the cause of righteousness, and in Fisher's triumph was a conclusive proof that the anxiety of the poor for education continues not only unabated, but daily increasing. This is not the place to trace the progress of education in England during the momentous years 1917-1923; suffice it to say that the centurylong struggle for educational conditions worthy of the children of a great nation reached a new stage. Nothing is more eloquent than facts, and the following figures of educational progress in England will bear out the remarks made by me. In 1920 the total number of Local Education authorities for England and Wales was 319, with a population of nearly 38 millions. The number on the register of public elementary schools, in 1920, was nearly six millions, with an average attendance of nearly 5 millions and a quarter. number is provided for in 20,981 schools, with an accommodation of nearly 7 millions places. The growth of expenditure on education can be studied best in the reports of the Board of Education, and the famous Geddes Report. The expenditure on Elementary Education in 1913-14 amounted to about 13 and a half million pounds; in 1922-23, it had risen to £42,200,000, The expenditure on elementary education in terms of cost per child amounted to £4-16-6 in 1913-14; in 1922-23 it had risen to £12-7-6. The salary bills had risen from 60 shillings 9 pence in 1913-14 to 168 shillings in 1922-23,

Why Compulsory Primary Education should be organised in Modern India.

My object in tracing the progress of various systems of elementary education is to show to you the importance of avoiding the mistakes that nearly every country has committed in the fight against ignorance. The history of elementary shows, moreover, that voluntary education education most expensive luxury that could the be offered the people, and that compulsory primary education is the most economical, as it is certainly, the most intelligible method, affording an equal opportunity to all the members of the body politic. In the earlier part of the nineteenth century democracy was in the main a political idea. took practical form as a protest against the aristocratic monopoly of Government, and found its chief expression in the demand for universal suffrage. Behind both old and new forms of democracy there is the consciousness of personal worth. The objection to the method of government and to the capitalistic system of industry is that they tend to treat the great mass of men as mere means to social well-being. As against that, democracy insists that every person, besides being a means to the maintenance of society, is an end in himself. The English statesman who remarked, not long before the passing of the Education Act of 1870, "We must now educate our masters" grasped the importance of education in democratic The only condition on which a wide suffrage is conceivable is that the whole people must be sufficiently educated to be able to vote intelligently. But the broad idea of democracy, as based on the worth of the individual man, calls for more than education in the three R's. It involves, over and above that, the higher education that opens up the spiritual realms of art, literature and religion in which a man is most completely free and, consequently calls for an education in the great human interests. So far, this has only very partially been secured for the mass of the people; but it is coming to be recognised more and more as one of the urgent needs of the future.

The Serenity of India.

Let us now turn to India—serene, composed, meditative, enduring, yet full of dramatic force and of profound feeling. She alone seems tranquil in her empire; unimpeded in her educational development, I should rather say lack of development, independent of interference, undisturbed by the cross purposes and wranglings of educational firebrands. The serenity of undisturbed ease, the luxury of ignorance amassed with pathetic confidence, give a physiognomy of ease and proud self-confidence to all her edifices. The grim and anxious struggles of the educational reformers seem to have left no marks on the placid waters of the Indian Ocean. different is this existence from many European countries where leaders could tell of their fierce struggle with ignorance, disease and misery; whose eager, passionate aspirations after independence ended in the complete victory of Light. Careless, isolated, poor, but haughty, with her pavements of liquid chrysoprase, with her palaces of porphyry and marble, her frescoed facades, her quays and squares aglow with the splendour of the East, she is asleep like a miracle of opal or of pearl upon the bosom of a merciless ocean-here and there only on the face of the whole globe was the unique country wherein the pride of life might combine with the lustre of the physical universe to create and stimulate in the artist a sense of all that was most sumptuous in the pageant of the world of sense.

The Report of the Committee of 1913.

The story of her effort to achieve a measure of compulsory primary education makes melancholy reading;

but it is my duty to trace it, if only to point out remedies for the future. The survey recommended by the Commmittee and adopted by the Government of the United Provinces depended on the main suggestions of that Committeethat a school carrying primary education up to its highest stage (class IV) should be placed within the reach of every child. The province was to be divided into circles, each of approximately 25 square miles. In each circle there was to be a full primary school, ideally of 200 boys, and any incomplete primary schools in the circle were to be regarded as feeders to it. The realisation of the schemes formulated by the Committee would have led to the abolition of many schools opened in answer to a real local demand, and it was feared that they might discourage the legitimate ambition of lower primary schools. distribution consequently The was revised, and while the main principles of the scheme were preserved, the proposed -aim at concentrating 200 pupils in the central primary school, before other schools within the unit could be allowed to aspire to the upper primary standard, was definitely abandoned.

The Scheme in operation. Its modifications.

The scheme took effect in 1916-17, though not to its full extent. There was, no doubt, an increase of 30,000 that year, but not even the Government stated that its main object—the continuance of a larger number of pupils to the close of the full primary course—was attained. Though the percentage of pupils in the upper primary classes to the total in vernacular schools increased during the quinquennium from 101 to 128, there was actually a decline in that year. The scheme had, in fact, failed, and failed miserably. The Government of India again tried to rouse the local Governments out of their characteristic lethargy, and their Resolution of 1918 emphasised the necessity of the extension of primary education. The United Provinces

Government thereupon launched a fresh scheme, with the object of rapidly increasing the enrolment of primary schools in the Province. District Boards were asked in April, 1918, to prepare programmes to cover a period of five years. The variety of method evidenced in the proposals put forward, and the obvious uncertainty evinced by some district boards as to the needs of their districts, induced the Government to reconsider the duration of the experiment, and it was decided that, in the first instance, it should cover a period of three years. The quinquennial report shows an increase of 4,956 in the number of schools, and of 138,442 in the number of scholars. This may seem highly satisfactory, at first sight; but a close examination of the data shows clearly that the progress was very uneven. Meerut succeeded in raising its enrolment by 62 per cent, but its neighbour, Bijnore, shows a decline. There was actually a falling off in enrolment in no less than 33 districts during the last year. The direct expenditure on primary education was Rs. 67, 41, 509 in 1921-22, and the enrolment in primary schools was 832, 940. Thus the direct expenditure on each child is about Rs. 8 per annum. Including the children in the primary classes of English schools, there are only about 120,000 in the upper primary stage of all schools, and 250,000 in the preparatory stage. This leaves in the lower primary classes nearly 5 lakhs of children on whom 40 lakhs of rupees were spent to little purpose last year.

The Results of the New Scheme.

That the results had not realised the expectation of the public is admitted by the Education Department. What are the causes of this failure? The main cause is the lack of appreciation of the difficulties of the local authorities. Nobody who reads the apologia of the Hon'ble Pandit Jagat Narain, no one who goes through the reports of the period 1920-1923, can help being struck

with the failure of the Government to grasp the situation. Pandit Jagat Narain enumerated the doctrine that the expansion of primary education is the primary duty of the local authorities. This is but a half-truth, for though the local authorities ought to shoulder the burden, they ought not to shoulder the whole burden; and part, and sometimes a very large part indeed, must be borne by the State. This is all the more essential in India, where the resources of the local bodies are limited.

The Resources of the Local Boards. Are they sufficient?

Commission I believe that if the Decentralisation had gone thoroughly into the question of the relation of local to provincial finance, if it had laid down some principles for the guidance of the Provincial Governments, it would have saved us many disappointments. But it only touched the fringe of the subject, and the fundamental question of the resources of the local bodies remains still unsolved. This is a vital question, for if we were sure of the adequacy of resources at the disposal of the local bodies; if they were capable of being utilised immediately and not in the distant future, the power of taxation conferred by the Acts of 1919 and 1921 on local bodies would be most useful indeed; nor there would be any fear of our educational programmes falling through. But I believe it will be found that the people of India are taxed in proportion to their capacity; that so far as this province is concerned, we pay the same proportion of taxes to the State as is paid by any other province in India, or, for the matter of that, England. Mr. Gokhale instituted an elaborate comparison between the taxable capacity of the people of India and those of other countries, and he came to the conclusion that we were as heavily taxed in proportion to our resources as the people of any European country. That this calculation is correct so far as the period before the War is concerned, will be admitted by any

one who has pondered over the subject. If this is granted, it follows that so far as local authorities are concerned, the question of realising a large, an appreciable sum, out of the proceeds of an educational cess that may be levied by a local authority, is out of the question. The financial condition of the municipal boards and district boards is precarious that it would be the height of folly on our part to expect them to organise a comprehensive scheme of free, compulsory education within their areas, and to pay half of the cost of the scheme. Let me quote a sentence from the Report on Municipal Administration and Finances in the United Provinces for 1922: "With few exceptions, the financial position of the boards can only be described as precarious, and as remarked by the Commissioner of Meerut, the outstanding feature which runs through nearly all the annual budgets is the steady depletion of balances, and the ever increasing dispartiy between income and expenditure." The district boards are in a far worse position. Indeed, a large number of bodies are nearly bankrupt, and cannot under any circumstances undertake grave responsibility of organising free education within their areas. The total income of 85 municipal boards amounted to 126.5 lakhs, and their expenditure to 148 lakhs. The debts incurred by some of the boards are enormous. In fact, the resources of the boards are not sufficient to enable them to work up to modern standards of administration. This was said by the Government of India in connection with Mr. Gokhale's resolution, and nothing has happened in the interval to modify the statement. True, they have given the right to impose taxes. This would be most useful indeed if we were assured of three things: (I) First, is there a margin for local taxation?-my own impression is that the local bodies are not likely to realise a large amount for some time to come; (II) secondly, what is the extent of the margin? and

(III) thirdly, can the margin be utilised at once? As a matter of fact, Sir John Jenkins admitted, on behalf of the Government of India, that if local self-government in this country was to be a success, the resources of the local bodies ought to be increased; while Sir James Meston, then a member of the Government of India, added that there must be quinquennial settlements by the Provincial Government as to the additional revenue that should be allotted to these bodies. Indeed, to anyone who has studied the question, it seems surprising that the question of the margin of taxation, and the extent of its utilisation should be mooted at a time when ever increasing burdens are being heaped on the devoted heads of the local bodies. If there had been a margin, it would have been utilised by the local authorities long ago.

Resources of Local bodies in other countries.

No scheme of education is likely to be successful until the question of the resources of the local bodies is exhaustively discussed. The mere passing of a Compulsory Education Act is futile without the consideration of the means to carry it into execution. In America, the local authorities have independent revenues of their own, and they also enjoy comparative freedom from state control. Moreover, the distribution of surplus revenue and land from the national domain for the purpose of education has given a great impetus to educational progress. In 1837, the United States distributed to the various states over 28 millions of dollars from its large surplus in the National Treasury, the interest on which was largely to be used for schools. together with the proceeds from the sale of state-lands. has resulted in large funds for the development of education. Texas has a state fund of over 65 million dollars, which will amount in time to one hundred million dollars. Minnesota's fund of 25 million dollars is increasing by a million dollars a year from royalties on mineral leases and from the sale of timber and land. Many states are not so fortunate; but every state money is appropriated to schools from the general fund or general treasury. This does not include amounts spent by private foundations, such as (a) The Peabody Eduction Board with a grant of 3 million dollars; (b) The Russell Sage Foundation, with a grant of 10 million dollars; (c) The Carnegie Foundation, founded in 1906 by Mr. Carnegie; (d) and The General Education Board, founded in 1902, by the millionaire John D. Rockfeller, with an endowment of over forty million dollars."

France.

In France local bodies derive a large part of their revenue by the simple process of being permitted to add extra centimes to the taxation which the Central Government levies from four Direct Contributions. Until 1889 each commune maintained its own schools and paid the teacher's salaries, receiving large subsidies from the State and the Department. But there was so much inequality that the State took over the responsibility for stipends of primary school teachers and all Normal School expenses, except the buildings and equipment. In 1870 the State budget for primary education amounted to about 10 million francs; by 1913 it had reached the figure of 235 and a quarter france.

Germany.

In Germany the cost of elementary education amounts to a little over seventy-five per cent of the total cost, of the middle schools to about 4 per cent, and of secondary education to nearly twenty-one per cent. The inequality is still further intensified by a comparison of the per capita cost for each pupil in the three institutions. The cost per pupil in the elementary schools was 64 marks; in the middle schools 143 marks; and in the secondary schools 296 marks. These figures should be compared with

those of the United States of America. In the latter the cost of educating a child in an elementary school in 1913 was 26 17 dollars, while the per capita cost of each high-school pupil was 56 54 dollars.

Denmark.

The Danish system of taxation for school purposes is based on the principle that the entire nation is vitally interested in the education of every individual in the kingdom. The rural schools are maintained (1) by State aid,—this is most generous; (2) permanent school funds; the general purpose of these funds is to equalise educational opportunities by rendering aid to the several communes according to needs; and by (3) local taxation.

Japan.

Since the passing of the compulsory education law, the percentage of school attendance has increased from 59 in 1893 to 82 in 1900, and 96 in 1906. The actual number of children attending elementary schools was $3\frac{1}{2}$ millions in 1893, $4\frac{3}{4}$ millions in 1900, and $5\frac{1}{4}$ millions in 1906. The expenditure on elementary education has increased from about $1\frac{3}{4}$ million pounds sterling in 1898, to £33,000,000 in 1906.

England.

I have already given statistics of expenditure on education in England. There is one point, however, which needs emphasis, and it is this that certain revenues were made over to local authorities in 1889. In addition, they derive a large part of their revenue from rates, and, finally, receive generous grants from the Exchequer. That the Central Government helped them generously during the War was admitted by Mr. Fisher. One instance will suffice. In England, in 1909, local bodies raised about 70 million

pounds, and received in that year grants that amounted altogether to 98 million pounds out of a total of 200 million pounds. Thus the total of £200 was practically divided half and half between the Central Government and the local bodies. In France, out of 158 millions, 95 millions represented the expenditure of the State for central purposes, and 58 millions for local purposes. The proportion is $\frac{2}{5}$ for the Local and $\frac{3}{5}$ for the Central Government.

Need for an Inquiry.

The above figures will show conclusively that the question of the introduction of compulsory free education is complicated by important political and economic factors, and that it is necessary to inquire, and inquire carefully, into five points: (1) Whether the present distribution of taxation between the local bodies and the Provincial Government is equitable? (2) Is it possible to assign any revenues to local bodies, as is done in England? (3) Whether there is any margin for additional local taxation? (4) What is the extent of this margin? (5) Finally, can this margin he utilised at once?

The financial question is the pivot on which all schemes of education revolve, and it will be the height of folly to try to elaborate a system of free, elementary education, without considering the numerous factors that complicate the problem. It was for this reason that I asked the local Government on April 3, 1924, to form a committee to go into the whole question of finance, grants-in-aid, and so on. The reply of the Director of Public Instruction was, I must confess, disappointing. It held out no hope of any rapid advance; it gave no promise of a thorough inquiry, and it damped the euthusiasm of a number of educationists. However, this is a point which concerns the welfare not of one person or two, but of fifty millions of a sturdy people, imbued with the noblest ideals, and trained by centuries of beneficent customs,

and they will, I am sure, see to it that the ideal of free, elementary education is realised, and realised in the near future.

The principles underlying the system of grant-in-aid.

The next important point that needs our attention is the modification of the grant system in operation, and a change in the relation of the Department to the local authorities. The rigid system of grants has proved a serious bar to the growth of education in the districts. It generally takes little or no account of the backward state of a particular district, but grants block grants, irrespective of the needs of the locality. That it is impossible to develop primary education in its initial stages by this means was demonstrated clearly during the War, when, according to Mr. Fisher, the whole of the educational system of Great Britain would have been ruined but for the generous help afforded by the Exchequer to the backward and poor local education authorities. The efficacy of this plan will be testified to by all who have studied the history of elementary education in Europe during the last 70 years; and a striking testimony to its utility has been furnished by the Bombay Presidency. There 65'7 per cent of the total expenditure on primary education was contributed, during the quinquennium, 1918-22, from Provincial funds, and only 3'9 per cent from Local funds. Of the Provincial contribution, 17'4 per cent represents grants to municipalities, 76 percent grants to District Boards, and 46 per cent grants to schools under private management. At present Government contribute 90.5 per cent of the cost of District Local Board schools, and 40 per cent of the cost of Municipal Schools. To sum up, some 70 per cent of the expenditure of the Bombay Government is for Primary Education.

Need for clear enunciation of policy regarding the proportion of expenditure on elementary education to that on other types of education.

The next important problem to which we must direct our attention is the enunciation of a principle whereby the

proportion of expenditure on elementary education to secondary and higher education may be equitably determined. Between 1920-21 and 1923-24, the increase of expenditure on University education was Rs. 11,24,000, or an annual average of Rs. 2,81,000. During the same period the increase of expenditure upon secondary education rose from Rs. 30,55,000 to Rs. 43,14,000, that is Rs. 12,59,000, or an annual average of Rs. 3,14,750. The expenditure on University education was 16.7 per cent of the total expenditure on education, whereas the proportion of the expenditure on secondary education was 26.27 per cent. Upon primary education, only 43.9 per cent of the total expenditure on education was incurred. Such a glaring inequality between the two items of expenditure will be difficult to find in any civilised country Even in Germany, at least 70 per cent-it was as high as 89.7 per cent in 1911-of the total expenditure on education was incurred on primary education. Such a scandalous distribution of the revenue of the State derived, be it noted, mainly from the miserable pittance, and the hard-won earnings, of the cultivator, calls for the strictest inquiry, and we shall be failing in our duty if we do not try to remove this glaring disparity.

Wanted a better type of officer for the organisation of Mass Education.

I do not wish to deal with the other problems of elementary education in detail, and shall only refer to two points of importance. I do not know on what principles text-books for primary schools are prepared, but if the Department had the imagination or the curiosity to inquire they would have found out that the early educational reformers regarded suitable text-books as absolutely essential to the success of mass education. There is urgent need of a thorough revision of the text-books. The Inspectorate too, needs overhauling. We need more Inspectors, and better Inspectors. The problems of elementary education are so multifarious, that

it is physically impossible for a Divisional Inspector of schools to develop elementary education within his Division. The staff at his disposal is too limited to enable him effectively to exercise supervision over districts whose combined population may exceed eight millions; while his responsibility for secondary education within his extensive jurisdiction prevents him from dovoting that time and special knowledge to the study of the needs of each district which are so absolutely essential to the success of a new movement. We may not agree with the views of Fichte and other German enthusiasts of the early part of the nineteenth century that primary education would eradicate prejudice and ignorance, for the course of history since their time has proved a bitter commentary on these dreams; but nobody can deny the force of their suggestion that it was only by the introduction of such a system of education that the masses could be roused from their passive indolence, and formed into personalities, intellectually and morally independent. To kindle this holy fire of knowledge, to fan the latent powers of our race into flame, we need a band of men who are inspired by a zeal for lighting the torch of Truth in this land of ours. In this, the Department should take a lesson from the history of the inspectorate in England, and appoint thoroughly trained district inspectors, and divisional inspectors of elementary schools in larger numbers than ever.

A committee suggested.

I will end this part of my address by suggesting the appointment a of committee on the limes of the committee appointed by the Bombay Government in 1921. It will

- (1) Consider and report on the desirability and practicablity of introducing free and compulsory education in the rural areas of the province;
- (2) Suggest new sources of taxation to meet the cost of such a measure;

- (3) Make detailed proposals for any legislative and administrative measures necessary for the purpose, including the machinery required to carry out any such measure;
 - (4) Submit a definite programme showing the various steps which should be successively taken, so that a complete system of free and compulsory education may be introduced within a definite period;
 - (5) Consider and report on any other matters germane to this question.

The arguments in favour of a committee are so overwhelming that I am astonished the Government should have refused my reasonable request in the Legislative Council. The Board of Vernacular Education cannot perform the functions of a genuine representative committee, one of of whose most important tasks will be the taking of oral evidence at all the important districts of this province. was the procedure employed by the committee appointed by the Bombay Government, and this ought to be the method Nor can the proposed Board of Vernacular Education discuss the supremely important questions of the incidence of taxation, and the financial relation of the local bodies to the provincial Government. Mr. Gokhale calculated that if we continue to proceed at the rate we are moving, it will take 115 years for India to see every boy of schoolgoing age at school, and 665 years to see every girl of school-going age at school.

The Secondary Schools-their Rigidity.

The progress of secondary schools during the period has been unusually rapid, and the reports of the Director of Public Instruction supply instructive figures. The number of Intermediate Colleges increased from 3 to 12, and the total number of educational institutions maintaining

Intermediate classes was 23, of which 8 were Government Colleges, 14 aided and 1 unaided with enrolment of 2,514 students. That the tuitional work of a number of these colleges was unsatisfactory admitted by the Department. One feature that strikes an observer is their soulless uniformity. Their organisation, methods of instruction, and the aim that inspires the work of the staff, the daily routine, the methods of study, and the ambitions of the scholars differ very whether the institution is an Islamia School on Frontier, or a Government High School in Madras. Let me quote the following remark of Mr. Sanderson, an Inspector of Schools in the Punjab. 'A first tour of the Lahore division after an interval of five years, revealed an amazing rigidity in the class-room. Take for example English. In a majority of schools the method of teaching and even the actual words show no change in that time. one visits a certain class at a certain time of the year, one finds the same sentence being taught in the same way with the same emphasis and with the same mispronunciation."

The differences between the Indian High School and the English Public School. Contrast in their aims and methods.

Herein lies the essential difference between the English Public School and the Indian High School. In the former case, the life of the school is not dominated by the formal course of study, much less darkened by the shadow of a coming examination. As the Punjab Report puts it, "It is the dread of this examination that darkens the clouds of the horizon of boys during their whole school career. What should be the happiest period in life (and is so in other countries where fortunate conditions prevail) becomes a time of drudgery and of overstrain." The Report of the Sadler Commission is conclusive on this

point: "Except in a few cases the schools think only of the Matriculation. They make it, and it alone, their aim. They are driven to do so because the boys and their parents feel that in the present conditions of life in Bengal, success in passing this examination is the one essential reason for going through the high school course." Thus the aim of the schools is more and more narrowly fixed upon an examination. But an examination can take account only of a part of what a secondary school does. It can not take account of the moral qualities of the students, qualities to the development of which supreme importance is rightly attached in English Schools; it ignores the æsthetic qualities that are such an indispensable element of a rational system of education, and it sets aside the social qualities which are really the deciding factors in the struggle for existence. What does it emphasise, then? Why, intelligence, not of the wider and broader type, resulting from the harmonious combination of instinct, emotion and will, but of the narrow, limited variety, expressing itself in a capacity for memorising by rote sentences of whose meaning the educand is no more conscious than he is of the meaning of a Greek sentence.

Comparison of the life of the Indian School / and the Public School.

Our Indian students, alas! have no green fields and trees, no blossoming orchards, to teach them the tender suggestiveness, the heroic poetry of a joyous and free life. Brooding over the dull, meaningless text-book, he makes his spirit strong in solitude by the companionship with everlasting thoughts. Compare this picture with that of a number of public schools I have seen in England. The unity of their work is derived from the effect of light and atmosphere, the unbreathed soul of tremulous and throbbing life which bathes and liquefies the whole. That cord of jocund colour which may fitly be compared with the smiles

of daylight, the clear blues found in laughing eyes, the pinks that tinge the cheeks of early youth, and the warm yet silvery lines of healthy flesh mingle, as in a pearl shell. is no perplexity, no division of interests. They are fascinated by no insoluble mystery, and absorbed by no seductive problems. Their artistic purpose and power are exactly balanced, adequate and mutually supporting. They know by intuition what to do. and do it without let or hindrance. Thought, passion, emotion become in them one living melody. Thomas Arnold summed up the characteristic features of the Public School when he said that it should be first of all a place for the formation of character, and next a place for learning and study, as a means for the attainment of this high end. Discipline and guidance were in his view still more permanently the business of a school master than the communication of knowledge. The main condition on which the incidental attainment of this object was possible was that the community should be au fond pervaded with the spirit of work, and that the proper business of a good school, the production of exact and accomplished scholars. should be thoroughly well fulfilled.

Lack of synthesis in Indian secondary schools.

The Indian schools, it is felt, fail in the formation of character. There is no spiritual life which touches a boy's inner nature, no corporate unity which sustains and appeals to his affectionate loyalty, no moral or intellectual flame which may kindle his nature. There are admirable exceptions, but these throw into darker contrast the shortcomings of the rest. Our boys work assiduously—often too assiduously. School hours are long—often too long; and the schools are occupied with purveying certain kinds of knowledge—but within too narrow a range. Secondary schools teach subjects, but offer no synthesis of knowledge, communicate no nucleus of unifying thought. As the Sadler Commission put it: "It is dull, not so much because it is poor in material

resources, as because it is poor in ideas." There is undoubtedly a lack of inspiring unity in their intellectual aim. Why? Because the mass of new knowledge which now claims a place in schemes of education has not yet found a synthesis. It has not been unified intellectually. Still less has it been co-ordinated with our spiritual belief. And this dislocation between different spheres of our activity, and their maladjustment to our emotional and æsthetic experience result in a lack of those simple, authoritative generalisations which compel acceptance, touch every side of human experience, and are the groundwork of definite teaching in primary and secondary schools.

The need now experienced in the secondary education affects not India alone, but the whole world. In other countries, however, an ancient spiritual tradition, interwoven with the work and teaching of schools, supplies something which serves, however imperfectly, as a basis of moral unity in education. Indeed, the spiritual and moral tradition holds so firm a place in school life and in school practice, and has such influence over conduct that the lack of intellectual unity is less clearly perceived, and "the forces which form character continue strong, though they are weak in grappling with many of the problems which challenge us in the tasks of modern life."

Need for the organisation of our educational ideals.

It is, no doubt, true that in schools which serve a nation there can be only approximate unity in intellectual outlook; at all times the process of mental and ethical adjustment is going on, and in a shool community, if its various activities are encouraged and recognised, there is a steadying force which gives moral unity to the whole and weaves diverse temperaments into the texture of corporate life. But in India a school is thought of merely as a place of instruction. Its possibilities as a society are overlooked. The dominating idea of Dr.

Arnold's life was that a headmaster is called of God to make his school a Christian school—an idea which has been steadfastly held by an overwhelming number of English school-masters. This idea pervades not only his chapel sermons but all the activities of his life. In his lessons, his study of history, his discipline, his exhortations addressed to the Sixth Form, and to the whole school, and his dealings with individual boys, he is felt to be always striving to infuse into the common life his own enthusiasm of Christian earnestness. and to stimulate the growth of public spirit and moral thought-It is this lack of a conception of ends, of an ideal fulness. of education, that has proved a source of trouble to India. We have, indeed, had, and now more passionately than ever cherish, ideals, many of which England has never known. ends of the public schools have been co-ordinated unified. They have known more clearly and exactly than we what they wanted from Science and Art, and they have seen to it that there should be a supply of men prepared by their general as well as by their special training to supply what was asked of them-viz, their contribution to a system of ends, to a conception of state.

· The organisation of German education. Its principles.

The potency of German education, as of German civilisation, has been its organisation. Organisation means the embodiment of a creed, unifying a community by expressing the common meaning of its members. It is easier to win allegiance to a narrow interpretation of the needs and desires of a society or a party, than to secure loyalty to ideas which have not yet established among themselves a vivid relationship, expressed in a form at once clear and elastic. And this was the cause of the power of Germany. She knew her own mind; she was mistress of her own resources, and ordered them to be clearly seen, though for an unspiritual end. Organisation for her has represented

the focussing, in all departments of life, of her varied energies upon the maintenance and enlargement of that life. We, on the other hand, have not yet been persuaded part of national life, inseparable that education is 8. from the other parts, affecting them and influenced by them; and within the loosely determined province which we call education, we have not yet achieved and scarcely attempted a systematisation of our conception of the ends of education. No more practical utterance upon the present purpose could be found than a sentence of Professor Burnet, in his Greek Philosophy from Thales to Plato: "We find that every serious attempt to grapple with the problem of reality brings with it a great advance in positive science, and that this has always ceased to flourish when interest in that direction was weak." Let me quote a sentence from another philosopher. Professor L. T. Hobhouse says in his Theory of Knowledge: "The world of thought at the present day is in a somewhat anomalous condition. We have come to the point where science seems to stand in real danger of being ruined by her own success. The mass of accumulated fact in which she justly prides herself has become too vast for any single mind to master. Year by vear it becomes more difficult to take any sort of view of the whole field of knowledge which should be at once comprehensive and accurate. It results that positive knowledge can scarcely be said any longer to have a general purpose or tendency. Intellectually it is an age of detail. An age of detail is an age without belief, and belief is the vitalising source and mainspring of organisation." If it is easier for a camel to pass through the eye of a needle than for a rich man to enter into the kingdom of heaven, the reason may be that the camel is, after all, one camel, and the rich man. playing many different roles, being many persons, may fail to achieve that oneness which we call personality. There is so much of him that at last there have come to be many of them.

This is just what has befallen Indian education. There is so much of it that there have come to be many of it; so much knowledge that we have set up many knowledges. We have named them, labelled them, departmentalised them, and taken the soul out of them. In fact, it is only in some group of schools confined to a section of the community, or more rarely, when an educational movement has expressed a transient unity of some dominant school of thought, that inellectual activities have been worked into a semblance of unity, focussed with an attempt at consistency upon a theory of conduct.

Have the recommendations of the Sadler Commission been carried out?

The question naturally arises whether these defects have been removed by the application of the principles of the Report of the Sadler Commission. Before, however, we discuss the question of the application of the principles of the Sadler Commission, it would be useful if I give my view of its work. I have pondered deeply over the twelve volumes of this Commission: I have discussed it with a number of teachers in Madras, Bengal, the Punjab and the United Provinces. I have had opportunities of discussing it with Sir Michael Sadler himself, in England. I have, as a result of my inquiries, come to the conclusion that this province made a serious blunder by adopting the recommendations of the Commission in toto. It made a greater blunder by trying to carry them out with unnecessary when the people had neither the time to digest the material, nor the opportunity to discuss it with and care which the gravity of the that thoroughness problem demanded. The recommendations of the Commission were framed with a view specially to reform the system of secondary and university education in Bengal; and the Commissioners devoted—and devoted rightly—a

large amount of their time to the collection of material relating to that province. Indeed, nobody was more astonished than Sir Michael Sadler himself at the reception given to his report in these provinces. There is a Spanish proverb which says that a mother-in-law tries to teach good manners to her daughter-in-law by beating her daughter, and this proverb was exemplified in this province. under the vigorous rule of the late Governor. no doubt, with the best of motives, and guided by the lofty purpose of reconstructing secondary and higher education, the Government launched a highly controversial scheme of education, without realising either the financial or the educational consequences of these measures. Let me quote the following from the speech of Dr. Ziauddin Ahmad, who was a member of the Sadler Commission, in the Legislative Council on January 29th, 1924. "There is a very important mistake which we all made, and I should include in it bodies of other universities,—and it is this that, while applying the recommendations of the Calcutta University Commission to these provinces, we never considered whenever the recommendations were applicable these provinces. The recommendations were made explicitly for Bengal. It was the Calcutta University Commission and not an All-India Universities Commission. The Calcutta University Commission made recommendations which were applicable to Calcutta University (only), and the reasons on of account which they made the recommendations were outlined in the first volume. Nobody ever took the trouble to read the reasons on which those recommendations were based. Everybody rushed to the conclusions, and applied them indiscriminately, without fully discussing the circumstances in our provinces." This speech brings out clearly enough the vital point that the members of the Commission never intended that their recommendations should be applied enbloc to another province, without serious and substantial

modifications. Yet the zeal and energy of our Government outstripped its usual prudence, and changes of far-reaching magnitude were introduced at a time when the country was by no means prosperous, in a manner that was distasteful alike to the trained administrator and to the veteran educationist, at a pace that rivalled the reforming zeal of a Pestalozzi or a Froebel, and threatened to eclipse the glorious achievements of America in the domain of education. Has anybody witnessed such a feverish activity, consuming the energy of a host of Departments, rousing the lethargic teachers out of their dogmatic slumber, and "reconstructing education" from the gutter to the University?

The principles of the Sadler Commission.

Gentlemen, it is not necessary for me to give the principles of the Sadler Commission Report in detail, as they have been so frequently discussed in the Council, the press, and the platform that all the educationists know them, or are at least supposed to know them.

The Commission laid special stress on the necessity of preparing students for admission to the University.

As they put it, "the colleges have to deal with large numbers of students insufficiently prepared for the methods and standard of University work. A considerable proportion of the candidates who pass the matriculation and enter colleges are not ready for University teaching. In order to take advantage of what the University can offer they should have a more thorough command of English, should possess a wider range of knowledge, and should be maturer in character and judgment." They rightly emphasised the need of the physical side of education, and stated that "secondary and higher education in Bengal would be a much greater boon to the community if improvements were made in conditions of school life." The examinations came in for severe comments, and the Commission

remarked that "their effects upon the spirit and tone of University life and studies are unsuitable."

Examination of the proposals of the Commission.

One of the fundamental propositions of the Commission stated in unmistable terms that the standard of university education could be raised only if the students were thoroughly prepared in the school, and could profit by University instruction. The College authorities were totally dissatisfied with the product of such schools, and frankly saw that the intake from them was of such poor quality that little could be made of it without a long preliminary drill. For this purpose it was necessary that the work done in the intermediate classes of the University should be transferred to institutions of a new type, to be known as intermediate colleges, to be organised and conducted according to the methods appropriate for school work, to be distributed over every part of the province, and to be placed under the same general direction as the High English school. This was regarded necessary, as (1) a means of providing more adequate preparation for University work for those of the students in the intermediate classes who will proceed to degree courses; (2) secondly, it was still more necessary to meet the needs of those who will go no further than the intermediate stage, and who require more carefully differentiated courses of study than are now offered to them; (3) lastly, as the best practical means of relieving congestion caused by the crowding of young and immature students into Calcutta, and of helping to mitigate the evils and dangers which result from this. They regarded a three years' course for the B. A. Pass or in Honours Degree the University as desirable for success of their schemes. They remarked that "it seems to be the experience of most Universities that a generous and well-balanced scheme of training in the arts or the sciences cannot well be fitted into a shorter period than three years; and if this course of study is to be treated

as a single whole, and if the student is to have the advantage of being helped by students who know him intimately, it must be obvious that it ought normally be followed throughout in the same institution, and under the same guidance". The Commission seemed to have ignored the important fact that if the duration of the B. A. Pass Degree were two years only, it will not develop those powers of mental discipline, co-operative social activity and social culture which is the object of a University to inculcate.

Effects of the establishment of Intermediate Colleges on University Standards.

The University teachers are generally of the opinion that the influence of the University on the development of the character of a student who resides only two academic years, or barely eighteen calendar months, will be reduced to such an extent as to nullify all the advantages which a system of residential, unitary teaching University confers. This is indeed one of the most serious aspects of a problem, and, if the theory of a two year Degree Course is pushed to its logical conclusion, we shall have a large number of immature and undisciplined graduates, whose University training will be a source of pride neither to the University, nor to their parents. Moreover, the transfer of intermediate classes to the school is likely to lower the standard of University education. There are undoubtedly a large number of Intermediate Colleges whose staff compares favourably with that of any second and even a first grade college, and whose equipment and the facilities they provide for their students are superior to those of the Colleges affiliated to the Allahabad University. But it cannot be denied that this change is likely to bring the level of the XI and XIIth classes of the Intermediate college down to that of the lower forms of the College. This

fear is expressed by a large number of College teachers, and I am distinctly of the opinion that there is considerable ground for anxiety. I believe that secondary and University education are so intimately connected, that a rigid organisation of secondary education will prove fatal to the interests of higher education in these provinces. The disappearance of the old college has left a gap in the corporate life of our University that is not likely to be filled by the newly created University Departments: and the shortening of their period of stay in the University from four to two academic years, or in other words, actually to eighteen months, has completed the process of its dismemberment. That these effects were foreseen by the framers of the Report will not be denied by the close student of that Report but the fact remains that the University standard of instruction, and that atmosphere of University which can be absorbed only by one who makes a reasonably long stay in the University, have been seriously affected by these changes. In fact, the object of the Commission has been defeated and, instead of the Intermediate classes bringing the lower forms of the College up to their level, and generally vitalising them, there is considerable evidence that they will be-in some cases, they have actually been-dragged down to the level of the lower classes. This, combined with the fact that the Degree course is only of 2 years' duration, and the fact that the corporate life of the old College has been replaced by the soulless, mechanical and purely intellectual life of a Department, will produce disastrous effects on higher education in this province. Signs are not wanting that a reaction has set in, and University teachers have begun to notice the effects of this change. It seems to me to be absurd to suppose that the mere fact of the institution of Intermediate Colleges is sufficient to raise the standard of our University instruction. Any one who possesses intimate knowledge of the mechanism of modern

Universities will tell you that, so far as the University is concerned, it makes absolutely no difference to it whether a student comes to it from the Intermediate classes of an Associated College, or the Intermediate classes of an Intermediate College. So far as courses of study for the third year Arts and Science are concerned, they are exactly the same for both types of students. But a student who has had the advantage of receiving his instruction in an Associated College is better fitted to follow the IIIrd year course than one whose teaching has been confined to the four walls of the new Colleges. Hence, the standard of University instruction is not raised by it. In fact, as pointed out by me above, there is actually a deterioration.

The Associated Colleges are very keen on keeping their Intermediate Classes.

Another important fact that was ignored by the framers of the Intermediate Education Act was the importance of the Intermediate classes to the Associated Colleges. Every College has been severely hit by the provision whereby all Intermediate classes will be completely separated from the College at the end of five years. These classes are really the mainstay of all the colleges, and it is through the support afforded by the Intermediate classes that the undergraduate and post-graduate classes of a College are maintained. Nearly every principal of an Associated College will inform you that if the Intermediate classes are taken away, there will be absolutely no likelihood of his College progressing. I may go further, and say that the College authorities are unanimously of the opinion that the separation of Intermediate classes from their Colleges will spell ruin. Indeed, there are signs that the policy of the Government with regard to the maintenance of Intermediate classes will be considerably modified. The Agra University Committee is likely to reconsider the whole question of the relation of the Associated Colleges to their Intermediate classes. I am strongly of the opinion that in the matter of secondary education, we have acted precipitately, and have not properly considered its relation to university education on the one hand, and elementary education on the other. Signs are not wanting that the question of Intermediate Colleges will be re-opened, and their relation to the Universities re-examined in the light of the experience we have gained of their working.

The mistake of the Government consisted in the fact that they relied too much on the efficacy of organisation. Now, I do not think there is anybody who is opposed to organisation as such. To me it is unthinkable that a person should actually oppose scientific, rational organisation. But it must be an organisation with a purpose, an end; it must imply an ideal to be realised, and, most important of all, it must train and keep up a supply of capable and efficient men who are to make the organisation a success. But our strange faith in a mere change of system, our supreme ignorance of the elementary rule that you must have men who are inspired by a zeal for the cause-men whose enthusiasm for their ideal is equalled only by their discipline,—and our habit of always waiting like Mr. Micawber for 'something to turn up,' are responsible for the grave defects in the system. When the plan of Intermediate education was formulated by the Sadler Commission, they might have felt themselves to be in the position of Joshua crossing into the Promised Land. They needed to "be strong and of good courage." Such was the demand that the people of Israel made, and such was the demand of the Indian people in the sphere of education. "Be thou strong and very courageous," was the call of our day when we, too, were moving out of the wilderness into a new world. To-day it is no longer a vision from Mount Nebo, but part of a practical plan of campaign which needs a highly trained staff of commanders in the field to carry out.

The emphasis on organisation has most unfortunately obscured the need for a great reform in the methods of teaching. The systematic training of those who intend to become teachers has changed the character of the educational system in many other countries. It is capable of rendering the same service to this Province.

Researches in Education.

The training of teachers should be placed on a firmer basis, and investigations should be conducted into important problems of school teaching. To any one who has undergone a post-graduate course in education in England or America, it is a matter of constant surprise to find that theories which have been applied in innumerable cases, and investigations that are known in every Training College in Europe, remain either unknown or unutilised in India. By clause 23 of the Education Act, a local education authority in England can give aid to teachers and to students who wish to prosecute research, with a view to promoting the efficiency of teaching; but the Indian teacher is rarely given an opportunity to step out of his class-room, and take a detached view of his experience in the light of the work of other colleagues, or the latest contributions of educational science. Even a teacher who has been trained is presumed to have been equipped for all time. The position of the advanced study of education in the United States and European countries is striking by contrast. Indeed, the charge is sometimes made in America that so much attention is given to the study of the science of education, methods of teaching, and administration of the educational machinery, that there is danger of neglecting the subject-matter to be taught. The most common agencies for the training : of teachers in service are the teachers' institutes, and teachers' conferences. The meetings last from two to five days, and attendance is compulsory without loss of

salary, and in many cases with payment of per diem compesation. These provisions are supplemented by Summer Schools, and post-graduate courses in education. An American fellow-student of mine, Dr. Douglas Waples, who was Professor of Education in Tufts College, Massachusetts, and is now, I believe. Professor of Education in Philaldelphia University, has described lucidly the function of the Summer Schools in the American system. The Summer Schools there are organised with great thoroughness, and there are very few teachers indeed who do not come back refreshed. In most cases, attendance at these schools is voluntary, but recently the practice has developed of indirectly encouraging teachers to attend by promotions or increases of salary; in a few cases special bonuses are The most remarkable expression offered for attendance. of interest in educational research is to be found in the magnificent Teachers' Colleges attached to the Departments of American Universities. The Teachers' College. Columbia University, has become the Mecca of educational investigators, and contains by far the most brilliant staff in the world. The significance of these post-graduate Colleges of education does not rest merely in the facilities that they offer to the students, nor in the research conducted by them, but rather in their close and intimate contact with the course of education day by day. During the past decade relations between the staff of Teachers' Colleges and local education authorities have grown more intimate in the more frequent conduct of special inquiries or surveys of school systems—city, county and state—by professors of education, and other specialists. The nearest analogies to English education are the inquiries conducted by Sir Michael Sadler in a few English counties. These surveys have dealt in whole or in part with the organisation and administration of local educational system, its cost and adequacy, the school equipment and school hygiene, the

courses of study, the teaching staff in relation to training and salary, and the methods of training and progress of pupils. One recent survey was limited to the development of a school building programme; another to the school finances; still others have investigated the provision of higher education in several counties. Moreover, the development of educational tests and scales for measuring achievements on a quantitative rather than a qualitative basis has greatly facilitated investigations by replacing opinion with fact. The technique of the scales and tests was perfected by Professor Thorndike, of Teachers' College, Columbia University, and there are now tests in Algebra, Arithmetic, Reading, Drawing, English Composition and Grammar, Geography, History and a number of foreign languages. The tests serve to measure not only the standard of attainment of pupils and the suitability of certain studies to their ages and capacities, but the quality of teaching, and the relative position of schools and school systems.

A Lesson to India.

The brief account given above indicates what a fertile field remains to be worked in India. We enjoy unique opportunities of investigation, and our inquiries, if they are rightly directand carefully planned, will, I am convinced. prove of the highest value to the student of education. What we need is a strong Faculty of Education, separate altogether from the Government Training Colleges containing on its staff graduates who have been trained at College, Columbia University, or Teachers' in London Day Training College. The need for a Research Department of Education is all the greater, as this province has taken the lead in the movement for educational reconstruction, and needs the expert advice of a body of people who have devoted their lives to the investigation of such

problems. The Faculty should be attached to a University. and should be completely free from Government control. could organise educational surveys in this province, and collect data that are absolutely essential to the organisation of of free, elementary education. It could synthesise the activities of the Department of Education and a policy that will be consistent in its aim. We are so burdened by various educational bodies, with independent powers, that there is a real danger of our activities being frittered away either in mutual wranglings, or squandered on badly conceived and badly prepared schemes. The need for educational research is more to-day than it was before the War, and I hope adequate facilities will now be afforded to the teachers for its prosecution.

Gentlemen, I will conclude my survey of secondary education by pointing out the necessity of the reconsideration of the relation of the Intermediate Colleges to university and primary education. To me it is a fact of the utmost significance that the Government have agreed to the appointment of the Agra University Committee. This may lead to the reconsideration of the entire sytem of secondary and university education, or it may not; but one thing is plain, and it is this, that the present position of secondary education cannot be maintained for a long time. It needs close and careful scrutiny; it demands vigilant care on the part of those who are keenly desirous of expanding primary education, and are as keen on maintaining the standard of our University education. can no more separate secondary education from other types of instruction, than you can separate ether from space. This seems to me to have been the fundamental mistake of the Sadler Commission. They constructed an admirable framework for secondary education; they elaborated excellent schemes for the reform and reorganisation of University education; and they formulated proposals for the administration of

education that have exercised, and will continue to exercise, profound influence on the educational policy of India. No praise could be too high, no reward too great, for that work of devotion and zeal.

The Middle Class. Its place in New India.

But they entirely ignored the importance of elementary education in democratic India. It is no doubt true that they were sent to report and make recommendations on University education in Bengal; but their elaborate reports and recommendations on secondary education did not come within their terms of reference. It may be admitted that the question bi university education could not be discussed apart from that of secondary education; but by the same process of reasoning it follows that the question of secondary education was not really susceptible of solution until a thorough inquiry had been made into the problems of elementary education. Their investigations into secondary education logically involved inquiry into elementary education, for the two are organically connected, and it is only by a process of imagination, or force of tradition, that we can separate the two. Yet, the imposing edifice erected by the patient labour of the Commissioners crumbles to pieces when the innumerable, complex and intensely important problems of elementary education are studied. That they should have remained oblivious of its importance at a time when India was marching on the road to freedom can be explained only on the hypothesis that they were distrustful of the effects of elementary education on the Indian masses. Indeed, their policy comes out in the following unguarded sentence: "A general system of primary education, if it were wisely adapted to the real needs of life and livelihood, and were not merely thrown like an explosive into the vast magazine of Indian life, might be welcomed without reserve". Compare this conception of the function of education in a civilised state with that held and developed in America or Germany.

The Masses.

The famous French writer La Bruyére gave the following account of the French peasant in 1689: "Certain savagelooking beings, male and female, are seen in the country, black, livid and sunburnt, and belonging to the soil which they dig and grub with invincible stubbornness. seem capable of articulation, and when they stand erect, they display human lineaments. They are, in fact, men. They retire at night into their dens where they live on black bread, water and roots. They spare other human beings the trouble of sowing, ploughing, and harvesting, and thus should not be in want of bread they have planted." This account of the French peasant may be mutatis mutandis to that of the Indian Examine the returns of prices; compare the cost of the barest necessaries of life; discuss with the peasant the hardships to which he is subjected, and you will find the depth of the misery of the people.

The Human Scapegoats.

In Plutarch's native town of Chaeronea, in ancient Greece, a curious ceremony was performed by the Chief Magistrate at the Town Hall, and by each householder at his own home. It was called the expulsion of hunger. "A slave was beaten with rods of the agnus castus, and turned out of doors with the words, 'Out with hunger, and in with wealth and health.' The custom of the scapegoat took a darker form in civilised Greece than the innocent rite over which the pious Plutarch presided. Whenever Marseilles, one of the busiest and most brilliant of Greek colonies, was ravaged by a plague, a man of the poorer classes used to offer himself as a scapegoat. For a whole year he was maintained at the public expense, being

fed on choice and pure food. At the expiry of the year he was dressed in sacred garments, decked with holy branches and led through the whole city, while prayers were uttered that all the evils of the people might fall on his head. He was then cast out of the city, or stoned to death by the people outside of the walls. The Athenians regularly maintained a number of degraded and useless beings at the public expense; and when any calamity, such as plague, drought, or famine befell the city, they sacrificed two of these outcastes as scapegoats. One of the victims was sacrificed for men, and the other for women.

We do not treat our scapegoats in the same manner as the ancient Greeks did. They are certainly never sacrificed literally; though in times of famine, there is physical sacrifice. Sacrifice of the type employed by the Greeks seems to be disapproved by modern society, though Dean Swift pointed out in his own inimitable manner other methods for the accomplishment of this end. But intellectual sacrifice there undoubtedly is, and we of the middle class ought to show our practical sympathy with the people in its tribulations, and try to raise the level of intelligence of the masses, by contributing equitably to the expenses of elementary education. For our human scapegoats are not confined to one or two persons. They are spread over the length and breadth of our land; and there is nothing before their eyes, but an endless, hopeless prospect of new flights of birds of prey and passage, with appetites continually renewing for a food that is continually wasting. Their prey is lodged in secure places, and their cries are given to seas and winds, to be blown up, in every breaking up of the moonsoon, over a remote and unhearing ocean. Will they, at the present stage of India's political development, bless the just and punctual hand that has torn the cloth from the loom, or wrested the scanty portion of rice and salt, or wrung from them the very opium in which they forget their oppressions and their oppressors.

The Middle Class.

After having vainly resisted the extension of franchise, to the working men of English cities, Robert Lowe avenged himself for his defeat by the sarcastic sally, "Now we shall have to educate our masters." This remark requires, however, another as its complement, "Now we shall have to educate ourselves," for the class above the dabourers and artisans is still remarkably ignorant. Everywhere the middle class exhibits complete indifference to the public weal; everywhere, and from the outset, as soon as they have come into power, they have held aloof. Disraeli's violent and well-founded reproaches addressed, in his Young England period, to the English middle class, which had just been admitted to the parliamentary franchise, bring out this feeling vividly enough.

In India, however, the middle class has acted on a different principle. Instead of avoiding power, it has eagerly sought it. Instead of shrinking from the responsibility of office it has been foremost in demanding it.

We are informed that in ancient Rome every year on the fourteenth of March a man clad in skins was led in procession through the streets of Rome, beaten with long white rods, and driven out of the city. He was called Manurius Veturius, that is, "old Mars", and the ceremony took place on the day preceding the first full moon of the old Roman year which began on the first of March.

Matthew Arnold was fond of dividing English society into three classes—the upper or aristocratic class, the middle class, and the lower class. The first he playfully characterised as Barbarians, the second as Philistines, and the third as the Populace. While he recognised some compensation for the lack of ideas in the tone of manners and in the public services of the country, and some corrective for the peculiar vices of democracy in its openness of mind and accessibility to ideas, he reserved for the middle class his

severest invective and his most humorous criticism. What he said of the English middle class may, mutatis mutandis, be applied to ourselves. "It was full of narrowness, full of prejudices, with a defective type of religion, a narrow range of intellect and knowledge, a stunted sense of beauty, a low standard of manners, and averse, moreover, to whatever may disturb it in its vulgarity." The typical Philistine never admires or even knows what is best in literature, but only that which is flimsy and ephemeral; who likes tea parties, and Bands of Hope, and unctuous prayers, and who "has a morbid hankering after marriage with his deceased wife's sister." "Those who wait on the Lord", says Isiah, in words not less true than they are noble, "shall renew their strength," and the Indian middle class owes to its religion not only comfort in the past, but also a vast latent store of unworn life and strength for future progress. If we are deficient in the graces, the accomplishments, and the tastes which are the product of a high and generous education, it ought at least to be remembered that the means of obtaining these were deliberately placed out of our reach.

The darker side of the picture.

There is, however, a darker side to the picture. I have already referred to the enormous disproportion between expenditure on secondary and higher education and primary education. The Legislative Council has just sanctioned the estimates of the Education Department. And what do they come to? What proportion does the expenditure on primary education bear to that on higher and secondary education? The estimate for primary education comes to, roughly, 70½ lakhs. The amount spent on University and secondary education comes to about 76 lakhs. In other words, the state spends more on University and secondary education than on elementary education. I do not say that the

amount is not needed by the Universities or secondary schools. They need as much as, and more than, they can get. But the essential duty of the state—its fundamental duty—is to provide facilities for the extension of primary education, and every citizen has a right to free education for his children in return for the heavy dues he pays to the state. This is an elementary rule of such wide application, and so deep a significance, that only the Venetian oligarchy, or the Byzantine officialdom, could perpetrate it. Yet here we are in the twentieth century, giving doles to the right, and doles to the left, and doles everywhere, and expecting free primary education to shoot up over the entire surface of this land, on some fine morning. Like tree-spirits in general, Attis, the god of creation, was thought to wield power over the fields of the earth. Our modern Attis exercises this power in a different manner, and for a different purpose.

Our attitude towards this policy.

To me, the only solution of this difficulty is a bold, and clear enunciation of a principle by the State-I hate the word Government which implies anarchy plus the policeman with a big truncheon-whereby it takes over the entire work of expanding primary education in our provinces and organises effective measures for its extension. There is reason to fear that vested interests will prove When, plans serious obstacle to our however. we consider the opposition which the early educational reformers encountered in England—the agitation in favour of compulsory education started in 1820, in England, and it was not till 1870 that the first Act in favour of it was passed—when we study the difficulties experienced by a host of pioneers of education in America, we may take comfort from the fact that our work is not likely to remain fruitless, for public conscience is already roused, and I can

hear faint murmurings from a class that has remained strangely inarticulate so far.

Universities.

Until the middle of the nineteenth century England had been content with two universities, mainly fed from schools founded by private enterprise and maintained out of public funds. The universities represented the land. the Church and the professions, and had not succeeded in establishing contact with the new population which had grown up in the industrial centres of the North. It was rare at that time for an Oxford or Cambridge man to go There had been no University schools of into business. engineering, of industrial chemistry, or agriculture, or metallurgy: and studies more germane to a good general education. such as economics, history, and modern literature had held a subordinate place. But great changes had come over the educational world, and the Acts of 1902 and 1918 had entirely transformed the system of education in England. Another important fact to bear in mind is that, until comparatively recent times, in opposition to the practice of America, France and Germany, the University fabric had been built upon private enterprise, and it was the weak provincial universities that had sought state support. The ideal of University education propounded by Mr. Fisher is remarkable. From the point of view of the state, the Universities of the United Kingdom and of Ireland form a single body, furnishing a crop of workers upon whose researches, in the main, the advance of higher knowledge must depend.

The most important question at the present time is one of co-ordination of University work, and it is upon the solution of this problem that the expansion of primary education, and maintenance of our University standards depend. They could not all do everything; they should not all attempt

to do the same things. In the sphere of science at least, where the cost was highest, and expansion most rapid, there should be some differentiation of functions among universities, if men and money were not to be squandered, and if the nation were to derive the best advantage from its utility. How much should be common to all, how much peculiar to each or few, would be best left to the joint forces of tradition, local circumstances, mutual agreement and the discriminating agency of the state. As research becomes more expensive, the need for some division becomes more obvious, and the share of state-grants in bringing that about would be increasingly prominent. For some years past, English universities had been developing special lines of study suggested by local or industrial conditions, or by some accident of tradition, or of local genius. Thus the Liverpool University had specialised in tropical medicine, Leeds University in textiles. Sheffield in metallurgy, Cambridge and Reading in agriculture, while Oxford remained par excellence the principal centre of classical studies.

The multiplication of Universities.

The policy of multiplying universities does not in itself imply any change in the standard of University teaching, since, as pointed out by Mr. Richey, the great majority of students have in the past been wholly dependent on their college for their education, and have in fact had no relation with the University except attendance at its examinations. Provided that the new universities maintain in their courses and examinations standards at least as high as those maintained by the older institutions, then the multiplication of universities must be wholly in the interest of education and research in India. I am, of course, discussing this question, from a purely academic standpoint, and not from a financial standpoint. Financially, the multiplication of new universities is bound to affect secondary and elementary education, for

the amount earmarked for the latter will be diverted to the University account. So far, however, as advancement of research and higher studies is concerned, the multiplication of universities does not necessarily involve lowering of standard. For in Canada, with a population of 8,788,483, there were, in 1921, 23 universities with an attendance of 34,720 students, of whom 9,000 were women. In Australia which has a population of about $5\frac{1}{2}$ millions, there are half a dozen universities with total enrolment of 9,000 students. In South Africa, with a colonial population of only one and a half millions, there are four universities with some 3,000 students.

Differences in University Standards.

It cannot be denied, however, that the multiplication of universities may-I do not say, it necessarily does-lead to the lowering of University standards. No one would desire to see any differences recognised in the value of degrees conferred by different Indian universities. But the pressure of competition may result in the lowering of standards, and it is significant that there is already a tendency in Bihar and Orissa for students to migrate the belief that the requirements of Calcutta in to exacting than those the Calcutta University are less of Patna. I myself have met several students who have migrated from these provinces to Calcutta, passed the examinations of the University with facility. Indeed, one could quote many examples of students who migrated from one University to the other. I am not opposed to the migration of students per se, as I believe the greater the exchange of teachers and students among the different universities, the better it would be for the province. Still, if migration is regular and persistent; if the percentage of passes in the University is unusually high; if the standards of the papers set and the courses prescribed are comparatively low. there seems a prima facie ground for supposing that the

pressure of competition has led to the lowering of standards. There may, however, be other causes at work, for the institutions of a new type of University may raise the standard of teaching to such an extent as to enable the majority of students to pass their examinations with facility. I am, therefore, opposed to laying down hard and fast rules regarding the maintenance of University standards. believe that a University which follows the line of the least resistance, and makes its degrees as worthless as the degrees of some American universities, will be so discredited in the world of culture, and the economic value of its degree will be so slight, "that its currency will, like the German marks, or the French assignats, not be worth the paper it is written on. Indeed, the policy of selling cheap and nasty articles, succeeds no more in the world of commerce, than in the world of education; and it is the perception of this fact that has led to the insistence by educationists on the necessity of maintaining the highest standard in University instruction. It would be most unfortunate if in India, as in the United States of America, a degree ceased to possess any intrinsic value, and was dependent for recognition on the status and reputation of the particular University by which it had been conferred. The mischief, however, does not stop here. As Mr. Fisher put it, "the universities have stamped themselves on the conscience of the nation," and the fact that the State had become aware of the value of the University as an integral constituent of national power, acquired more and more significance, the longer it was contemplated; and if the State, which was nothing but the organised public conscience of the community, was serious about education and research, and about the place which the universities should take in the promotion of these objects, then the universities would be drawn into the movement, not so much by external force as by the suction of a great

current running through their own lives as well through the life of the nation.

Freedom of Teaching.

The lowering of University standards would paralyse research, vitally affect the secondary schools of the province. and dissolve that union between scholarship and teaching. which it is the aim of every University to foster. Freedom of teaching is the prerogative of every University; and freedom of . teaching is intimately connected with intellectual freedom. "The German University," wrote Stanley Hall more than a decade ago, "is to-day the freest spot on the earth. All the old forms and laws of belief men had lived by were upturned, and every possibility of thought was explored in quest of the new, deeper more ineluctable foundations. But the most perfect liberty was more triumphantly vindicated by its fruits than amidst ลไไ this ferment. While weak men have through a period of confusion, and perhaps some have grown indifferent and sterile, strong natures have only struck deeper root." It is no longer, as formerly, the function of the University teacher to hand down a body of truths established by authorities, but to search after scientific knowledge by investigation, and to teach his hearers to do the same. For the academic teacher and his hearer there can be no prescribed and no proscribed thoughts. There is only one reason for instruction; to justify the truth of one's teaching by reason and facts. There is, of course, the danger that what is untenable, strange, and absurd may also claim acceptance. Paulsen cites examples of such dangers, but India has supplied supreme examples of devotion to truth in the past, and modern Indian universities will not. I am convinced, lag behind their predecessors. For freedom and danger can not be separated, and we must be prepared to pay, and pay cheerfully, the price for

freedom of teaching. Helmholtz once pointed out how important it was that all fields of scientific research be surrounded with an atmosphere of free thought, in which alone men might have the courage to strike out new paths to new discoveries in the land of truth. He showed that Germany won the leadership in the study of organic nature, in physiology and medicine, for other reasons than the indefatigable industry of the German scholar and his strong idealistic bent. "The crucial point is that we are more fearless of the consequences of the whole truth than any other people. In England and in France, too, there are distinguished thinkers capable of working with their full strength in the spirit of the natural scientific method, but thus far they have almost always been compelled to yield to social and ecclesiastical prejudices, and have not been able to express their convictions openly, without endangering their social influence and their efficiency." This passage brings out vividly enough those qualities which made the German teaching universities the best training grounds of human intellect in the world.

The work of the University for the state.

The historian of German universities, point out that the love which the German people inspires abroad is in a great measure due to the universities. This statement is substantially correct, and the union of Germany, and with it the foundation of the German Empire, would have been impossible without the patient labour, and burning zeal of the German universities. They may, in fact, be regarded at this epoch as luminous points in the dense darkness of feudal aristocracy. The principles enunciated by Von Humboldt at the beginning of the nineteenth century are as true to-day as they were at that period. "The State should not look to the universities for anything that directly concerns its own interests, but should rather cherish a conviction that in fufilling their real function, they will not only serve its purposes but serve them on an

infinitely higher plane.....affording room to set in motion much more efficient springs and forces than are at the disposal of the State itself." The universities must never forget that the things which they are called upon to cultivate transcend the boundaries of countries and nations. It is in the national task of educating the public conscience of our country that Indian universities have proved so deficient. Goethe's words that the man in action is always without conscience are doubtless true of the man of political action. He is not working for his own good, but for the good of the whole; and what is not allowable to attain this end? We need consequently a tribunal that is not called upon to act, but represents and emphasises the moral judgement. In Germany the universities have taken up this work. Engaged in contemplation, they are less exposed to the temptation of power, to partisanship and party hatred, and for that reason it is their mission to measure the acts of power by the ideal. At a momentous period of it history, the German University proved true to its vocation to be the conscience of the country. J. Grimm's account of the work of the German universities is so apposite, that I take the liberty of reproducing it here: "So long as their sterling and excellent organisation remains what it is, the German universities will be extremely sensitive to everything good or bad that happens in the country. were otherwise, they would cease to serve their purpose. frank and healthy minds of the young demand that their teachers shall at all times reduce every question concerning important relations of life and the state to their purest and most moral terms, and shall answer them openly and honestly. hypocrisy is impossible, and the influence of right and virtue upon the unbiassed minds of the hearers is so strong that they instinctively submit to it, and are disgusted by every kind of perversion. It is impossible to keep from them one's independent teaching, fettered by inner conviction alone concerning the nature, conditions and consequences of good Government,"

The function of the University teacher.

What then is the function of the University teacher? He is both a scholar or scientific investigator, and a teacher of knowledge. For the University is both an academy and a higher institution of learning. By academy is meant an institution having as its object the extension of scientific knowledge and the organisation of scientific labour. It is accordingly the ideal of the University teacher, on the one hand, to be an original thinker, and a productive investigator within his particular field; and on the other hand, to inculcate in the minds of his pupils the scientific spirit, and to teach the most gifted ones among them to take part in the work. is really by their capacity for organising researches in the most abstruse branches of science, their methodical, patient and exact methods, and the scrupulous care they take in testing their theories, that the worth of German universities is to be estimated. The essential difference lies rather in spirit and in intellectual outlook, than in forms of organisation. As Sir Michael Sadler points out, "The German University has invented a larger measure of the spirit of scientific investigation than, in spite of the immense change which has come over this country during the last thirty years, has vet descended on the English."

Some drawbacks of the new Universities.

At the risk of being regarded as a pessimist, I assert that the prospects of the organisation of research in this province are getting more remote every day. I have no quarrel with those who repeat, parrot-like, the formula of a "teaching, unitary and residential University." This is one of the most important functions of a University, and University teaching in India still needs considerable reform. The tutorial system must be extended to every department of the University; proper facilities should be provided for the practical work of the students; the size of the classes should

be reduced to reasonable proportions; conditions of student's life should be improved; and greater attention should be devoted to the corporate life of the University. The old college played an admirable part in the development of the character of the students, and my firm conviction is that that place has been taken neither by the Departments nor by the hostels. afforded a number of centres of educational initiative in matters of learning, instruction, and the welfare of the students. Another serious defect of the present system of organisation of University work is its tendency to ignore the claims of The conception of a teaching University does research. not exclude the possibility of systematic research on the part of its members. In fact, it will be easy to show that historically only a teaching University has been able to foster Still, there is a tendency at the present time to emphasise the claims of teaching to the exclusion of the claims of research. The University can flourish only if it is a seat of learning as well as a school for undergraduates. Its teachers must be men of learning, absorbing and utilising, by steady research, the new material which constantly becomes available throughout the field of knowledge, and themselves contributing to the supply of such material, according to their abilities. As the Report of the Royal Commission on Oxford and Cambridge puts it, "In the absence of research, teaching itself must inevitably lose both solidity and freshness, and must become fatally impoverished in all its branches." What is needed at the present time is the institution of Post-graduate Departments in selected subjects in the univesities of Allahabad and Lucknow. It is impossible for each Department of every University to organise researches in its subjects. The system is educationally unsound, and financially wasteful. Provision will of course, have to be made for the teaching of the ordinary subjects of University instruction up to the M. A. and M. Sc. Degrees in both the universities. After this stage, the need for specialization by a University is essential

I suggest that it may be possible to select a few for the advanced study of which special arrangements could be made in the two universities. Allahabad may be allotted two or three subjects in which it could specialise, and for which ample provision could be guaranteed by the Government; while Lucknow could also choose the subjects in which it offered special facilities for research. For the organisation of effective work, liberal provision is absolutely essential, and if this arrangement is effected, it would avoid that duplication, and pseudo-research which are the characteristic contribution of some of the Departments. Excellent work is being done by some of the Departments, and their investihave proved of the highest value to scholars. Co-ordination does not imply loss of individuality on the part of any institution. Again, they are dealing not with mechanical but with human organisations, and no scheme can in practice produce satisfactory results unless it secures the hearty and harmonious co-operation of those who are to work it. Nor does it imply the concentration of science teaching in one University, and of Arts in the other. A "University of Science" or a "University of Hunanities" would be about as effective as a University of culinary art. Coordination, to me, means the effective organisation of our resources for the attainment of a specific end.

Rural Schools.

The need for the organisation of rural schools is increasingly felt in this province. It is not desirable that what is known as technical instruction in agriculture should be taught in these schools, but an impetus should be given to the minds of boys who intend to take up an educational career. The most powerful factor in the rural regeneration of Denmark, and Finland, and, to a certain extent, of Norway and Sweden, has been the type of school originating in, and developing from, the first Danish Folk

High Schools. They came into being when the nation was politically distracted and in sore need of a healing and unifying influence. They afforded an opportunity for the educated classes to give the best they had in them for their country. According to the statement of a typical school, "The purpose of the school is to awaken a craft interest, to give agricultural education,-adapted to local circumstances, and particularly referred to the needs of small holders,—which will make it possible for the agriculturist who is practically trained to pursue a rational, intensive, and especially an independent cultivation." The Punjab has taken the lead in providing facilities for practical training Efforts have been made to introduce agri-'agriculture culture into the Middle Vernacular schools, and their popularity among the agricultural classes testifies to their utility. In my opinion, the success of all of our schemes of educational reconstruction will depend ultimately upon organising really efficient training in the ordinary schools of the province. A beginning has been made in this province, but the progress is extremely slow. What we need is short summer courses for rural teachers held at various agricultural centres. Here they should follow a course, extending to six weeks, designed to teach them something of the principles underlying the growth and development of the plant and the animal. Special grants should be given by the Department to the local authorities for the purpose, and they might well imitate the system in England whereby agricultural education of a farm institute-type might be provided by local authorities. Instruction of a farm institute type might be given at a permanent residential institution, or by means of organised courses at different centres in the area.

The place of the Teacher in New India.

From the discussion of the technical side of our craft, I now turn to the professional side. The growth of interest in

education has led to a greater appreciation of the work of the teacher.

He is the pivot round which the whole system revolves, and upon his work, his initiative, and his industry, the success of all the educational schemes of this province depends. The amount of power the teachers can wield in the organisation of our community is enormous. The two instances of Japan and Germany are conclusive evidence of the tremendous influence exercised by the schoolmaster in his generation. This all-conquering power is the education of the young. Benjamin Kidd expresses this idea, in his crude, doctrinaire way, "The stupendous potentiality of civilisation, as distinct from barbarism, consists in its cultural or collective heredity imposed on the generation under suitable conditions. The most important element in this, viz., the idealism of mind and spirit conveyed to the young of each generation, under the influence of social passion, is absolutely limitless in its effect. The power which is represented thereby is capable of creating a new world in the life-time of a generation." Hence, an ideal backed by a social passion can be impressed upon the young in a single generation.

The status of a Teacher in European countries.

Let me compare the position of the secondary school teacher in Germany and France, and explain the enormous differences in outlook, status and salary from their brethren The German India. teacher enjoys security of tenure, and may only be removed from office verv grave cause. He is a member of the civil a definitely recognised position in the service, and has He enjoys, in addition to a graduated social scale. salary, the use of a house or compensation for rent, and the prospect of a pension. The salaries, though generous, are sufficient to provide him with

amenities of life. In France, the secondary school teacher have an open career for ambition, and a high professional and social status. Moreover, they have independence and security. Their salaries are substantial, and they are entitled to a pension at sixty, after thirty years' service, equal to two-thirds of the average salary received during the last six years. Only five per cent of their salary is paid towards the pension; and, if incapacitated by infirmities resulting from exercise of duties, a master is pensionable at fifty, after twenty years' service. Provision on a liberal scale is made for widows and orphans, the amount varying between one-third for normal cases, to two-thirds for special cases, of what the husband's pension has been or would have been.

The United States is well-known for the poor sarlaries its elementary teachers receive in various states. Carpenters in the United States receive an annual wage of 802 dollars, coal miners 600 dollars, factory workers 550, and labourers 513 dollars. What does the elementary school teacher get? During the part of the year he is employed—and this rarely exceeds 200 days in the year—he gets on an average 485 dollars. It must be remembered that in many of the states the period of employment represents but a small part of the year, and many of the teachers resort to other employments during the remaining time. What is the result of this niggardly policy? The inevitable result is that teachers do not remain long in the rural schools. There is a constant migration, particularly of good teachers from the rural schools, to the city.

The School teacher in England.

The position of the school teachers in England before the War was not by any means enviable. Unless he happened to be a master in a Public School, or a good Grammar School, the secondary teacher received a miserable reward for his

services. Indeed, it was only with great difficulty that he could keep on the garb of respectability. The salary he received was barely sufficient for his needs and it was a heartrending sight to see "black-coated", trim, respectable-looking secondary school teachers trudging proudly to the school. The elementary school teacher had attained a better Thanks to his discipline, his power of organadd, to his submissiveness, he me isation, and let succeeded in extorting really valuable privileges from the close-fisted, contentious, and pugnacious councillors. This is due of course, to the tremendous power exercised by the National Union of Teachers. That body had a very humble beginning and had to fight a succession of local authorities, with all the resources-and they means large—at its command. But the were by no spirit of self-sacrifice displayed by its members, the organising capacity and power of leadership exhibited on numerous occasions by its officers, ultimately led to victory. supremacy is now unchallenged, and it exercises general supervision over a number of smaller Associations, created chiefly for the purpose of safeguarding the privileges of a particular locality. The best example of such an Association is the London Teachers' Association, which contained more than 20,000 teachers on its rolls, organised numerous meetings, demonstrations, and even strikes during the period of struggle, 1917-18.

Recent developments in English education.

In April 1917, Mr. Fisher introduced the Education Estimates for the year in the House of Commons, and called attention to the urgent need of increasing the salaries of teachers. He gave figures to show how low the salaries were in the various grades, and he asked the House to sanction an additional grant for elementary education of not less than £3,420,000, framed upon a

principle which would give a direct interest to the local authorities to enact liberal salary scales. One of the great events in the educational history of 1918 was the placing upon the statute book of the School Teachers' (Superannuation) Act. This Act placed teachers same footing as regards pension as Civil Servants, thus for the first time, gave formal recognition to the fact that teachers were performing functions analogous in importance from the civil point of view to the function performed by the Civil Service. The scheme was a non-contributory one, no contribution being required from the teachers. It provided that teachers who had been employed not less than 30 years in a recognised or qualifying service should eligible for pension at the age of 60. It must be noted that the previous Acts had made no provision for pension. The Act provided in generous terms for the payment of superannuation allowances, and sanctioned lump sums for teachers who were compelled by ill-health to give up teaching before they had reached the normal age of retirement. The lump sum constituted a form of life insurance policy. Another vital point must be noticed. The Act was not a scheme for the superannuation of elementary school teachers only, but for all teachers, below University rank, whether in elementary, secondary or technical schools, provided they were recognised by the Board. Another important departure from previous policy was the establishment of Burnham scale of salaries. These scales were drawn up on most generous lines, and all classes of teachers benefited by this.

Ladies and gentlemen, I will not take up your time with a description of the effects of these measures. Suffice it to say, that they have completely altered the status of the teacher in England. He now occupies a recognised place in the national system of English education, and his zeal and devotion to the state are as conspicuous as his sturdy independence, and capacity for discipline.

The lot of the Indian school teacher.

Contrast the position of the English teacher, with his strong Association, his generous pay and his liberal pension with the unorganised, poor, almost inarticulate teacher in a non-Government Indian school. His tenure is precarious in the extreme; he rarely enjoys a decent pension; bonuses are unknown, while the delusive gipsy promises of a rise in salary, and recognition of services rendered are no more binding than many a pledge sworn on oath and backed by all the ties of mutual interest. Does not this attitude produce something ignoble and inglorious? a kind of meanness in all the prevalent policy? a tendency in all that is done to lower, along with individuals, all the dignity and importance of our profession? We teachers are proverbially silent, quiet and shy. and it is only after considerable reluctance that we have decided to put forward our reasonable, legitimate, moderate claims for improvement in our salary; for the institution of a pension scheme, and for our representation on various educational institutions of our province. Because half a dozen grass-hoppers under a fern make the field ring with their importunate chink, whilst thousands of great cattle chew the cud and are silent, pray do not imagine that those who make the noise are the only inhabitants of the field.

Our demands.

What do we need at the present time? Our demands are not unreasonable, nor are our claims unjust, and we are actuated in this course of action by the sincere belief that it is for the good of the children committed to our charge, and is beneficial to the country. We stand to-day for equality of educational opportunity, and we admit no social inequalities or poverty bars within the educational system. Our passport is capacity, and our chief care the efficiency of our educational system, and the maintenance of the welfare of our children

and youths. We must make it clear to the nation the danger of the continuance of the present policy, which seriously threatens the present standard of efficiency of the whole educational system of this country. We cannot conceive that the economic and social tradition of this province, a tradition for which no living man or woman is responsible, but which has been inherited by the present generation as a legacy from the past, is the best imaginable, either for this province or for India. Here we have a peasantry as quick-witted and intelligent and sturdy as any in Europe, splendid material for education, but condemned from a tender age to monotondous toil, and bleak ignorance, without any chance of education.

The teaching profession does not offer great rewards, but it is essential that teachers should be relieved from the burden of constant financial anxiety. It was useless to say that teaching was a vocation and that, given the real missionary spirit, the money was a matter of little importance.

We must organise, and organise effectively, vigorous campaign against the tendency to "dilution" in schools. We are, I think, the greatest offenders in this respect, and overlook the importance of maintaining the highest standards for admission to our profession. In the case of the skilled artisan, it is comparatively easy to determine whether the dilution lowers the quality of the work done. The results are there to be tested. We have the bricks before us; if they are well and truly laid, there is no more to be said. Far different it is with the boys' class-rooms. The boys may be as happy with the untrained teacher as they are with the trained. Nay, they are even a little more demonstratively cheerful. Does it follow, therefore, that all is well? Education suffers, and suffers disastrously.

If we wish to maintain the solidarity of our profession, if we desire to keep up the standard, and increase the prestige of our profession, we must set our face against the admission of persons who have not been properly educated. It is by this means that the sense of *espirit de corps* has been developed among the teachers of Europe and America; it is the lack of this that has disorganised the secondary teacher in India.

One effective means of realising this is the institution of the Teachers' Register. It is nearly ten years since the first council, under the chairman of Mr. Arthur Acland, completed the task of settling up the conditions under which admission to the Register could be obtained by approved persons, and the aim of Sir Robert Morant, "the larger and more general conception of the unification of the teaching profession," is nearer realisation. In 1917, 17, 752 applications were received, while in 1922, the total applications were 73, 359. Of this number 2,668 were refused. The public refuses confidence to the unqualified doctor or lawyer. Such recognition should also be withheld from the ill-equipped, unqualified teacher.

Need for organisation.

Gentlemen, we have a long and desperate fight before us. It is a great change that we want to bring about in the system of administration—a change by which the educational affairs of the people will be represented by the voice of the representatives of the teachers. What we need is action, leadership, and discipline. What we want is earnest, active, disinterested work for the cause, which is really the cause of our country. Temporary failures must not discourage us. Hopes deferred must not sicken us. We must pursue our course with that courage which inspires the soldiers in a forlorn hope with a heart for meeting any failure, conscious of our integrity and conscious of the nobleness of our purpose. And I call upon you to fight for your right, resolved not to be beaten. To doubt is to doubt the justice of our cause. To doubt is to doubt the honesty and sincerity of a great people, who are bound by

every obligation of duty to redeem their pledges. Let us then work not in sorrow, not in despondency, but in joyful assurance, and in the sure trust that our cause shall triumph, and our profession shall attain its rightful place in the social scale. Our ability to meet the situation will depend upon our spirit of comradeship, our spirit of unity, and our readiness to express these in and through a complete and effective The intrusion of sectional differences, and dissipation of our power in separate organisations, will bring disaster on our immediate fight, and destruction to the realisation of our professional status. I say to my brother teachers drop your exclusive dangerous sectionalism, and unite with a will and organise with determination. Our Association will grow greater in power, it will grow greater in influence. if the teachers of this province are roused out of their lethargy, and united into a band of enthusiastic, devoted fighters for the cause.

I believe that the hour has struck for a great educatoinal advance in this country. I believe that the people of this province are ready and willing bear any sacrifices for the cause of their children. I am convinced that this great people, which has led the way in all the movements of reform, is determined that justice is done to its teachers, and their rights safe-guarded. I believe that the years which follow will be marked by incessant and fruitful progress along the paths of promise, and any changes which we may succeed in accomplishing will only be the logical completion of a long series of quiet improvement, the work of devoted men, labouring unostentatiously to a common end, which has already been embodied in our practice. The field has been sown, the corn is ripening under the sun, and the time will come to reap the harvest.

I appeal to my brother teachers to rise to the occasion, and to show to the world that we are determined to tolerate

in-efficiency, disunion, and disorganisation no longer, and that we are resolved to keep up the fight until victory is assured. We must be allowed to participate on equal terms in the rights and responsibilities of this province with other sections of society. There is no land on earth which stands more in need of such service than ours. There is no province in India which contains nobler traditions of culture and public spirit, and loftier examples of art and religion, and it behoves us as inheritors of this legacy to illustrate them in our actions. is true that we are working under numerous difficulties; it is true that we are faced with a desperate struggle. But duty demands that we should face it. I do not doubt what your decision will be. I have never distrusted your instinct, or questioned your wisdom. For a time the needle of your judgment may quiver, but then it will settle and point the end steady to the polestar of hope.

SHAFAAT AHMAD KHAN.

REPORT

BY THE

Right Hon'ble V. S. Srinivasa Sastri, P.C.,

REGARDING HIS

Deputation to the Dominions of Australia, New Zealand and Canada.



SIMLA SUPERINTENDENT, GOVERNMENT CENTRAL PRESS 1929 Dated Madras, the 8th January 1923.

From-The RIGHT HON'BLE V. S. SRINIVASA SASTRI, P.C.,

To—The Secretary to the Government of India, Revenue and Agriculture
Department.,

Sir,

I have the honour to submit a report of my visit to the Dominions of Australia, New Zealand and Canada.

- 2. Accompanied by my Secretary-Mr. G. S. Bajpai, I.C.S.-I sailed by the S.S. 'Ormonde' from Colombo on May 22nd and arrived at Fremantle, the port of Western Australia on June 1st where I was received by the Acting Premier of the State, Mr. Colebatch and an official of the Prime Minister's Department, Mr. W. A. Smith, who was attached to me throughout the period of my stay in the Commonwealth. I sailed from Sydney for New Zealand on July the 6th and in the interval visited the capital of every State in the Commonwealth with the exception of Tasmania, to which, on account of the prevalent climatic conditions and the comparative insignificance of the resident Indian population, it was not considered desirable that I should proceed. Everywhere I was the recipient of the most generous hospitality from officials and non-officials, and nothing could exceed the warmth or sincerity of the welcome which was extended to me as a representative of the Government of India. arrangements made for my comfort by the Government of the Commonwealth were in every way satisfactory, and I should like to place on record my gratitude to Mr. W. A. Smith of the Prime Minister's Department whose aid was invaluable in the furtherance of my mission.
- 3. The primary object of my mission to Australia as well as to the other Dominions was to induce the respective Governments to give practical effect to the resolution of the Imperial Conference of 1921 which recognised "that there is an incongruity between the position of India as an equal member of the British Empire and the existence of disabilities upon British Indians lawfully domiciled in some parts of the Empire," and recommended that "in the interests of the solidarity of the British Commonwealth it was desirable that the rights of such Indians to citizenship should be recognised." I was further generally instructed to look into any other disabilities of Indians resident in Australia and to request the authorities concerned to remove them. Another duty was to enquire into the possibility of securing admission for Indian students into the various Australian Universities and to ascertain whether these bodies would be ready to arrange an interchange of professors and lecturers with Indian Universities as a step towards the establishment of a better understanding between India and Australia.
- 4. My method of enquiry in regard to the disabilities of domiciled Indians was to collect the fullest information from official sources as well as from representative Indians whom I met in the various capitals.

A list of these disabilities which Indians share with other Asiatics is given below:—

√(1) Disabilities in regard to political status.—

- (a) Franchise for and Membership of Parliaments.—
 Commonwealth.—An aboriginal native of Australia, Asia,
 Africa, or the Islands of the Pacific (except New Zealand)
 cannot be an elector for the Senate or the House of Representatives, unless he is entitled under the law of the State
 to vote at elections for the more numerous House of the
 Parliament of the State (Commonwealth Franchise Act,
 1902, section 3, and Constitution Act, 1901, section 41.)
- (b) Qucensland.—Indians as aboriginal natives of Asia are disqualified from membership of the Legislative Council and Legislative Assembly (Constitution Act, 1867) and from voting at elections for the Assembly (Elections Act, 1915, section 9). The Council which was the upper house has now been abolished in Queensland.
- (c) Western Australia.—Aboriginal natives of Australia, Asia or Africa may be registered as electors for the Council in respect of a freehold qualification but not for the Assembly (Constitution Acts: Amendment Act, 1899, sections 7, 15, 20: Electoral Act, 1907, sections 17, 18.)
- (2) Disabilities in regard to property.—All Asiatics are disqualified from obtaining leases of land in certain irrigation and reclaimed areas. (Irrigation and Reclaimed Lands Act, 1914, section 19.)
- (3) Disabilities in regard to employment and occupation.—
 - (a) Commonwealth.—Bounties under the various Bounties Act, 1907-1912, are payable only in respect of goods grown or produced by white labour.
 - (b) Queensland .-
 - (1) The Dairy Produce Act, 1920.
 - (2) The Béche-de-Mer Fishery Act, 1913.
 - (3) The Sugar Works Act, 1911.
 - (4) The Sugar Cultivation Act, 1913, and
 - (5) The Banana Industries Preservation Act, 1921, prohibit the employment in the various industries of persons who have not in the first instance obtained in the manner prescribed by the Acts a certificate that they are able to read and write from dictation not less than 50 words in the English language. In practice these Acts have the effect of excluding all Asatics from these trades or occupations.

- (c) Western Australia.—Miners' rights may not be issued to, nor may an interest therein be held by Asiatics or Africans, even though British subjects, without the Minister's approval. (Mining Act, 1904.)
- (4) Miscellaneous.—Commonwealth.—Indians are disqualified from receiving invalid and old-age pensions. Enquiry made from Indians further showed that some difficulty was encountered in the administration of passport regulations especially in regard to the admission of substitutes for resident Indians wishing to return temporarily to India.
- 5. Each one of these grievances I discussed with the authorities concerned, and the results of my negotiations in regard to them will be stated in separate paragraphs. Before proceeding to do this, however, it may be desirable to make a few general remarks on the distribution of the Indian population in the various States of the Commonwealth, their occupation and outlook and their social and economic conditions.
- 6. The total Indian population in the Commonwealth of Australia is approximately two thousand. Accurate figures as to the province-wise distribution of this population are not available, as the census authorities include in the enumeration Indians who happen to be in port on the day when the census is taken. From official and private enquiry, however, I was able to obtain the following approximate figures:—

Western Australia.	South Australia.	Victoria.	New South Wales.	Queens- land.	Tasmania.
300	200	400	700	300	100

Mohammadans predominate in all these States. Only a few Sikhs are to be found in New South Wales and Queensland. Statistics of occupation were not available; but I gathered that the majority were engaged in retail trade or in agricultural operations. Instances of success in these occupations are numerous, the most notable being those of one Mr. Bad Ullah from Sind who has settled in Western Australia and owns a large sheep station of 250,000 acres of land and 25,000 head of sheep, and a firm of Indian mercers, Messrs. Wassiamall Assamall who Melbourne and Sydney. Hourishing branches at all look prosperous and, even where economic prejudice operates to their detriment, the remuneration for manual labour for each man is seldom less than 12 shillings a day. Of social prejudice I saw little trace. A good many Indians have married Australian wives from whom they have children and live in harmony and friendship with their neighbours. I visited a few families and was assured by the wives that they suffered from no social disabilities.

7. The question of prejudice brings one to the so-called white Australia policy which is often interpreted to signify not merely the

determination of Australians to exclude Asiatics, but as an instrument of persecution for those Orientals who have taken up their residence in Australia. I have already alluded to the social relation in which the Indian community in Australia stand to their white neighbours. So far as the restrictive side of the policy in regard to emigration from abroad is concerned, it commands the support of an overwhelming majority, who look upon it as sacrosanct. Various causes have led to the crystalisation of the policy and the attitude of mind on which it is based. The sensitiveness and vigilance of both the Australian public and the Australian Press in this matter may be gathered from the fact that, in spite of repeated declarations that the Government of India stood by the reciprocity resolution of 1918 which concedes to each community of the Britannic Commonwealth the right to regulate the composition of its own population, my mission was to the end criticised in certain circles as an insidious attempt to seek a revision of the securing concessions which would make immigration to Australia attractive to Indians in the future. Though the criticism was confined to the circles in sympathy with labour views, it necessitated emphatic assurances on my part of the determination of the Government of India to abide by the reciprocity resolution of 1918. The result was evident in the consideration which I received at the hands of the various Governments and in the creation of an atmosphere generally favourable to the realisation of those objects for which the Government of India had deputed me to visit the Dominions. Had I shown the slightest disposition to throw doubt on the validity of the 1918 compact, the mission would have been foredoomed to failure.

- 8. In regard to the Commonwealth franchise I was informed by the legal advisers of the Commonwealth Government that the Commonwealth Election Act of 1902 creates a separate Commonwealth franchise, which cannot automatically follow from the conferring of the provincial franchise on any class of citizens on a date subsequent to the passing of the Act. This is the interpretation to which successive Attorneys General have adhered and, although it is not supported by judicial authority, it may be taken for all practical purposes as necessitating a special Act of the Federal Parliament to enfranchise those Indians who were not in enjoyment of the State franchise before the Act of 1902 became law. This was the view which I urged on the Commonwealth Government, and their attitude can best be indicated in the following words of the Prime Minister of Australia, Mr. Hughes.
- 9. "In regard to the franchise although I am not able to speak on this subject with such assurance and with such finality as on the old age pensions question (see paragraph 12 of Report) I do not hesitate to repeat in the plainest possible terms that you have brought within the range of practical politics a reform which but for your visit would have been most improbable, if not impossible, of achievement." A more definite promise was not possible in view of the political situation in Australia and the distribution of parties in the Parliament. Both at the parliamentary dinner given by the Government of the Commonwealth at which I pleaded for an early grant of the Dominion franchise to domiciled Indians, and at private interviews with Mr. Charlton, the

leader of the labour party and Dr. Page, the leader of the country party, I received assurances of sympathy and support, and I hope that this fundamental reform will be effected at no distant date. The desire to satisfy Indian aspirations in this respect is widespread and genuine. Its fruition may temporarily be retarded by political exigencies which are incidental to Parliamentary Government and cannot be prevented. Of course the electors of Australia would have to be reminded of the great importance attached in India to the franchise of the Dominions as a proof of her equal status and equal partnership in the Empire, and of the imperial significance which the problem acquires from that fact.

- 10. In Western Australia and Queensland where Indians do not enjoy the political suffrage in respect of elections to the Lower House, there is every reason to hope that the Governments concerned will follow the lead of the Dominion Cabinet. Without such lead the State authorities are reluctant to take the initiative, for reasons arising from the existence of sharply defined political parties.
- 11. The Government of South Australia promised to amend the Irrigation Act so as to render Indians eligible for leases of land under the Act. The disability in Western Australia as regards the acquisition of mining rights is not statutory but is remediable by the Minister in charge of mines, and I was assured by the Premier of the State that any future applications of Indians for such rights would be sympathetically considered.
- 12. During my stay in Brisbane the Government of Queensland resolved to remove the restrictions to which Indians engaged in the banana industry were subjected under the Act of 1921; the only other laws which affect them are the Sugar Cultivation Act of 1913 and to a smaller extent, the Dairy Produce Act. The Béche-de-Mer and other Statutes mentioned in paragraph 3 of this report have no practical bearing upon the Indian situation as there is hardly an Indian engaged in these industries. The amendment of the relevant Acts may be expected to follow the passing of legislation in the Commonwealth Parliament rendering Indians eligible for invalid and old-age pensions. Labour is always suspicious of measures of relief to oriental rivals, and the Labour Government of Queensland is naturally anxious to dispel apprehensions by giving to its remedial legislation the impress of a general policy adopted in deference to larger imperial interests. Commonwealth Government promised to introduce legislation to amend the present Invalid and Old-age Pensions Act at an early date. would confer a real benefit on the older Indians settled in the country who are devoid of personal resources and disabled from pursuing their normal vocations. The Bounties Acts were only in operation during the war and are no longer applicable. There is no need to seek for the amendment of what is already a dead letter.
- 13. Difficulties in regard to the entry of Indians into Australia arise in connection with—
 - (i) incomplete passports; and
 - (ii) the admission of substitutes.

It often happens that a person, wishing to go to Australia either to assist a relative or friend already there or in hope of getting an occupation with his help, obtains a passport describing him as a visitor, and being unable to satisfy the immigration authorities, finds himself in trouble. The Minister of the Interior, who administers the immigration regulations and with whom I discussed the question, informed me that, although the general practice about admitting substitutes was to confine the privilege to persons who came out to act for men engaged in promoting overseas wholesale trade between Australia and the Eastern countries, Indian substitutes were allowed to land if they came as substitutes for farmers, retail storckeepers or in some cases even for hawkers. that a substitute has to do is to obtain a bond in the sum of £100 and to accept the condition that he will leave Australia within three months of the return of the permanent resident to the Commonwealth. A similar condition is imposed on the resident to leave within three months of the arrival of the substitute. The attitude of the authorities seemed to me to be reasonable and the only action necessary would appear to be a closer scrutiny of passports issued by the Local Governments in India to persons proceeding to Australia to make sure that only bona fide substitutes get permits. Full information about the object of an applicant's visit and the probable duration of stay should be shown on the passport in order to eliminate such difficulties as individuals falling under the category of merchants, students and tourists might conceivably experience on landing in Australia.

14. In the Universities of Adelaide, Melbourne and Sydney, which are the best equipped and the most widely known, my request for the admission of Indian students was very favourably received. The accommodation in these Universities is limited owing to the pressure of indigenous students, but I have no doubt that the authorities would welcome the entry of suitable students from India in moderate numbers. A similar assurance was given me by the University of Perth. In Brisbane I saw for myself that the local demand leaves no room for outside students. The first three Universities would also be prepared to consider any reasonable proposal for the exchange of lecturers that might emanate from the Indian Universities.

15. The foregoing paragraphs briefly summarise the results of my visit to Australia. The promise of legislation to render Indians eligible for old-age pensions, the removal of disabilities in regard to employment in the banana industry in Queensland and the undertaking of the Government of South Australia to eliminate the only restriction on their statute book applicable to Indians, viz., exclusion from leases of Crown lands in the Murray region does not amount to a complete settlement of our differences with the Australian authorities, but it is a satisfactory index of the spirit in which the latter are prepared to give effect to the resolution of the Imperial Conference of 1921. Even more gratifying was the cordial sympathy manifested by all sections of the people to the requests which I made on behalf of the Government of India. The principle of equality of citizenship is now recognised as vital to the continuance of friendly relations between the various parts of the Empire, and there is a general disposition to concede equality in

view of the assurances that nothing will be done to disturb the policy of restricted emigration which the majority of Australians look upon as necessary to their economic safety and well-being. It is easy to underrate the effect of popular sympathy; but in democratic countries it is the only foundation on which a reform which has long been hindered by ignorance and prejudice can be based. The appeal to imperial solidarity, justice and fairplay on which I based my case evoked wide-spread response. Ere long it should help to consummate the aspiration which the Government and the people of India have so much at heart.

NEW ZEALAND.

I sailed from Sydney on the 6th of July and arrived in Wellington on the 11th. The Minister for the Interior, the Hon'ble David Stewart, and Mr. Hislop, Under-Secretary of State for Internal Affairs, received me on behalf of Government. As I was to leave for Vancouver or July the 25th it was decided to confine my visit to the North Island. During in stay I stayed for a week in Wellington, a couple of days in Rotarua, and the rest of the time in Auckland. The Government of New Zealand had made every arrangement for our comfort and both as decrone and official guide-Mr. Hislop who accompanied me everywhere in the Dominion was invaluable. The reception accorded by the civic authorities was also most generous and enthusiastic; while nothing could exceed the courtesy shown me by Their Excellencies the Governor-General and Lady Jellicoe. Everywhere I saw manifestations of sympathy for India and her people and a genuine desire to establish a friendly understanding between the two parts of the Empire by the removal of outstanding differences.

- 2. The resident Indians in the Dominion of New Zealand number between 550 and 600. Exact figures were unfortunately not forthcoming as the Census Department had not completed their report of the last census. The New Zealand Electoral Act gives franchise to all British subjects, and Indians, enjoy the privilege, just the same as other classes of His Majesty's subjects. Enquiry from Indians revealed the existence of two disabilities:—
 - (1) exclusion from the benefits of the Old-age Pensions Act; and
 - (2) difficulty of securing employment. I made representations on both subjects to the Government of New Zealand. As regards the former Mr. Massey's Cabinet informed me that there were no amendments proposed at present in the Act, but that when the time came to revise it, Government would consider my representations. In view of the fact that there are probably no Indians who fulfil the conditions regarding age required by the Act, and it is unlikely that any will be eligible for some years to come, no great hardship should result from the matter being allowed to stand over for the present. When the time comes, I have no doubt that the claims of Indians will receive a sympathetic consideration.

- 3. In this belief I am strengthened by the assurance given me by the Minister of Public Works that no Indians who could not find employment elsewhere would be provided with work by Government in order to enable them to earn a livelihood. In this connection it seems desirable to record an episode which reflects great credit on the Government of New Zealand. Some time ago a band of Indian labourers was employed on road construction, when white labourers refused to work with them. In this intransigent attitude they received the support of their union. The authorities declined to dismiss the Indians and their firm stand led to a collapse of the white strike. This instance is significant of the firmness and impartiality with which the Dominion of New Zealand administer their laws.
- 4. I was also at some pains to enquire into the causes which prevented Indians from securing employment. It will be idle to deny that in some cases colour prejudice is responsible for the result, but the prejudice is confined to a few, and so are the instances of unemployment among Indians. They do not enjoy the same degree of prosperity as their compatriots in Australia; but the explanation of this is to be sought not in any aggravated manifestations of prejudice as in a variety of causes wholly unconnected with racial animosity. The majority of Indians have not been long in the country and have yet to find their feet. Casual labour at a time when there is a general economic depression is a precarious source of livelihood. The revival of prosperity should improve their prospects. Such of them as have farms of their own are quite well to do.
- 5. In accordance with my instructions I made representations to the Government of New Zealand regarding the New Zealand Immigration Restrictions Amendment Act, 1920. Under the regulations framed under the Act it was provided:—
 - (1) that temporary permits for visits for the purpose of pleasure, education or commerce should be issued only for a period of six months or less, extensions being given for extraordinary reasons only, and
 - (2) the Government of New Zealand further suggested that the number of passports issued annually by the Government of India for temporary visits to New Zealand should be restricted in number, and that they should be issued only to people who had already arranged to leave New Zealand on the expiration of their temporary visits.

As a result of my negotiations the stipulation as to the number of permits or passports to be issued by the Government of India has been withdrawn, and it has also been agreed that such permits will in every necessary case be extended in order to enable a visitor to complete the purpose of his visit. The regulations further provide that Indians lawfully resident in New Zcaland can leave the country only for four years without loss of domicile. The Government of New Zealand have agreed to amend this regulation if it is found that the time fixed can be safely extended with due regard to the prevention of fraudulent use of old certificates.

6. So far as grievances remediable by legislation or appeals to individual official or public opinion are concerned, this exhausts the list. I should, however, like to dwell on one feature of the situation which -affects Indians both in Australia and New Zealand and which to my mind calls for immediate improvement. It is the absence of a co-ordinating and protecting agency which could help the Indian community to realise its existence as a corporate entity, and assist individual members of the community in combating difficulties which arise from day to day. Neither in Australia nor in New Zealand do Indians possess sufficient education to take care of themselves. They are scattered over a very wide area; they are drawn from various classes, and they lack the equipment for organised effort. The dominion authorities with the best will in the world cannot help them to overcome the shortcomings of defective education. If one of them wishes to secure a passage, there is difficulty with the shipping companies. If the authorities have to be approached regarding the admiss on of a substitute or a relation, there is difficulty owing to lack of mutual understanding. Most of these troubles are incidental to an imperfect knowledge of English and the strangeness of the environment in which they live. Its effect on the community as a whole is to paralyse unity of endeavour where the interests of all are The individual is similarly handicapped in the pursuit of his own vocation. Other countries provide the necessary aid to their nationals in the person of a Consular Officer. India maintains no such agency in the Dominions. Doubtless the Indian population both in Australia and New Zealand will, in future, probably be a dwindling factor, but this can of itself be no justification for a neglect of the interests of those who are there. From several quarters I received suggestions or requests that this deficiency should be supplied. Nothing could be of more effectual help to the Indian community in these distant lands, than the presence of a sympathetic and duly accredited representative of their country who was charged primarily with the duty of protecting their interests: nothing could better smooth over difficulties which must arise between Governments so far removed from one another as the Governments of the Dominions and of India. If a protector of Indians is appointed in Fiji, it might be possible to include the protection of Indian interests in New Zealand and Australia in his jurisdiction. If such an appointment be deferred, an alternative arrangement would seem to be to appoint an agent for the two Dominions; who might also combine with the duties of protector those of a Trade Commissioner if his work as protector does not occupy all his time. But some action to help our nationals in these countries seems to me to be essential.

CANADA.

I left Auckland on July the 25th and landed in Victoria, the capital of the province of British Columbia, on August the 11th. I was received on landing by Sir Joseph Pope, Under-Secretary of State for External Affairs, whom the Prime Minister of Canada had deputed to welcome me on behalf of his Government. Fortunately the Commissioner of Emigration for the Pacific Coast was in the town, and I was able to ascertain Le3RAD

from him the exact numbers and distribution of the Indian population in the Dominion. There are not more than 1,200 Indians in the whole of Canada to-day, and of these nearly 1,100 are Sikhs and are mainly to-be found in British Columbia. The remaining 100 are scattered overthe rest of the country, the majority being found in the provinces of Alberta and Saskatchewan. Compared with the pre-war figures which were in the neighbourhood of 6,000, there has been a very great decline in the Indian population, due partly to migration from Canada to the United States and partly to returns to India.

- 2. In British Columbia the majority of Indians resident are employed in the lumber trade as mill-owners, or operatives or carriers. Agriculture is the main occupation of the rest, although I found one or two in Toronto-following literary pursuits such as journalism or accounting. Very few Indians work as labourers for others. The labour representatives whom I met in Vancouver and other private individuals informed me that the-Indian is very industrious and steady and much in demand, and that consequently he commands sometimes even a higher wage than his European rival. In the circumstances it is only to be expected that the general level of prosperity of the Indian population in Canada should be high.
 - 3. In Canada I had to apply myself to three tasks, viz. :-
 - (i) to secure the federal franchise for such Indians as do not already enjoy it;
 - (ii) to obtain the provincial and municipal franchise for Indiansresident in British Columbia which is the only province that withholds these rights; and
 - (iii) to ascertain and ask for the removal of such other grievances asmight exist unknown to the Government of India.
- 4. Dominion franchise.—Under section 30 (1) (g) of the Dominion Elections Act persons, who by the laws of any province in Canada, are disqualified from voting for a member of the Legislative Assembly of such province in respect of race are not qualified to vote in such a province at elections to the Dominion House of Commons. That the disqualification is not absolute may be gathered from the provision included in the same sub-clause of the Act that the restriction shall not disqualify or render incompetent to vote any person who has served in the naval, military or air force of Canada in the late war. Other instances of the Dominion Parliament not strictly adhering to the provincial electoral qualifications: for the purposes of dominion franchise are not uncommon. For instance, in the year 1900 the legislature of the province of Manitoba passed an Act providing that persons not of British birth and not resident for more than seven years in the province could not be enrolled as voters. unless they could read certain clauses in the Act in one of the following: languages :---

English, French, German or any Scandinavian language.

This provision was intended to disfranchise Slav voters from the Ukraine, but the Dominion Parliament did not accept the disqualification

and admitted them to the federal franchise. Precedents thus exist to enable the Dominion authorities to take separate action in order to confer the right of vote at Dominion elections on Indians resident in British Columbia, even though the Government of that province cannot see its way to confer the provincial suffrage on them. This argument as well as the recommendation of the Imperial Conference of 1921 which was assented to by the representatives of Canada I placed before the Federal Cabinet in Ottawa in order to expedite legislation in the desired direction. I quote the following from the Prime Minister's reply:—

"I desire to assure you that at the earliest favourable moment, the Government will be pleased to invite the consideration of Parliament to your request that the natives of India resident in Canada be granted Dominion Parliamentary franchise on terms and conditions identical with those which govern the exercise of that right by the Canadian citizens generally."

From enquiry I ascertained that the present Electoral Act should come up for revision in the very near future and that the occasion will be suitable for recommending to Parliament the enfranchisement of Indians resident in British Columbia. The attitude of politicians and the public generally would be favourable to such a measure, primarily on its merits as a measure of justice and also on account of its beneficial influence on the relations of India and Canada. There may be some disposition in political quarters in British Columbia to oppose it, but there is no reason to anticipate that their objections would not yield to a rational presentment of the case in its broader aspect. At every public meeting which I addressed, I urged on my audience the need for approaching the question in an imperial and not a provincial spirit. Their response seemed to be of happy augury for the future.

5. In British Columbia itself I found every readiness on the part of the Local Government to admit the reasonableness of my request, but a reluctance to make any definite pledge in view of the prevalent opinion in the province. The economic rivalry between the white and non-white races in British Columbia is more acute than in any other part of the Indians do not share in the struggle to any appreciable extent as their numbers are comparatively insignificant, but the oriental element in the population of the Province composed of men from countries in the far East is considerable; and to those engaged in the task of earning their daily bread, racial distinctions are too intangible to provide a substantial basis for differentiation. The extent of popular prejudice may be gathered from the fact that last year a measure introduced in the legislative assembly of the province to confer the vote on those Asiatics who had served with the Canadian forces during the late war was defeated. such an atmosphere it is difficult to expect an immediate and auspicious initiative on the part of the provincial authorities. As Parliament was not sitting. I was unable to put my case before its members; but I spoke before several public audiences and also discussed the question of the franchise with representatives of labour organisations which are commonly supposed to be stronger in their opposition to claims of equality put forward on behalf of the Eastern races. The former were enthusiastic in their

response to my appeal for equitable and equal treatment of Indians; the latter authorised me to state to Government that they would not oppose to any measure of relief that the latter might decide to introduce. All the signs point to a softening of prejudice and a broadening of vision; but persistent effort would appear to be necessary for some time yet in order to complete the task of political education without which no change can be expected in a democratic country. In British Columbia I am not hopeful of immediate results; but of the ultimate success of continued endeavours I have little doubt.

6. The other difficulties of resident Indians, besides exclusion from the municipal franchise in British Columbia in regard to which the attitude of the Provincial Government is similar to their attitude in respect of the political franchise, are of a minor character. They arise out of applications for the admission of substitutes or children of relatives whom resident Indians wish to send to school in Canada, or from the rejection of applications for permission to return to India by Indians who entered Canada surreptitiously and are, therefore, not lawful residents. As regards the entry of substitutes there should be no difficulty in arriving at an arrangement similar to the one which exists in Australia. The admission of children not covered by the reciprocity resolution of 1918 presents some difficulty as the Department of Emigration do not feel sure that the privilege of introducing the children of relatives who merely wish to proceed to preparatory schools would not be abused. Once a child has been admitted. it is impossible for the Department to keep track of him or to compel his attendance at school; a loophole, it is feared, might thus be opened for the mportation of child labour. A solution might be found in the consideration of each application on its merits, and I have urged this on the Minister for consideration. Indians who enter the country by evading the law have no legal claim to be allowed to register out with a view to retaining their domicile if they wish to return to India for a short visit; but as the Canadian authorities have not exercised their right to eject such people, I pointed out that their de facto citizenship might now be treated as a de jure qualification for the granting of permits. The Minister has promised sympathetic consideration. As regards the entry of wives and children of resident Indians the Government of Canada are ready to administer the rules made under the reciprocity agreement of 1918 with the utmost sympathy and fidelity.

7. Reviewing the tour in the light of actual achievement and of prospective reform, I am glad that a deputation was sent to the Dominions. The constitutional importance to India of negotiating directly with the Dominions on matters of mutual interest through an accredited representative is too evident to need elaboration. What is less obvious is the educative value of such visits both for facilitating the realisation of the immediate objects in view and the promotion of a spirit of imperial solidarity. India has suffered in the past from lack of knowledge and of understanding. The progress made by her during the last 60 years is hardly known outside this country. The average citizen of a Dominion still regards India as a land of mixed poverty and splendour, barbaric in outlook and aspiration as well as in magnificence. He has had no

opportunity of meeting Indians of refinement and culture, without which it is impossible to dissipate the phantom of superiority born of an imperfect appreciation of Indian capacity. The incentive to active trade relations between India and the Dominions has also been lacking to promote the personal intercourse which is the best solvent of prejudice. The only means of securing better relations in the future is the promotion of such intercourse. Of the desire of the Dominions to understand India there can be no doubt. In the task of stimulating and satisfying this desire the educated people of India, no less than the Government, must do their full share.

Of the services of Mr. Bajpai as Secretary, I cannot write enough. To uncommon ability he adds uncommon industry and uncommon courtesy. It was a piece of good fortune to me that his services were available. I recommend them earnestly to the recognition of the Government of India.

I have the honour to be,

Sir,

Your most obedient servant, y. S. SRINIVASA SASTRI,