

Educational (190 4) Department.

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[Despatch Abstract.]

Board of Arts, Mysore.

Reading with remarks the report
on the working of the — for the
year 1903-1904.

BACK PAPERS.

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Government {1904} of Madras. EDUCATIONAL.

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ORIGINAL

G.O., No. 471, 2nd August 1904.

N. P.

AUGUST.

School of Arts, Madras.

Recording, with remarks, the report on the working of the — for the year 1903-1904.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

READ—the following paper:—

From the Hon'ble Mr. A. G. BOURNE, D.Sc., F.R.S., Director of Public Instruction, to the Secretary to Government, Educational Department, dated Madras, 23rd July 1904, Cur. No. 6312.

I have the honour to submit, for the information of Government, a copy of my proceedings, Dis. No. 4401, dated 1st instant, reviewing the report on the working of the School of Arts, Madras, for the year 1903-1904.

ENCLOSURE.

Proceedings of the Director of Public Instruction, Dis. No. 4401, dated 13th July 1904.

Read—the following letter from G. E. BRAND, Esq., Acting Superintendent, School of Arts, Madras, to the Director of Public Instruction, No. 138, dated 2nd May 1904.

I have the honour to submit the annual report of the School of Arts for the official year 1903-1904.

2. Mr. A. Chatterton held charge of the school during the year but was absent from Madras for 85 days in connection with the inspection of Technical schools and Pumping experiments. I rejoined the school from the Punjab on the 27th October 1903. Mr. J. W. Coombes, Weaving Assistant, was relieved on the 31st March 1904 to take up the duties of Deputy Superintendent, Chingleput Reformatory. The two assistants who were temporarily employed during my absence at Lahore left the school on my return, to take up appointments—one with the Indian Aluminium Company and the other as Superintendent of Technical School, Bezwada.

3. *Drawing.*—There were 317 pupils on the rolls of the school on the 31st March as compared with 316 on the same date of the previous year. The average daily attendance was 79 per cent. as against 75 in the previous year. All the pupils, with the exception of four who are specially exempted by the Director of Public Instruction, pay fees which amounted to Rs. 4,332 during the year, or Rs. 155 more than what was collected in the previous year.

The evening drawing classes were carried on as usual, the average number on the rolls and the average daily attendance being 12 and 8 respectively.

4. Tables I, II, III and IV in the appendix give detailed information regarding the strength of the various classes, the educational attainments of the pupils and the classes of the community to which they belong. From table II it will be seen that while the number of paid apprentices is nearly the same as last year the number of unpaid apprentices fell from 28 to 9. This difference is mostly due to some apprentices in the metal work department leaving the school with their relatives when the aluminium department was transferred to the Indian Aluminium Company.

5. *General Education classes.*—The number on the rolls of these classes on the 31st March was 73 and the average daily attendance for the year was 51. The only subject taught is English conversation. These classes were inspected by the Assistant

Inspector of Schools on the 28th March 1904. The results of his inspection have not yet been communicated to me. There are four teachers (one of whom was appointed some years back to teach vernacular subjects and is unable to teach in English) drawing pay from Rs. 20 to Rs. 10 per month. The pupils, who are all apprentices, attend for one hour daily and leave the industrial classes to do so. It appears to me extremely doubtful whether the boys gain any advantage whatever by attending these classes and I certainly think they should not sacrifice one hour daily from the workshops to acquire what after all cannot be more than an extremely superficial knowledge of English. The teachers could well be transferred to some other institution and the pay thus saved would provide a much needed teacher for the art side of the school.

6. In table V in the appendix, the results of the various Government Technical examinations held in November and December 1903 are compared with those of the previous year. From this statement it will be seen that the number of candidates for the various drawing examinations increased from 215 to 245 and the percentage of passes decreased from 60 to 57. The decrease is entirely due to the extremely poor results in Geometrical Drawing, which, I think, is due to the difficulty the students experience in understanding the question papers and not to their ignorance of the subject. A glance at table IV will show how very few of the students are capable of understanding a question paper in English if their capabilities are to be judged by the examinations they have passed in general education.

In the industrial examinations the number of candidates fell from 135 to 76 and the percentage of passes rose from 57 to 68. The number of candidates who appeared for the examinations this year, although much less than that of the previous year, may be accepted as satisfactory inasmuch as it almost coincides with the number of apprentices undergoing instruction in the industrial classes of the school. The unusual number in the previous year included many workmen from the wood and metal work departments.

In the Technical Teachers' Certificate examination 18 candidates passed the various examinations as compared with 11 in the previous year.

7. *Passed students.*—Thirteen students passed out of the school during the year. Of these five obtained employment outside and eight continued to work in the school workshops on daily wages.

8. The statements for the financial year are given in tables VI, VII, VIII and IX. From these statements it will be seen that the cost of the art department was Rs. 20,623-11-3, of the carpentry department Rs. 4,658-11-5, of the miscellaneous department Rs. 4,568-10-0, and that of the weaving department Rs. 4,104-15-11 making the total cost of the school Rs. 33,956-0-7 as against Rs. 31,011-5-5 in the previous year. A percentage, however, of the profits made in the aluminium department should be deducted from the amount which would probably reduce the cost to that of the previous year.

9. In table X are shown the receipts and sales of the different departments. The receipts include the sale-proceeds of the exhibits sent to the Delhi Art Exhibition during the previous year. The sales amounted to Rs. 19,703-2-0 which is about the same as in the previous year if the sales effected at the Delhi Art Exhibition are omitted.

10. *Industrial departments. (a) Aluminium department.*—The sales in this department continued to increase rapidly until the industry was sold as a going concern to the Indian Aluminium Company in September 1903. The most gratifying feature of the expansion was the increased demand from the native sources for machine-made articles as the various patterns were placed on the market. The sales from April to September amounted to Rs. 1,19,000 which is considerably more than the sales of any previous six months.

The following statement represents the progress of the industry from the time Mr. Chatterton started it with 112 lb. of metal presented to him by the British Aluminium Company, to its closure in the school in September last when the whole concern, with a rapidly increasing business, equipped with modern machinery and

appliances, controlled by mechanics trained in the school and accompanied by highly skilled artizans who owe their acquaintance with the metal to the school, was handed over to the Indian Aluminium Company.

Years	Metal purchased.	Expenditure.		Receipts.	
		RS.	A. P.	RS.	A. P.
1897-1898	..	3,800	0 0	..	..
1898-1899	20,102	45,014	7 5	44,621	13 9
1899-1900	56,615	93,000	0 0	91,432	0 8
1900-1901	74,355	1,94,936	14 0	1,37,452	2 9
1901-1902	126,988	2,34,874	7 7	1,84,549	13 8
1902-1903	70,736	2,24,001	0 8	1,69,711	15 0
1903-1904	77,834	94,142	15 1	2,91,582	8 6
Total	..	8,89,769	12 9	9,19,350	6 4
Excess of receipts over expenditure		..	..	29,580	9 7
Wages paid to workmen during the same period.		..	..	1,93,478	5 2

Thus ends a very interesting and practical experiment, the difficulties attending the initiation and carrying on of which to a successful issue, can only be appreciated by those engaged in it.

Although the financial aspect of the experiment cannot but be considered satisfactory, it is from the educational point of view that the results are more important; and although they cannot be tabulated and reduced to a percentage like the results of an ordinary examination they nevertheless exist. These results may be stated as follows:—

Some 600 workmen have been taught to work with a metal with which they had no previous acquaintance. Of these 600, about 450 were Madras metalworkers whose hereditary trade is hammering up and brazing brass and copper vessels. They were introduced for the first time to a metal which, owing to the fact that it cannot be soldered or brazed like brass or copper, required much more skill and care to manipulate. An ill-aimed blow or a little carelessness would perhaps render useless the work of days. They used their own tools and appliances which were altered and improved as experience was gained, to suit the new methods they had to follow. As a proof of the progress made, it may be mentioned that at the commencement of the industry it was some months before the most skilful workman had acquired the skill necessary to make a seamless aluminium water-bottle, while at the close of the department quite 30 were able to do so. In the meantime many thousands of these bottles had been made and sold.

These artizans were also taught that tasks had to be finished within a promised time and not at their convenience. They were also shown by practical experience that mechanical aids and the use of the most effective labour-saving machinery did not kill their trade, but, although many of the articles which they formerly made by hand were made cheaper and quicker by machinery, the very fact of putting large quantities of cheaper made articles on the market was a means of largely increasing the demand of such articles as could only be made by hand.

In the foundry the lessons taught were no less important. Usually the metal-worker of Southern India moulds in wax the object he requires to cast, encloses the whole in clay, melts out the wax and pours in the metal. This wasteful process destroys the pattern each time. Although it was necessary to follow this practice for some time the method of casting from fixed patterns (which could be used an indefinite number of times) in sand was gradually introduced, and long before the department was closed, had entirely superseded the native method.

In the polishing shop also the workmen were taught to work in a way which gave a much better article at a less cost.

Some mechanics were trained to use the special and highly efficient machinery purchased for the department.

In addition to the workmen a very large number of their sons and dependants partook in the work of their elders.

These results are, I consider, very satisfactory, especially as they are obtained from the artizans whom industrial education is intended to benefit and who have hitherto, as a rule, kept aloof from the institutions intended for their benefit.

It also speaks well for their skill and adaptability that the industry is so well founded.

(b) *Woodworking Department.*—The amount of work turned out in this department during the year was Rs. 12,450, which compares very favourably with the output of previous years. The great variety of articles made provided an excellent means of instruction for the apprentices.

Some progress was made during the year in the preparation of half tone blocks for the illustrations for the catalogue of Indian Artware which it is hoped will be ready for the press in July.

(c) *Carpet-weaving Department.*—Carpets were produced during the year to the value of Rs. 2,721. This amount represents the earning capacity of the department under ordinary circumstances. Most of the carpets are made to order and there is seldom one in stock for any length of time.

During the year a number of poor Muhammadan lads belonging to the Anjuman received instruction in this department and were paid a small daily wage as soon as they could do useful work. They were, however, withdrawn in March to the Anjuman where a carpet-weaving department is about to be started.

(d) *Weaving Department.*—Under the orders of Government the work in this department was somewhat restricted during the year. The amount of receipts was somewhat less than in the previous year and the cost was reduced by Rs. 2,400.

The department was as usual carried on in a hired building in the Mount Road and late in March orders were received to remove it back to the School of Arts buildings. Mr. J. W. Coombes who held charge of the department left on the last day of the official year to take up the appointment of Deputy Superintendent, Chingleput Reformatory.

A pamphlet is in the press which describes the experience gained during the three years the department has been in operation.

It cannot be considered that this department has yet passed out of the experimental stage. The shuttle can be thrown more rapidly by the fly shuttle attachment than by the hand, but it is doubtful whether the advantage thus gained is not more than counterbalanced by the extra time and care necessary in preparing the warps for this method of weaving.

Some machinery was indented for from England last year, but the indent was withheld pending the orders of the Government of India on the report of the Committee on Industrial Education. The orders have now been received and in view of the importance attached to the improvement of the hand-weaving industry by the Government of India, I think the machinery should now be procured. If the experiments are thus continued for a period of three or four years it will be definitely known whether the hand-weaving industry can be improved or not. The removal of the department to the school premises will, I think, be an advantage, as there are facilities in the school for making and improving the appliances which did not exist in the Mount Road.

11. *Chrome Tanning Department.*—Mr. Chatterton having brought to the notice of Government the very large number of country tanned hides which are used annually by the ryots in making water buckets for well irrigation, the perishable nature of the leather owing to inferior tanning and to the more enduring qualities of chrome tanned leather when used for the same purpose, a special grant of Rs. 2,000 was allotted for experiments to be made to ascertain if chrome tanning could be successfully carried on in Madras.

It was not intended to try and produce a leather equal in quality to the highly finished leathers of Europe and America but to make a leather which would be superior for purposes of irrigation to the ordinary country tanned leather.

Considerable time was lost in waiting for the various chemicals required and it was not till February that work could be commenced.

Three different processes were tried and after a number of experiments the simplest process and the one giving the best results was adopted.

Tanning and fat-liquoring drums were made and a considerable quantity of raw materials and chemicals purchased.

The experiments thus far have been very promising and although it will take some time before the durability of the leather is fully tested there is no doubt whatever that the leather now being produced in the school is far superior to the outturn of the ordinary country tanneries. Several native tanners are visiting the school and closely watching the experiments and as soon as it is seen that there is a demand for the leather there is no doubt whatever that the process will be adopted by them.

There is still a good deal to be learnt before the leather can be considered perfect and up to the present there has been a continued improvement in the quality of each successive tannage.

The whole of the grant was spent in appliances and raw materials and as only a few hides had been tanned by the end of March, the receipts were only Rs. 84. A considerable proportion of the grant will however be recovered in the coming year.

In this connection it may be noted that Mr. Chatterton at the request of Government prepared a monograph on "tanning and working in leather in the Madras Presidency" during the year.

12. *Library and Museum.*—A very valuable and useful addition of 99 books costing Rs. 539-4-0, dealing with Art and Industrial subjects was made to the library during the year. The library requires re-cataloguing and re-arranging very badly, but there is no one available to do it.

Some glass cases were added to the museum during the year and no more are likely to be required for some years to come. All the exhibits were re-arranged after removal of the aluminium articles.

13. *General remarks.*—Almost all the machine tools in the school were sold with the aluminium industry and their removal has left the school in a very helpless state when articles and appliances which require the aid of machinery have to be made. Native methods have to be followed and tools have to be used which certainly should not be seen in an up-to-date Industrial institution. If the Industrial departments are to improve it is very necessary that some of the more elementary machine tools should be procured. Most of these departments have suffered by the loss of orders which were attracted by the Aluminium department, and the apprentices in the metal work department have certainly lost the opportunity they had of assisting in the great variety of work turned out in the Aluminium department. It now becomes necessary for a course of instruction to be drawn up to ensure that they participate in a sufficient range of work to give them a thorough training.

TABLE I.
STRENGTH of each of the Drawing classes.

Division.	Class.	Number on the roll on 31st March 1903.	Number on the roll on 31st March 1904.
I	Pre-Elementary	91	100
	Elementary	83	81
	Group certificate	94	81
	Advanced	39	37
II	Special painting	9	18
Total ..		316	317

TABLE II.
STRENGTH of each of the Industrial classes.

Departments.	1902-1903.			1903-1904.		
	Paid apprentices.	Unpaid apprentices.	Total.	Paid apprentices.	Unpaid apprentices.	Total.
1. Carpentry	36	5	41	39	2	41
2. Metal work	25	13	38	22	2	24
3. Lacquer work	18	9	27	27	5	32
4. Jewellers' work	7	..	7	5	..	5
5. Carpet-weaving	9	..	9	5	..	5
6. Modelling	12	1	13	10	..	10
Total ..	107	28	135	108	9	117

TABLE III.
CLASSIFICATION of the pupils according to the class of the community to which they belong.

Class of community.	31st March 1903.			31st March 1904.		
	Males.	Females.	Total.	Males.	Females.	Total.
Europeans and Eurasians	6	16	22	13	11	24
Native Christians	32	4	36	32	..	32
Muhammadans	11	..	11	10	..	10
Brahmans	15	..	15	20	..	20
Non-Brahman Caste Hindus	229	..	229	223	..	223
Panchamas	3	..	3	2	..	2
Total ..	296	20	316	306	11	317

TABLE IV.
CLASSIFICATION of the pupils according to their attainments in General Education.

	1902-1903 students.	1903-1904 students.
F.A. examination	..	9
Matriculation examination	6	4
Higher examination for Women	..	1
Lower Secondary examination	39	16
Primary examination	40	11
Unpassed	231	276
Total ..	316	317

TABLE V.
RESULTS of the various Government Technical examinations held in November and December 1903.

Subjects.	Grade.	1902-1903.		1903-1904.	
		Number appeared.	Number passed.	Number appeared.	Number passed.
Free-hand outline drawing ..	Elementary	50	25	65	28
	Intermediate	35	20	41	22
	Advanced	12	8	12	10
Geometrical drawing	Elementary	29	9	22	3
	Intermediate	22	15	17	6
	Advanced	7	5	9	5
Design	Elementary	21	16	18	14
	Intermediate	3	3	6	5
	Advanced	1	1	1	1
Painting	Elementary	21	16	24	18
	Intermediate	8	7	18	15
	Advanced	1	..	4	3
Modelling	Elementary	1	1	..	..
	Intermediate	1	1	3	3
	Advanced	1	..	2	1
Wood engraving	Elementary	1	1	1	1
	Intermediate	..	..	..	..
	Advanced	..	..	..	..
Copper plate engraving	Elementary	1	1	2	2
	Intermediate	..	..	..	..
	Advanced	..	..	..	..
Cabinet making	Elementary	62	28	25	17
	Intermediate	17	15	24	17
	Advanced	9	3	3	2
Metal work	Elementary	29	17	12	9
	Intermediate	8	5	9	5
	Advanced	5	3	..	..
Jeweller's work	Elementary	5	5	1	1
	Intermediate	..	..	..	..
	Advanced	..	..	..	..
Carpet weaving	Elementary	..	..	1	..
	Intermediate	..	..	..	..
Total ..		350	205	321	189

TECHNICAL Teachers' Certificate examination.

Subjects.	1902-1903.	1903-1904.
	Number passed.	Number passed.
Freehand outline drawing—Intermediate	5	4
Do. Elementary	5	9
Cabinet making—Intermediate	1	1
Do. Elementary	1	1
Carpet weaving—Elementary	1	1
Metal work—Advanced	2	2
Total ..	11	18

TABLE VI.

STATEMENT of Receipts and Charges of the School of Arts, Madras, for 1903-1904.

Receipts.	—	—	Charges.	—	—
	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
Drawing class—Fees	4,332 0 0	..	Assistant Superintendent ..	3,508 12 8	..
General education class—Fees ..	0 8 0	..	Establishment—Permanent ..	4,740 15 11	..
			Do. Temporary ..	5,452 11 4	..
			Travelling allowances ..	292 8 0	..
			Scholarships	2,184 8 0	..
			Stipends of apprentices ..	4,693 3 3	..
			Tools and plant	1,819 2 6	..
			Municipal assessment	1,006 8 0	..
			Repairs to furniture	200 0 0	..
			Library and prizes	539 4 0	..
			Postage charges	150 1 0	..
			Telegraph charges	18 5 0	..
			Office expenses and other contingencies.	350 3 7	..
Total ..	..	4,332 8 0			
Balance ..	..	20,623 11 3			
Grand Total ..	..	24,956 3 3	Total ..	..	24,956 3 3

TABLE VII.

Carpentry Department.

STATEMENT of Assets and Liabilities.

Assets.	—	—	Liabilities.	—	—
	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
Amount of receipts	22,561 8 1	..	Amount of expenditure ..	17,795 1 10	..
Sundry debtors	3,619 2 0	..	Liabilities	..	..
Stock of manufactured articles on the 31st March 1904.	2,914 8 0	..	Outstandings on 31st March 1903.	11,965 12 3	..
Stock of unfinished articles on the 31st March 1904.	315 0 0	..	Stock of manufactured articles on the 31st March 1903.	5,641 10 8	..
Stock of materials on 31st March 1904.	1,770 0 0	..	Stock of unfinished articles on the 31st March 1903.	1,493 0 0	..
Value of tools and plant ..	1,162 13 0	..	Stock of materials on the 31st March 1903.	911 0 0	..
Liabilities of 1902-1903 paid during the year.	804 14 3	..			
Total ..	..	33,147 13 4			
Balance ..	..	4,658 11 5			
Grand Total ..	..	37,806 8 9	Total ..	..	37,806 8 9

TABLE VIII.

Miscellaneous Department.

STATEMENT of Assets and Liabilities.

Assets.	—	—	Liabilities.	—	—
	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
Amount of receipts	10,606 1 4	..	Amount of expenditure ..	12,266 3 5	..
Sundry debtors	637 14 0	..	Outstandings on the 31st March 1903.	6,736 8 4	..
Stock of manufactured articles on the 31st March 1904.	4,909 0 0	..	Stock of manufactured articles on the 31st March 1903.	3,547 4 8	..
Stock of unfinished articles on the 31st March 1904.	363 0 0	..	Stock of unfinished articles on the 31st March 1903.	825 0 0	..
Stock of materials on 31st March 1904.	1,112 0 0	..	Stock of materials on 31st March 1903.	772 0 0	..
Value of tools and plant ..	1,240 7 0	..			
Liabilities of 1902-1903 paid during the year.	710 0 1	..			
Total ..	..	19,578 6 5			
Balance ..	..	4,568 10 0			
Grand Total ..	..	24,147 0 5	Total ..	..	24,147 0 5

TABLE IX.

Weaving Department.

STATEMENT of Assets and Liabilities.

Assets.	—	—	Liabilities.	—	—
	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
Amount of receipts	3,591 15 10	..	Amount of expenditure ..	10,210 9 2	..
Sundry debtors	136 1 7	..	Liabilities	..	..
Stock of manufactured articles on 31st March 1904.	1,072 0 0	..	Outstandings on the 31st March 1903.	71 9 6	..
Stock of unfinished articles on the 31st March 1904.	120 4 0	..	Stock of manufactured articles on 31st March 1903.	1,011 0 0	..
Stock of materials on the 31st March 1904.	446 12 0	..	Stock of unfinished articles on 31st March 1903.	32 9 0	..
Value of tools and plant on 31st March 1904.	2,000 0 0	..	Stock of materials on 31st March 1903.	300 10 0	..
Liabilities of 1902-1903 paid during the year.	154 4 4	..			
Total ..	..	7,521 5 9			
Balance ..	..	4,104 15 11			
Grand Total ..	..	11,626 5 8	Total ..	..	11,626 5 8

TABLE X.

RECEIPTS and Sales.

Departments.	Receipts.		Sales.	
	1902-1903.	1903-1904.	1902-1903.	1903-1904.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Wood work department	11,118 0 3	22,561 8 1	20,689 3 9	9,831 10 3
Carpet weaving department ..	3,208 14 0	2,457 12 10	3,185 8 0	2,468 3 10
Metal work do.	4,500 9 7	5,893 3 6	8,801 1 4	1,944 10 4
Jeweller's work do.	442 7 0	109 12 0	420 11 0	365 1 0
Modelling and Pottery department ..	1,699 11 3	1,367 2 9	1,758 3 11	635 12 9
Engraving, lacquer work, drawing and miscellaneous departments.	283 7 11	778 2 3	1,451 14 10	868 5 9
Weaving department	4,174 7 9	3,591 15 10	4,295 3 5	3,589 5 2
Total ..	25,427 9 9	36,759 9 3	40,561 14 3	19,703 2 1

Proceedings, Dis. No. 4401 of 1904.

Staff.—There were no changes in the staff during the year except that on the return of Mr. Brand from Lahore on the 27th October last, the two temporary assistants who were employed during his absence left the school in order to take up appointments elsewhere. The establishments entertained in connection with the aluminium department were also disbanded during the year on the transfer of the department to the Indian Aluminium Company.

2. *Accommodation.*—The transfer of the aluminium industry to a private agency set free considerable space in the workshops, and this has been utilized for the weaving department which has been retransferred from the rented building on the Mount Road.

3. *Library and Museum.*—The library received an addition of 99 books, and a few show cases were added to the museum. The Acting Superintendent is requested to have the books in the library rearranged and re-catalogued with the help of the shorthand clerk and the pottery assistant (storekeeper), who should, under present circumstances, be able to spare at least an hour daily for the work.

4. *Strength and Attendance.*—The strength of the drawing classes remained almost stationary, the number on the last day of the year having been 317 against 316 on the corresponding day of the previous year. The average number on the rolls has again not been reported, the percentage of average daily attendance, viz., 79 showed some improvement. The classification of pupils according to the occupation of their parents has not been furnished though a similar omission was noticed in the last review. This information which is most important so far as the industrial classes are concerned should now be furnished if possible. It should also be reported whether any measures were taken to restrict admissions to those classes to pupils likely to become artisans, and if so, what was their nature. The four pupils stated to have been exempted by the Director from payment of fees are certificated teachers of aided schools. The fee receipts were Rs. 152-14-0 (not Rs. 155 as stated in paragraph 3 of the report, more than in the previous year. The evening drawing classes were attended only by 12 pupils, and their average daily attendance was not satisfactory. This year there was a further fall in the number of unpaid apprentices, the number having declined from 41 in 1902 to 9 in 1904. The Director is not prepared at present to reopen the question as to the discontinuance of the general education classes, the matter having been set at rest in G.O., No. 627, Educational, dated 16th December 1903. These classes were examined by the Assistant Inspector of Schools, Presidency Division, on the 28th March last, and he suggests that a better staff should be employed. The matter will receive attention in connection with any scheme for the reorganization of the school. It appears to the Director, however, that in the meantime the Superintendent should devote a little time to giving the teachers some idea of what would be a suitable course of instruction. The conversation should be about the work and the tools, measuring, cost of materials, estimating, preparation of bills and simple accounts. As a rule the boys would supply the information in the vernacular and the teacher could instruct them how to express their ideas upon these matters in English.

5. *Examinations.*—Including the students in the modelling and engraving classes, 245 pupils appeared for the several drawing examinations, and of them 137 passed, the corresponding figures for the previous year being 215 and 129. Thus while thirty more students entered for the examinations the number of passes increased by eight only. The results obtained in design, painting, modelling and engraving were very good, while those of the examinations in drawing, particularly geometrical drawing were not so satisfactory. The acting Superintendent's explanation of these unsatisfactory results is vague and cannot be accepted. In the absence of specific complaint as to the character of the examination papers set last year it appears to the Director that if the students had understood the teaching they should also have understood the question papers. Possibly greater care is necessary in regard to the general education qualifications of the students who take up geometrical drawing, and only such students should be admitted to this drawing class as are likely to understand the teaching. For the industrial examinations, 76 students appeared and 52

passed, the corresponding figures for the previous year being 135 and 76. The large fall in the number of entrances has been explained, but it should have been explained why the workmen in the wood and metal work departments did not, as in the previous year, present themselves for the industrial examinations during the year under report. Not a single student appeared for the Advanced examination in metal work, and but one candidate presented himself for the examination in jewellers' work against five in the previous year. For the examinations in carpet weaving, two students appeared against none in the previous year, and one of them was successful. Judged by the numbers represented at the public examinations and the results, the working of the school shows that there is considerable room for improvement.

Eighteen students qualified themselves for technical teachers' certificates against eleven in the previous year, but there is no information as to the number that were examined for such certificates.

6. *Former students.*—The acting Superintendent is requested to report whether paragraph 7 is to be taken to mean that only 13 students ceased to be such during the year and further to state the nature of the instruction given in the school to the five students mentioned as having secured employment outside and that of the employment secured by them.

7. *Finance.*—The net expenditure of the year taking all the departments together was Rs. 33,956 against Rs. 33,991 in the previous year, the latter figure excluding the profits shown by the aluminium department at the close of that year. According to table X appended to the report the cash sales amounted to Rs. 19,703 during the year.

8. *General.*—The account given in paragraph 10 of the report of the working of the several industrial departments in the school, and specially that of the aluminium industry from its experimental stage to the date of its transfer to the Indian Aluminium Company, is interesting. An illustrated catalogue with the somewhat comprehensive title of a catalogue of Indian artware which has been long under preparation is stated to be approaching completion. The carpet weaving department is susceptible of considerable expansion. The weaving department under the charge of a temporary assistant is still in an experimental stage and is being worked on a limited scale. The results of the experiments in chrome tanning which were begun during the year under report will be watched with interest.

The acting Superintendent is requested to report whether there was any attempt to co-ordinate the art and the industrial sides of the school; whether for instance any designs produced by the students in the art classes were put to a practical test in the industrial section.

The Director would be glad to learn whence the designs and patterns are obtained which are used in such of the industries as require them.

9. *Conclusion.*—No orders having been passed during the year under report on the reorganization of the school, it worked on the old lines, and except for the abolition of the aluminium department and the introduction of another industry which can lay no claim to be an art-industry, viz., tanning, there were no changes in the working of the school which require special notice.

A. G. BOURNE,
Director of Public Instruction.

To the Superintendent, School of Arts.
" Inspectors of Schools including the Inspector of
European and Training Schools.
" Inspector of Technical Schools.
" Inspectresses of Girls' Schools.
" Principals of Colleges.
" Managers of Industrial Schools.
Copy to Government with C.L.

12

No. 471, EDUCATIONAL, 2ND AUGUST 1904.

ORDER—No. 471, Educational, dated 2nd August 1904.

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2. The Government have nothing to add to the remarks made by the Director.
3. Final proposals for reorganizing the school should be submitted as early as possible.

(True Extract)

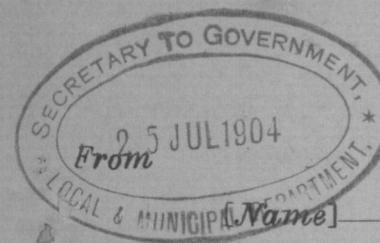
H. D. TAYLOR,
Ag. Secretary to Government.

To the Director of Public Instruction.

Exd. A. Rungasawmy Aiyangar.

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The Hon'ble Mr. A.G. Bourne, D.Sc., F.R.S.,

[Designation] Director of Public Instruction.

[Station] Madras.



Current No. 6312 of 04

Dated 23rd JULY 1904

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SUBJECT.

Report on the working of the School of Arts
for 1903-04.

The draft placed below is submitted for
approval.

P.T.T.
29-7-04.

402
2.504

To

The Secretary to Government,

Educational Department.

Sir,

I have the honour to submit, for the
information of Government, a copy of my Proceedings Dis No.
4401 dated 13th instant reviewing the report on the working
of the School of Arts, Madras for the year 1903-1904.

I have the honour to be,

Sir,

Your most obedient servant,

A. J. S. S. S.

For Director of Public Instruction.

P.T.
23-7-04.

[illegible]

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2. The Government have nothing to add to the remarks made by the Director .

3. Final proposals for re-organizing the school should be submitted as early as possible.

P. T. T.
29-7-04.

NO2
28-04

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