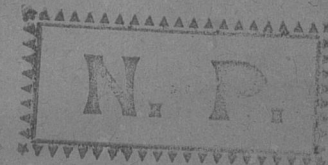


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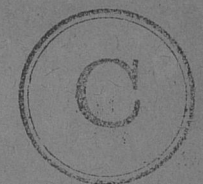
G.O., No. 390

DATED 8. 7. 02.



INDEXED.

ORIGINAL



[Despatch Abstract.]

School of Arts:-

Reviewing the report on the working
of the — during the year 1901-1902.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

Reviewing the report on the working of the — during the year 1901-1902.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

Read—the following paper :—

From the Hon'ble Mr. G. H. STUART, M.A., Barrister-at-Law, Director of Public Instruction, Madras, to the Secretary to Government, Educational Department, dated 28th May 1902, Cur. No. 4184.

I have the honour to submit, for the information of Government, a copy of my Proceedings, Dis. No. 2927, dated 26th May 1902, reviewing the report on the working of the School of Arts, Madras, during 1901-1902.

ENCLOSURE.

Dis. No. 2927.

PROCEEDINGS OF THE DIRECTOR OF PUBLIC INSTRUCTION, DATED 26TH MAY 1902.

Read—the following letter from A. CHATTERTON, Esq., B.Sc., Superintendent, School of Arts, Madras, to the Director of Public Instruction, dated 8th May 1902, No. 97 :—

I have the honour to submit the annual report on the working of the School of Arts during the year 1901-1902. For reasons which I have explained in this office letter No. 9, dated the 16th April 1902, the report is submitted for the financial year and not for the calendar year as required in your Proceedings No. 1472 of the 11th of March 1901. In previous years, the School of Arts and the Aluminium Department of the School of Arts have been treated as separate institutions, but since the 7th of February 1901, they have both been placed under me and I have therefore included the Aluminium Department in this report.

2. I was in charge of the school throughout the year except for three weeks in August 1901 (1st to 21st August) when I was on privilege leave and Mr. E. W. Middlemast was in charge without prejudice to his duties in the Presidency College. During the year I was absent from Madras on inspection work for 42 days and in addition for 30 days at the Simla Educational Conference. During these periods of absence the work of this school was carried on by my assistant Mr. G. E. Brand. For the art instruction and the management of the drawing classes M.R.Ry. M. Velayuda Asari, the Assistant Superintendent, has been responsible. As the staff under him was numerically weak and in many ways inefficient, proposals for the reorganisation of the art side of the school were submitted with my No. A.L. 134 of 10th April 1901, but the passing of final orders was deferred by Government pending some declaration of the policy to be pursued in regard to industrial schools by the Government of India. Under these circumstances it has not been found possible to effect any material improvement in the art instruction except in the direction of painting for which a special instructor was engaged from the 11th of July 1901. The establishment of the weaving department for the purpose of carrying out experimental investigations in hand-weaving led to the necessity for a special assistant for that work and in G.O., No. 5, Financial, dated the 2nd of January 1902, Government sanctioned the appointment of an assistant in the weaving department on a salary of Rs. 200—10—250. Mr. J. W. Coombes, the second assistant master of the Madrasa-i-Azam, returned from a three years' course of technical instruction in England at the end of December and as he had made a special study of weaving at the Manchester Technical school, he was appointed to the new post.

3. Accommodation.—No additions to the permanent buildings were made during the year but the growth of the aluminium business necessitated an extension of the temporary sheds. During the cyclone in December last the whole of these sheds were blown down. The cost of rebuilding them, however, was not very great and I

am still of opinion that this type of structure is well adapted to the present requirements. They are far cooler to work in than permanent sheds and are suitable for any kind of industrial work that is not affected by dust or occasional showers of rain. For a time the weaving department was carried on in the school buildings but the available space was totally insufficient and as a temporary measure on the appointment of Mr. Coombes, as special assistant, the whole department was transferred to a range of sheds which were rented from the Anjumani-mufidi-ali-islam and which formed the rear part of their premises in the Mount Road. The experiment of locating a department of the school in premises more than a mile away has not proved a success and is in many ways extremely inconvenient. The abolition of the pottery department, which has been recently sanctioned, will provide sufficient space for the future development of the metal work department; but, as the workshops which have thus become available are extremely badly arranged, considerable expenditure will be necessary to render them suitable for the installation of metal working machinery which is now on its way from England. The carpentry and wood-carving department is working in what used to be the Museum, which is large enough, but the room is so badly ventilated that it is quite unsuitable for a workshop. I therefore hope during the present year to be able to put the wood-workers in a thatched shed in the compound and to restore the Museum to its original use. The permanent buildings of the school are in a very dilapidated condition and it is extremely desirable that they should be thoroughly repaired but I have postponed taking the matter up till final orders have been received regarding the future working of the school.

4. Strength and attendance.—In the following tabular statement are given particulars relating to the classification of the pupils, the average number on the rolls and the average daily attendance :—

General classification.	1900-1901.			1901-1902.		
	Number on rolls on the 31st March.	Average number on the rolls.	Average daily attendance.	Number on the rolls on the 31st March.	Average number on the rolls.	Average daily attendance.
Apprentices learning a trade	222	227	150	115	185	142
Stipendiary students learning drawing.	2	2	2	3	3	2
Students attending drawing classes only.	267	245	195	203	216	161
Total	491	474	347	321	404	305

From this statement it will be seen that the total number of students on the rolls has fallen from 491 in March 1901 to 321 in March 1902. This result is due to two causes. First, the very considerable enhancement of the fees sanctioned in G.O., No. 773, Educational, dated the 21st December 1901, which came into force on the 1st of January 1902 and secondly to the fact that all unpaid apprentices in the industrial department were required to pay fees for the drawing classes. The following statement shows the effect of these changes.

	Number on rolls on November 1901.	Number on rolls on March 1902.
Pre-elementary class	144	95
Elementary	114	73
Intermediate	120	108
Advanced class	33	42
Special painting class	...	3
Total	411	321

The numbers of the apprentices included in the above were :—

Paid apprentices	89	74
Unpaid apprentices	93	41
Total	182	115

From this statement it will be seen that nearly the whole of the reduction in strength has occurred in the pre-elementary and elementary classes and I think it

may fairly be assumed that we have succeeded in eliminating the greater number of those students who were merely playing with drawing or waiting for something to turn up and had no serious intention of pursuing their studies in the higher classes.

5. In the following table are given the numbers of each class of the community on the rolls of the school at the end of the year :—

Classes of community.	31st March 1901.			31st March 1902.		
	Males.	Females.	Total.	Males.	Females.	Total.
Europeans and Eurasians	18	32	50	8	20	28
Native Christians	45	2	47	38	..	38
Mahomedans	20	..	20	10	..	10
Brahmins	13	..	13	19	..	19
Non-Brahmin caste Hindus	357	..	357	228	..	228
Panchamas	4	..	4	3	..	3
Total ..	457	34	491	301	20	321

6. The following tables classify the students according to the condition in life of their parents and the nature of their occupations :—

Classes.	31st March 1901.			31st March 1902.		
	Males.	Females.	Total.	Males.	Females.	Total.
Rich	10	3	13	13	9	22
Middle	123	31	154	73	11	84
Poor	324	..	324	215	..	215
Total ..	457	34	491	301	20	321

Occupations.	31st March 1901.			31st March 1902.		
	Males.	Females.	Total.	Males.	Females.	Total.
Officials	49	32	81	64	20	84
Petty officials	125	2	127	87	..	87
Traders	60	..	60	19	..	19
Land holders	76	..	76	26	..	26
Artisans	132	..	132	102	..	102
Coolies	14	..	14	3	..	3
Mendicants	..	..	..	..	..	..
Total ..	457	34	491	301	20	321

7. In the following table the number of students coming from each district in the Presidency is given :—

District.	Number of students.
Madras	286
Gódvári	5
Tanjore	4
Bellary	4
Trichinopoly	4
Salem	3
Malabar	3
Ganjám	2
Madura	2
Nellore	2
Mysore	1
Chingleput	1
Vizagapatam	1
Coimbatore	1
North Arcot	1
Total ..	321

8. The following table gives the general educational attainments of the pupils from which it will be seen that only two are entered as ignorant of English. But, as a matter of fact, the majority of those entered as able to read and write English have but a very slight acquaintance with the language :—

Examinations passed.							31st March 1901.	31st March 1902.
B.A.	..	..	..	..	..	..	..	..
F.A.	..	..	..	..	..	..	..	2
Matriculation	..	..	..	..	..	..	2	5
Higher examination for Women	..	..	..	..	..	..	2	2
Lower Secondary	..	..	..	..	..	..	42	28
Primary	..	..	..	..	..	..	73	41
Able to read and write English	..	..	..	..	..	..	368	241
Ignorant of English	..	..	..	..	..	..	4	2
Total ..	..	..	..	..	..	..	491	321

9. In the next table are given numbers of attendance in each of the drawing classes :—

Division.	Class.	Number on the rolls on 31st March 1901.	Number on the rolls on 31st March 1902.
I	Pre-elementary	164	95
	Elementary	169	73
	Group Certificate	123	108
	Advanced	35	42
II	Special Painting	..	3
	Total ..	491	321

Before the 1st of January 1902, when the new fee regulation came into force, no apprentice paid fees, whereas now every student pays a fee, which in the case of an apprentice is deducted from the stipend awarded to him. The change in the monthly fee income is shown in the following table, from which it will be seen that the number of paying students has increased from 272 to 332, whilst the monthly income has been multiplied more than 3½ times. It is too soon yet to judge what the result of these changes will be on the working of the school, but there is no doubt that we have got rid of a large number of undesirable pupils and the remainder, having now to pay for their education, desire to get value for their money.

Formerly the average attendance was very unsatisfactory, and a material improvement has been effected in this direction as disclosed by the figures for March 1901 and 1902. In 1901 the number on the rolls was 491 and the average daily attendance was 63 per cent., whilst in March 1902 the total number on the rolls was 321 and the average daily attendance was 78 per cent.

Class.	March 1901.				March 1902.			
	Number of paying students.	Fees for the month.	Arrears and fines.	Total.	Number of paying students.	Fees for the month.	Arrears and fines.	Total.
Special Painting	..	..	..	..	3	RS. A. P. 9 0 0	..	RS. A. P. 9 0 0
Advanced	20	10 0 0	2 14 0	12 14 0	42	84 0 0	6 0 0	90 0 0
Intermediate	47	23 8 0	7 10 0	31 2 0	108	162 0 0	13 8 0	175 8 0
Elementary	94	47 0 0	2 2 6	49 2 6	72	72 0 0	11 0 0	83 0 0
Pre-elementary	108	27 0 0	1 8 6	28 8 6	95	47 8 0	5 8 0	53 0 0
Engraving	..	..	..	..	5	7 8 0	..	7 8 0
Modelling (Elementary)	..	..	..	..	1	1 0 0	..	1 0 0
English	3	0 12 0	0 0 6	0 12 6	6	3 0 0	2 0 0	5 0 0
Total ..	272	108 4 0	14 3 6	122 7 6	332	386 0 0	38 0 0	424 0 0

Students who are not apprentices pay extra fees for the engraving and modelling classes. This accounts for the fact that the total number of paying students entered in this table is 332, whereas there are only 321 individual students in the school.

10. *The industrial classes.*—The number of paid and unpaid apprentices in the industrial classes is shown in the following table:—

Classes.	31st March 1901.			31st March 1902.		
	Paid apprentices.	Unpaid apprentices.	Total.	Paid apprentices.	Unpaid apprentices.	Total.
Wood-carving	18	54	72	24	7	31
Carpet-weaving	6	14	20	4	1	5
Metal work	10	27	37	17	10	27
Jewellers' work	3	13	16	7	1	8
Pottery	8	12	20	7	5	12
Painting	12	45	57	15	17	32
Total	57	165	222	74	41	115

There has been an increase of 17 in the number of paid apprentices and a decrease of 124 in the number of unpaid apprentices. My experience is that the old system of admitting unpaid apprentices and allowing them to attend drawing classes free of charge was a great mistake and led to a great waste of the resources of the school. The diminution in the total number of apprentices has been a great advantage and far more work has actually been turned out, and since the instructors have more time to devote to each apprentice the quality of the work has materially improved. In the proposals I have submitted for the future working of the school, I contemplated allowing the number of apprentices to rise to 130, which as the course extends for five years would make the annual admissions only 26. It is obvious, therefore, that at the present time the strength of the industrial classes is below what is desirable, but it is not an easy matter to raise it rapidly except by the admission of undesirable pupils. The industrial classes are, I assume, for the benefit of those who intend to follow industrial pursuits in after-life. Till lately a large percentage of the apprentices came to the School of Arts solely to learn drawing and took up the industrial work as a necessary evil compensated for by the stipends they received and the free instruction in drawing. Dozens of students were learning trades which they had no intention of pursuing in after-life and though the instruction was beneficial to them it would have been much better had it been given to an equal number of pupils who would have made use of it.

The classification of apprentices according to the occupation of their parents or guardians is given in the following statement:—

Departments.	Officials.	Inferior servants.	Traders.	Land-holders.	Artizans.	Coolies.	Mendi-cants.	Others.	Total.
Wood-carving	3	5	2	2	16	2	..	..	30
Carpet-weaving	..	1	1	1	2	..	..	..	5
Metal-work	..	4	1	..	21	..	..	..	26
Jewellers' work	..	2	1	..	5	..	..	..	8
Pottery	..	1	..	..	14	..	..	..	15
Lacquer work	1	6	7	6	10	1	..	..	31
Total	4	19	12	9	68	3	..	..	115

It may be noted that the percentage of artisans is steadily increasing and has now reached 59 per cent.

11. The strength of the modelling, engraving, architectural and evening drawing classes is given in the following table:—

Classes.	31st March 1901.	31st March 1902.
Modelling	20	15
Engraving	28	11
Architectural drawing	45	35
Evening	23	11

From the evening class two passed the Intermediate examination and five the Elementary examination in Free-hand and two passed the Elementary examination in Geometrical drawing.

12. *General Education classes.*—The strength of these classes is as follows:—

	31st March 1901.	31st March 1902.
Second class	17	13
Third „	19	7
Fourth „	36	9
First form	17	15
Second „	8	9
Third „	17	9
Total	114	62

The general education classes were inspected by the Assistant Inspector on 24th March 1902, but the results of his inspection have not yet been communicated.

13. *Examinations.*—The results of the various Government Technical examinations held in November and December 1901 are compared with those of the previous year in the following tabular statement:—

Subjects.	Grade.	1900-1901.		1901-1902.	
		Number appeared.	Number passed.	Number appeared.	Number passed.
Free-hand outline drawing	Elementary	104	77	92	53
	Intermediate	64	51	45	27
	Advanced	16	9	13	2
Geometrical drawing	Elementary	76	22	71	19
	Intermediate	38	20	32	3
	Advanced	5	4	7	6
Design	Elementary	53	42	43	23
	Intermediate	8	6	18	14
	Advanced	1	1	2	1
Painting	Elementary	54	23	52	30
	Intermediate	12	5	18	6
	Advanced	1	..	2	1
Modelling	Elementary	10	9	2	2
	Intermediate	7	6	4	3
	Advanced	1	1	1	1
Wood-engraving	Elementary	2	2	1	1
	Intermediate	..	..	1	1
	Advanced	1	1	2	1
Copper-plate engraving	Elementary	..	..	..	..
	Intermediate	10	7	12	8
	Advanced	7	6	3	2
Cabinet-making	Elementary	6	3	2	2
	Intermediate	..	..	..	..
	Advanced	..	..	..	..
Silversmiths' work	Elementary	No examination.		No candidates.	
	Intermediate	..		..	
	Advanced	..		..	
Carpet-weaving	Elementary	3	2	3	2
	Intermediate	2	2	..	..
	Advanced	..	..	..	..
Jewellers' work	Elementary	No examination.		..	..
	Intermediate	..	..	..	..
	Advanced	..	..	..	..
Pottery manufacture	Elementary	4	3	1	1
	Intermediate	1	1	..	..
	Advanced	..	..	..	..
Metal work	Elementary	No examination.		..	..
	Intermediate	..	..	..	..
	Advanced	..	..	2	..

It will be seen that there was a considerable falling off in the number of students who entered for the examinations and, in the case of certain examinations, a considerable falling off in the percentage of passes. This result is probably mainly due to the fact that less attention is now paid to preparing candidates for examinations and no special classes are held for the express purpose of cramming them. The fees charged for these examinations are very high for artisans to have to pay and the practical value of the certificates is very small. Unless therefore the apprentice intends seeking employment in places where these certificates have an artificial value, he does not willingly go up for the examination. Hitherto it has been the custom to allow apprentices to withdraw their savings from the bank for the purpose of paying their examination fees. Last year I discontinued the practice with the result

that very few artisans were able to raise sufficient money to pay the fees. The money which is placed to the student's credit in the Savings Bank is deducted from his pay for the purpose of providing him with sufficient funds to make a fair start in life when he leaves the school, and it is obviously wrong that this money should be applied to other purposes. If it is desirable to test the progress of pupils by the Government Technical Examinations, I think that, in the case of apprentices in the industrial classes, they should be admitted free, for, so far as my experience goes, the certificate which they receive for passing is no adequate return for the fee they have to pay. With regard to drawing examinations the results are much more satisfactory than the figures would seem to show, as the percentage of passes in 1900 was unduly high and was probably due to a lowering of the standard of the examination rather than to any extra capability on the part of the candidates. The teaching of geometrical drawing is very unsatisfactory as the examination results emphasize, and apparently it has always been so, the reason being that the general educational attainments of the students are so low that it is difficult for them to study the subject with only English text books which they cannot read to help them outside the class rooms. The question is a somewhat serious one as the difficulties connected with the study of geometrical and perspective drawing prevent a large number of students from obtaining group certificates and diplomas, and I hope during the present year to be able to make arrangements for improving the instruction.

14. *Employment of students.*—The names of all students who left the institution during the year after passing a public examination are given below. Of the 32 students included in the list 18 are known to have obtained employment.

STATEMENT showing the employment of students.

Name.	Highest Examination passed.	Period spent in school.	Present employment.	Salary.
		YEARS.		RS.
1. B. Reneaux ..	Freehand Outline Drawing .. I. Geometrical Drawing .. E. Cabinet making .. E. Group certificate in drawing, Cabinet making .. I. Modelling .. I. Technical Teacher's certificate .. E.	3	Guard in the Madras Railway Company, Madras.	Not known.
2. Muhamad Ghouse ..	Cabinet making .. I. Modelling .. I. Technical Teacher's certificate .. E.	10	Drawingmaster Anjuman, Vellore.	25
3. M. Ahamad Khan ..	Cabinet making .. I. Freehand Outline Drawing .. E. Freehand Outline Drawing .. E.	10	....	..
4. P. R. Doraisawmy ..	Geometrical Drawing .. E. Jeweller's work .. E. Freehand Outline Drawing .. I. Geometrical Drawing .. I. Design .. E.	6	Goldsmith in a private firm at Bangalore.	10
5. S. Shanmugavelu ..	Group certificate in drawing, Freehand Outline Drawing .. A. Geometrical Drawing .. A. Design .. A. Painting .. I.	3	....	..
6. C. Venkatakrishna Pillai ..	Group certificate in drawing, Freehand Outline Drawing .. A. Geometrical Drawing .. A. Design .. A. Painting .. I.	7	Draftsman, Survey office ..	15
7. M. C. Munusawmi Naidu ..	Group certificate in drawing, Freehand Outline Drawing .. A. Painting .. I.	6	Do. do. ..	15
8. R. Ramalingam Asari ..	Group certificate in drawing, Do. do. ..	7	Do. do. ..	15
9. Duraisawmi ..	Do. do. ..	5	Do. do. ..	15
10. Ghulam Hussain ..	Freehand Outline Drawing .. I. Cabinet making .. E. Design .. E. Group certificate in drawing, Modelling .. I.	2	....	..
11. M. Shanmukam Pillai ..	Pottery .. I. Technical Teacher's certificate .. E. Cabinet making .. I. Freehand Outline Drawing .. E. Freehand Outline Drawing .. I.	10	Drawingmaster, Maharajah's High School, Bobbili.	30
12. O. Velu Asari ..	Geometrical Drawing .. E. Design .. E. Painting .. I.	7	....	..
13. T. V. Subbaraya Mudali ..	Freehand Outline Drawing .. I. Geometrical Drawing .. E. Design .. E. Silversmith's work .. E.	5	Draftsman, Survey office, Madras.	12
14. Abdul Quadir Khan ..	Jeweller's work .. E.	3	....	..

Statement showing the employment of students—cont.

Name.	Highest Examination passed.	Period spent in school.	Present employment.	Salary.
		YEARS.		RS.
15. J. Marriappa Chetty.	Freehand Outline Drawing .. I. Geometrical Drawing .. E. Design .. E. Cabinet making .. A. Freehand Outline Drawing .. I. Geometrical Drawing .. E.	6	Carpenter, School of Arts, Madras.	10
16. Abdul Wahid ..	Design .. E. Cabinet making .. I. Painting .. E. Group certificate in drawing, Modelling .. E. Cabinet making .. I. Technical Teacher's certificate .. E.	9	Fireman, Madras Railway Company.	15
17. K. Kandasawmi Nayer.	Freehand Outline Drawing .. E.	7	Wood carver, Cuttack ..	30
18. Seetharamaiah ..	Freehand Outline Drawing .. E.	3	Draftsman, P. Orr and Sons, Madras.	6
19. V. Ramasawmy Nayudu.	Do. do. ..	5	....	..
20. Shaik Ibrahim ..	Freehand Outline Drawing .. I. Painting .. E. Cabinet making .. E. Freehand Outline Drawing .. I. Painting .. E. Cabinet making .. E. Geometrical Drawing .. E. Design .. E. Modelling .. E. Technical Teacher's certificate .. E.	7	....	..
21. D. S. Bakiam ..	Freehand Outline Drawing .. I. Painting .. E. Cabinet making .. E. Geometrical Drawing .. E. Design .. E. Modelling .. E. Technical Teacher's certificate .. E.	5	Tracer, Madras Municipality.	15
22. P. Ethirajulu ..	Freehand Outline Drawing .. E. Metal work .. E.	5	....	..
23. T. K. Parthasarathy ..	Freehand Outline Drawing .. I. Geometrical Drawing .. E. Design .. E.	4	....	..
24. C. M. Ekambaram ..	Freehand Outline Drawing .. E. Geometrical Drawing .. E. Freehand Outline Drawing .. E.	2	Apprentice, P. Orr and Sons, Madras.	..
25. Mahamed Alli ..	Cabinet making .. I. Freehand Outline Drawing .. I. Geometrical Drawing .. E.	9	....	..
26. H. Moben ..	Freehand Outline Drawing .. I. Geometrical Drawing .. E.	1	....	..
27. A. Arumuga Mudaly.	Freehand Outline Drawing .. I. Cabinet making .. I.	6	Surveyor, Salem Party, Salem.	..
28. Syed Muhamad ..	Cabinet making .. E. Freehand Outline Drawing .. I. Geometrical Drawing .. A.	1	....	..
29. V. B. Ammotty ..	Painting .. I. Design .. I.	3	....	..
30. Muhamad Abdur Rahiman Sheriff.	Freehand Outline Drawing .. E. Geometrical Drawing .. E. Design .. E. Cabinet making .. E. Freehand Outline Drawing .. I. Design .. E.	5	....	..
31. D. Varadarajulu ..	Silversmith's work .. E. Geometrical Drawing .. E.	9	Silversmith, Orissa Art work, Cuttack.	40
32. P. Indiran Asari ..	....	10	Engraver, Orissa Art work, Cuttack	30

15. The statements of accounts given below are for the financial year. Those for the Aluminium Department have been added so as to show the total amount of work done in the School of Arts. From the statements of receipts and charges for the school of arts excluding the Aluminium Department, it will be seen that the net expenditure was Rs. 27,170 as compared with Rs. 31,959 in the previous year; whilst the net expenditure on the Aluminium Department was Rs. 48,774. Statements of assets and liabilities for the school of arts and for the Aluminium Department have been prepared and show that the total cost of the School of Arts was Rs. 27,866-0-1 and that there was a profit on the working of the Aluminium Department of Rupees 21,450-4-8. The average annual expenditure on the School of Arts during the last 12 years has been Rs. 31,186-2-9. In September last the half-yearly balance sheet of the Aluminium Department was prepared by Mr. Middlemast who also took the stock and valued it, and the result of his investigations showed that between March 1898 and September 1901 the gross profit on the aluminium business amounted to Rs. 34,503-7-1. In March this year the Accountant-General under the orders of the Government prepared a complete statement of the accounts of this department

from the time it was first started and a special officer was deputed to value the stock. The results of these investigations have not yet been communicated to me, but in my No. A.L. 5155, dated the 4th of February 1902, I submitted to you a statement showing that taking into account all charges which can be fairly debited to the Aluminium Department the net profit from the beginning was sufficient to pay 4 per cent. interest on the capital which had been supplied by Government.

RECEIPTS and sales.

	Receipts.		Sales.	
	1900-1901.	1901-1902.	1900-1901.	1901-1902.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Wood work department	2,537 9 4	7,095 3 10	2,951 7 11	8,738 15 5
Carpet weaving	1,321 11 10	1,369 0 0	1,866 12 4	1,181 4 0
Metal work	6,700 13 0	9,421 10 6	11,107 15 8	9,813 10 4
Jewellers' work	49 6 0	385 2 0	34 14 0	535 13 0
Pottery	6,308 3 8	4,242 15 1	8,733 5 8	2,464 12 10
Modelling .. .. .	....	296 2 0	....	296 2 0
Lacquer work	144 4 1	523 0 3	310 7 4	310 14 9
Engraving	250 3 0	15 6 0	24 5 0	14 2 0
Weaving .. .. .	....	176 15 5	....	1,123 10 11
Drawing and miscellaneous	10 8 0	88 8 0	5 10 3	77 2 0
Total ..	17,322 10 11	23,613 15 1	24,534 14 2	24,556 7 3
Aluminium Department ..	1,32,757 5 9	1,86,650 4 11	1,52,202 5 1	1,95,845 6 8
Grand Total ..	1,50,080 0 8	2,10,264 4 0	1,76,737 3 3	2,20,401 13 11

STATEMENT of receipts and charges.

Receipts.		Charges.	
RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Drawing Class.		Drawing Class.	
School fees	2,146 3 6	Assistant Superintendent	2,400 0 0
Cash sales	409 6 0	Pupil-teachers—Permanent	475 0 0
Realization upon bills	13,982 5 5	Do. —Temporary	1,171 0 6
Do. adjustment	7,488 5 8	Clerks	204 0 0
Advances	91 8 0	Scholarships	2,047 3 11
Exhibition account	1,681 0 0		6,297 4 5
		Industrial Department.	
Miscellaneous.		Industrial assistant	5,100 0 0
General education class fees	29 6 0	Weaving do.	425 12 11
Fines, refunds, &c.	11 6 0	Pottery assistant and stock-keeper	858 0 0
		Instructors—Permanent	2,218 12 0
		Do. —Temporary	1,705 8 10
		Servants, &c.	199 0 0
		Scholarships	599 7 9
		Stipends of apprentices	3,014 13 3
		Wages of coolies	13,180 5 0
		Value of materials	13,291 13 1
		Tools and plant	775 8 6
		Contingencies	423 5 9
		Tour charges, &c.	360 3 6
			42,084 10 7
Excess of expenditure over receipts		General.	
		English class teachers	676 8 0
		Head and assistant clerks	1,007 6 2
		Travelling allowance of establishment	173 8 0
		Servants, &c.	1,535 8 4
		Municipal assessment	1,006 8 0
		Postage charges	137 3 0
		Telegraph charges	2 14 0
		Office and other contingencies	38 9 0
			4,578 0 6
Grand Total ..	52,959 15 6	Grand Total ..	52,959 15 6

STATEMENT of receipts and charges of the Aluminium Department for 1901-1902.

Receipts.	Amount.	Total.	Charges.	Amount.	Total.
	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
Cash bills	11,528 10 1		Materials	1,71,550 3 2	
Realization of bills ..	1,68,838 7 1		Wages of workmen ..	47,135 6 6	
Do adjustment..	2,637 15 2		Tools and plant ..	4,402 1 1	
Advances	842 1 7		Contingencies	6,448 5 3	
Balance on hand on the 31st March.	2,803 3 0		Establishment	4,593 15 7	
		1,86,650 4 11	Honorarium	550 0 0	
Excess of expenditure over receipts.	..	48,774 2 8	Travelling allowance ..	744 8 0	
Total ..	..	2,35,424 7 7	Total ..	..	2,35,424 7 7

STATEMENT of assets and liabilities.

Assets.	—	—	Liabilities.	—	—
	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
Amount of receipts ..	..	25,789 8 7	Amount of expenditure ..	..	52,959 15 6
Sundry debtors	..	5,524 7 5	Liabilities—		
Stock of manufactured articles on the 31st March 1902.	4,154 4 0	..	Lighthouse division ..	1,525 10 7	
Stock of unfinished articles on the 31st March 1902.	2,606 4 6		Stipends of apprentices for March 1902.	262 0 2	
Stock of materials on the 31st March 1902.	2,012 6 0		Wages of workmen for the fortnight ending 31st March 1902.	329 6 0	
		8,772 14 6	Messrs. Badsha Sahib & Co.	1,753 5 9	
Value of tools and plant.	..	775 8 6			3,870 6 6
Liabilities of 1900-1901 paid during the year.	..	4,402 2 2	Outstandings on the 31st March 1901.	..	8,853 11 8
Total ..	..	45,264 9 2	Stock of manufactured articles unfinished articles and materials on 31st March 1901.	..	7,446 7 7
Balance ..	..	27,866 0 1			
Total ..	..	73,130 9 3	Total ..	..	73,130 9 3

STATEMENT of assets and liabilities of the Aluminium Department for the year 1901-1902.

Assets.	Amount.	Total.	Liabilities.	Amount.	Total.
	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
Receipts	..	1,86,650 4 11	Expenditure—		
Sundry debtors	..	44,936 3 10	Materials	1,71,550 3 2	
Articles presented to public institutions.	..	141 15 0	Wages of workmen ..	47,135 6 6	
Stock of manufactured articles on the 31st March 1902.	29,050 0 0		Establishment	4,593 15 7	
Stock of materials on the 31st March 1902.	89,716 0	1,22,831 0 10	Travelling allowance..	744 8 0	
Stock of manufactured articles with agents less 3 per cent.	4,064 8 10		Contingencies	6,448 5 3	
Amount of liabilities of 1900-1901 paid during the year.	..	15,862 5 7	Honorarium	550 0 0	
Tools and plant 5,559 less 12½ per cent. + 4,402 (fresh).	..	9,236 2 0	Tools and plant ..	4,402 1 1	
			Advance	..	842 1 7
			Liabilities—		
			Wages of workmen ..	466 14 1	
			Establishment	249 0 0	
			Messrs. Best & Co. for metal.	14,158 9 0	
			Contractor	110 1 0	
			Agent's expenses ..	96 2 10	
					15,080 10 11
			Outstandings on the 31st March 1901.	..	35,644 3 9
			Stock of articles on hand on the 31st March 1901.	..	65,687 0 0
			Tools and plant less 12½ per cent.	..	5,559 3 8
					3,58,287 11 6
			Profit ..	..	21,450 4 8
Total ..	..	3,79,688 0 2	Total ..	..	3,79,688 0 2

16. *Industrial departments—Wood-carving and Carpentry departments.*—In these departments the sales amounted to Rs. 8,738-15-5 as compared with Rs. 2,951-7-11 in the previous year. This substantial increase is due to the execution of a large number of comparatively small private orders, and there is no doubt room for considerable expansion in this direction. During the year accurate accounts have been kept of the cost of production, and the bulk of the orders undertaken were executed at a profit. The number of wood-carvers and carpenters in Madras is not very large, and owing to the fact that many of them have been attracted to the Mysore palace works, there has at times been considerable difficulty in getting work turned out. The market for South Indian wood-carving is a very fluctuating one and a man earns much better wages as a carpenter and joiner than he does as a skilled wood-carver. It seems desirable to try and create a steady demand for artistic furniture and ornamental wood-work of the type which is produced in Madras. Government have sanctioned an expenditure of Rs. 5,000 for the preparation of an illustrated hand-book and price-list with the view of making known the products of the skill of the Madras wood-carvers in a much wider market than at present, but it will take a considerable time to compile as the illustrations must all be from photographs of actual articles and till recently no systematic photographic record of work done has been maintained. Several specimens of work produced at the School of Arts were shown at the exhibition of the Fine Arts Society in February last, and the following quotations from an article in the *Madras Mail* on the exhibition may be of interest:—

No. 33, Lady's Writing Table, is one of the best things in the exhibition, charming in design, and the wood for once well chosen and just the right colour. The inlay is delicate and harmonious and the brass handles tastefully in accord with the general scheme. No. 32, Rose Wood Side-Board, is a magnificent specimen of local handicraft, the design of M. Velayuda Asari. It has only the prevailing fault of Madras wood-work, namely, excessive blackness to mar it, but the richness and fertility of the design, the good taste and excellence of the workmanship more than atone for it. Indeed it would look well in any colour, and, even as it is, would make a superb addition to a hall or palace. It is a pity that such a triumph of Native skill cannot be sent to an American or English exhibition. There are scores of rich men who would gladly take it at treble the price.

I may add that, since the exhibition was closed, this side-board has been sold and will, I believe, be sent to England. I am inclined to think that the demand for the best class of Madras furniture is practically unlimited, but the actual quantity which goes to the market is very small owing to the fact that purchasers have to order everything they want and that no stock is available for inspection. More than half our work is now done for stock and it is generally sold immediately after completion. This leads me to think that a permanent public show-room in which could be exhibited a representative collection of the products of Madras handicraft would be a great success; provided that every article was for sale and could be removed by the purchaser at once. With careful attention to both the artistic and the business side of the institution, an immense amount of assistance could be rendered to Madras artisans. I have already referred to this matter in connection with the various proposals which have been made for disposing of the funds in the hands of the trustees of the Victoria Jubilee Technical Institute, and I only refer to it here to state that the experience I have gained during the last 12 months in this department of the School of Arts convinces me that the project if properly carried out would be very successful and would probably do more to reviving the art industries than any other plan. The main difficulty connected with the expansion of this business is the provision of suitable designs. Left to themselves, the designs of Native draftsmen are structurally inferior and they will rely too much on profuse ornamentation for the general effect. In M.R.Ry. Velayuda Asari, the Assistant Superintendent, and R. Kalimuttu, the Maistry of this department, I have the services of two exceedingly skilled designers and it is only their imperfect knowledge of European habits and requirements that prevents them from being absolutely in the first rank as designers. I am endeavouring to discover more men of the same stamp, but so far with no great amount of success.

Carpet-weaving department.—The sales in this department were Rs. 1,181-4-0 as compared with Rs. 1,366-12-4 in the previous year. During the greater part of the year no attempt was made to do more than keep the permanent staff and apprentices at work. But towards the end of the year there were a number of enquiries for

carpets from exporting firms, and I am now engaged in making as many carpets as the looms can accommodate; and an attempt is being made to reduce the cost of production. If it is successful, it will probably result in a very great demand for these carpets; and I hope to eventually transfer the whole business to Ellore, where there are a large number of carpet-weavers whose industrial condition at the present time is far from satisfactory. The demand for Indian carpets in Europe and America is very considerable and has been greatly stimulated of late by the enterprise of the American missionaries, who have started a very large carpet-weaving factory on a commercial scale in Ahmadnagar. Unless efforts are made to improve the Madras carpet-weavers, the little business they have will probably be lost, whilst a serious effort to improve the methods of manufacture may lead to a considerable expansion of business which will be mainly obtained by opening up new markets and not by competing with those which have already been developed.

Pottery department.—Early in the year I represented to you that the pottery department was in an unsatisfactory condition, and I recommended either the employment of a special expert and a large expenditure upon machinery and plant or the abolition of the department, and of the two courses I preferred the latter. Government were pleased to approve of the proposals in their order No. 17, dated 9th January 1902. For the greater part of the year no work was done but when it was finally decided that the pottery department should be closed, it was found that considerable inconvenience would be caused to the Medical Store department unless some provisions were made to meet their annual requirements. Accordingly arrangements were made to supply that department with sufficient stock to last for three years and that work has now been completed. The value of the sales was Rs. 2,464-12-10 as compared with Rs. 8,733-5-8 in the previous year.

Jewellery work.—The sales in this department amounted to Rs. 535-13-0 against Rs. 34-14-0 in the previous year. Enough gold and silver jewellery was made to keep the apprentices properly at work and the rest of the increase was due to the sale of a number of miniature Kaiser-i-Hind medals, the dies for which were prepared by the engraving instructor.

Metal work department.—During 1900-1902 this department was attached to the Aluminium department and there has therefore been no change in the management as has been the case with all the other departments of the School of Arts. The sales amounted to Rs. 9,813-10-4 and the receipts to Rs. 9,421-10-6. The work of this department is almost entirely confined to copper, brass and silver. Window fittings for the lighthouse division, copper tanks for the Medical Store department, copper repoussé work in the form of panels and jars and a fairly large order for native utensils made of silver for the late Jaghirdar of Arni constituted the bulk of the work turned out during the year.

Decorating and painting work.—The most important development in this department during the year was the starting of Fresco-painting. In order to give the students a fair opportunity for practising the art a set of three rooms was taken in hand and the walls were decorated with frescoes. The work is now nearly complete and though it shows signs of the prentice hand yet it is very effective. One of the rooms serves as my office and the other two are used as show-rooms. A number of apprentices are now capable of undertaking the work of decorating the interiors of buildings and I should be glad if the attention of the Consulting Architect to Government was drawn to this fact.

Modelling department.—This is practically a new department which was started at the beginning of the year, though modelling work was occasionally done before by the staff of the pottery department. The work is under the direct supervision of M.R.Ry. Velayuda Asari. Some of the best specimens of the work done were exhibited at the Fine Arts exhibition and the remarks of the *Madras Mail* on the subject may be quoted.

“The exhibits of the Madras School of Arts are in one important respect an advance upon anything which has hitherto been done either here or in any part of India. Some of the busts and figures are really excellent, and in this branch we have reason to believe that a very beautiful and lucrative craft is springing up, and one

which will without doubt receive great encouragement from purchasers and recognition by all. Some of the specimens in this section are covetable in a high degree, and we can only say to the students “Go on in the same path, stick to your own native types, and some among you may do wonders.”

There is no doubt that the clay modelling is extremely good, but it is little use teaching students to model unless there is an outlet for the exercise of their skill. So far we have not succeeded in obtaining any remunerative work, partly because we have not yet ventured to make metal castings from clay models except upon an experimental scale, and partly because we have not as yet received any commissions for work of this kind. Native taste favours Ormolu clocks and Parisian bronzes and it is hardly likely that there will be any change in this direction in the immediate future. The only chance of a career for the students will be to encourage the erection of statues and bronzes as memorials of men or deeds. In this way those who wish to commemorate the dead or advertise themselves may be made to do useful work by extending a helping hand to the struggling artists of their own community.

Weaving.—The weaving department was started at the beginning of the year to ascertain the possibilities of improving the methods of the hand-weavers of this country. For more than a year I took such opportunities as came in my way of studying the conditions under which hand-weavers carry on their trade, and I came to the conclusion that at the outset it would be desirable to confine my attention to one small branch of this big industry and in that branch to work on a scale sufficiently large to enable results of commercial value to be obtained. It seemed obvious that the introduction of the European hand-loom with the flying shuttle would effect a great improvement upon native systems of weaving, and the fact that it was in use in the Basel Mission Weaving establishment and in several Industrial schools led me to think that it was probable that a very much greater use might be made of it. As the result of my enquiries I concluded that the manufacture of the well-known Madras handkerchiefs for the export trade would be a suitable field for the earlier weaving experiments. They were first started at the Chingleput Reformatory School with the assistance of the Deputy Superintendent Mr. J. P. Lewis and later on a number of hand-looms were set up in the School of Arts and still later the manager of the Wesleyan Mission Industrial School at Karur was induced to undertake the same class of work. At the end of the year I am compelled to say that we have made no substantial progress. We have certainly discovered the difficulties that lie before us and are no longer surprised that the European hand-loom has found but a limited field for employment in India. The expenditure during the year was Rs. 2,281-5-11 and the receipts Rs. 176-15-5. These figures however do not fairly represent the amount of work done as a considerable quantity of yarn was paid for in kind and the outstandings at the end of the year amounted to Rs. 1,036-10-7, so that roughly it may be assumed that the weaving experiments have only cost us Rs. 100 a month. The question of the introduction of the flying shuttle was the subject of a wordy newspaper correspondence during the latter part of last year and a great many wild and utterly unpractical assertions were made * * *

In order to make the fly shuttle and the European hand-loom more generally known through the Presidency I had drawings of the looms prepared and the candidates for the Elementary and Intermediate examinations in Cabinet-making were required to make in the Elementary examination a full sized “lathe” or “slay” and in the Intermediate examination, a model of a complete loom to scale. Afterwards copies of these drawings and a photograph of a loom in working order were sold at Re. 1 per set. The model looms were sold at Rs. 10 each and the “lathes” received from the various centres were used in the looms now at work in the weaving shed in the Mount Road. In all 36 sets of drawings and 4 model looms have been sold.

Besides constructing all the looms and other machines required for the weaving shed in the Mount Road, four complete hand-looms and eight “lathes” or “slays” have been sold to people interested in the improvement of the weaving industry. The price of a complete hand-loom is Rs. 75 and for a lathe or slay Rs. 20. In each case two shuttles and one set of reeds and healds are included. The use of the flying

shuttle confers upon the weaver the power of producing an increased outturn when dealing with comparatively coarse counts. But without a complete modification of all the preparatory processes of the Indian hand-weaver it seems doubtful if the flying shuttle is of any advantage to him in the finer work on which hand-weavers depend for a livelihood. I have already alluded to the appointment of a weaving assistant and the transfer of all the work to the Mount Road. It seems desirable to emphasize the fact that at the present time the weaving department is a purely experimental department and is in no sense a school of weaving. It has sprung from the necessity of trying to do something to save the hand-weavers of this country from complete destitution and possibly final extinction. If we discover any methods of procedure which are of commercial advantage it will first be necessary to clearly demonstrate that the commercial advantages are real and then, and then only, shall we be justified in setting up weaving schools to introduce these improved methods to the notice of the weaving population. The matter affects probably ten million weavers in India and is therefore one of immense importance and I hope that, now I have an expert in weaving to assist me in these investigations, I shall be able to record next year something more than a series of negative results. Briefly stated, my idea is to improve the native weaver by giving him a better system of preparatory machinery and an improved loom to work with, to diminish the cost of production by collecting the weavers in small factories where a variety of small but in the aggregate material economies can be effected. Put in another way, the real question at issue is whether between the primitive hand-loom and the modern weaving factory there is any intermediate stage in which manual labour can be employed with efficiency and economy. These are the lines upon which we are at present working, but they are subject to modifications as experience shows that in any direction they are capable of improvement.

17. *Aluminium Department.*—During the year the sales in this department amounted to Rs. 1,95,845-6-8 and the expenditure to Rs. 2,35,424-7-7. In the following table similar figures for each year since this industry was started are given, from which it will be seen that there has been a steady increase in the amount of business done.

Year.	Sales.			Expenditure.		
	RS.	A.	P.	RS.	A.	P.
1898-1899	50,791	5	7	48,814	7	5
1899-1900	1,10,657	10	5	94,174	0	8
1900-1901	1,52,202	5	1	1,95,033	13	5
1901-1902	1,95,845	6	8	2,35,424	7	7

The total receipts amount to Rs. 4,61,845-11-11 and the total expenditure to Rs. 5,73,446-13-1 and against this net expenditure of Rs. 1,11,601-1-2 we have net assets valued at Rs. 1,64,192-4-2 so that the gross profit on the industry from the beginning amounts to Rs. 52,591-3-0. The growth of the industry is much greater than the growth of the sale-proceeds as is shown by the following table in which the amount of metal purchased and the amount of metal actually used in the workshops are given :—

Year.	Metal purchased.		Metal used.	
	lb.		lb.	
1898-1899	20,102		Not available.	
1899-1900	56,615		33,844	
1900-1901	74,355		36,444	
1901-1902	126,938		56,688	

The great difference between these two columns of figures is accounted for by the gradual accumulation of the stock which is necessary for economical working and by sales to other manufacturers and to artisans in the bazaar, the amount of which during the last six months was 18,977 pounds. The work of military equipment in

aluminium utensils is making fair progress as may be seen from the following statement which shows the value of the military orders received during each year from the beginning of the work :—

Year.	Amounts.		
	RS.	A.	P.
1898-1899	413	14	0
1899-1900	16,014	8	3
1900-1901	27,722	1	6
1901-1902	63,823	9	7

Roughly one-third of our business is now military work, one-third for European residents in the country and one-third for the purely native market. It is upon the growth of this last item that the successful establishment of a big industry entirely depends and although progress is very slow considering the enormous extent of the native market, yet progress is being made and would certainly be much greater if it were possible for us to undertake a really energetic course of action for the development of business. For sometime past I have employed three native agents at Calicut, Coimbatore and Salem and there are workshops at Tinnevely, Chingleput, Madura, Ongole, Cocanada and Palghat, all of which are engaged in the native business and the results which have been obtained over so wide an area are sufficient to show that to extend the business it is simply necessary to multiply the number of agencies till every large town throughout the country has a depôt. The demand for aluminium is extremely varied and I am certain that no other aluminium manufactory in the world turns out such an enormous variety of goods as is done in the School of Arts. Military work consists largely of water bottles, of which we have made twenty-four thousand, of large dishes and cooking pots ranging to upwards of sixty gallons in capacity and of small canteen sets and lotas for individual use. The demand among Europeans is mainly for sauce-pans, dishes, tumblers and kettles and latterly there has been a rapidly growing demand for soup plates, bowls and dishes. This is largely due to the fact that we have constructed a press, by means of which the cost of production has been greatly reduced and such articles can now compete on almost level terms in the matter of price with enamelled hardware. In fact when it is remembered that an old aluminium plate is worth as metal half its original value and that an old enamelled iron plate is worth nothing at all and that the cost of the one is not much greater than that of the other it becomes perfectly evident that even in the matter of price aluminium is superior to enamelled ironware. The growth of native business has been greatly retarded owing to certain shipments of metals sent out from England having been of an inferior quality, and it was only after a considerable quantity of this metal had been manufactured and sold that the defects became evident. Since then every consignment of metal received from the British Aluminium Company has been most carefully examined, and any that did not reach the very high standard of quality that was insisted upon was unhesitatingly rejected and returned to the makers. The manufacture of aluminium is confined to a small number of big companies operating in America, Germany, France and England and by international agreement the whole of the supply of metal to India is in the hands of the British Aluminium company. Previous to this arrangement the Pittsburg company in America shipped some twenty thousand pounds of metal to Bombay and Madras, but at the present time, with the exception of a small quantity which goes to Bombay direct, the whole of the metal imported into India was at the instance of this department. * * *

18. In November 1900 indents were sent to the Secretary of State for metal working machinery to enable the development of certain lines of business to be taken up but only part of the machinery was received during the year and no use could be made of it. It is expected that the complete plant will be delivered within a month or two and I hope then by combining the best hand-labour with the most modern machinery to be able to effect a substantial reduction in the cost of manufacturing processes and, therefore, to considerably reduce the price of most articles largely in demand among Hindus.

19. *Library and Museum.*—I regret that during the year I have been unable to submit any of the proposals for the improvement of the Library and Museum, because it is difficult to draw up any definite scheme until Government have issued final orders regarding the future working of the whole institution.

20. *Aermotor.*—At the instance of the Board of Revenue I made certain enquiries regarding the value of Aermotors for irrigation purposes and as no definite data were available I entered into an arrangement with Messrs. Parry and Co. to conduct a continuous trial of an Aermotor. Messrs. Parry and Co., as agents for the Chicago Aermotor Company, supplied a 16-ft. wind-mill with steel tower, 70 feet high, and the Board of Revenue made a grant of Rs. 2,000 towards erecting the same and carrying out the experiments. The wind-mill has been put up in the School of Arts compound and the necessary measuring tanks have been built. The experiments have been in progress since the beginning of March and a continuous record of the work done by the wind-mill is maintained.

21. *General remarks.*—At the present time the industrial side of the School of Arts is rapidly expanding and the total outturn of work is about twenty times as much as in former years. Besides apprentices and students, fully 500 workmen are in constant employment working under the best maistries and foremen I have been able to secure. As the methods of working here are superior to those of the bazaar, a very large amount of educational work is done among these work people who are trained to habits of order and precision and compelled to turn out work with accuracy and finish. Probably the results from training workmen are of greater importance than those from training boys to be workmen. At any rate, they are more immediately perceptible and have a more distinct influence on the commercial development of the country.

22. In conclusion, I desire to bring to your notice the very excellent work done by the staff under my orders. My two chief assistants Mr. Brand and M.R.Ry. Velayuda Asari have each in their own departments done exceedingly good work and upon them has largely fallen the burden of working out in detail the numerous developments which have taken place during the year under review. The work in the office has been extremely heavy and the head clerks M.R.Ry. N. Subrahmanya Aiyar and M.R.Ry. S. G. Daniel are deserving of great praise for the zeal and energy with which they have carried out their very arduous duties. Of the industrial assistants M.R.Ry. K. Srinivasa Sastri in the aluminium department and R. Kalimuthu in the wood-carving department have done excellent work.

Proceedings, Dis. No. 2927 of 1902.

The report relates to the official year 1901-1902. Under G.O., No. 55, Educational, dated 4th February 1901, the report on this institution should be for the calendar year, but on account of certain difficulties represented by Mr. Chatterton the sanction of Government has been sought in a separate communication for this and future reports being prepared so as to cover the official year. Mr. Chatterton has embodied in this report the transactions of the aluminium department of the school, which were omitted from previous reports because they were not conducted under the supervision of the Superintendent of the school. The financial statements and most of the statistical tables should, in future, be given as appendices, the necessary comments being given in the body of the report.

2. *Staff.*—Mr. Chatterton remained in charge of the school throughout the year except for three weeks when he was absent on privilege leave. During this short period, Mr. Middlemast had charge of the school without prejudice to his duties in the Presidency College. The Industrial Assistant and the Assistant Superintendent continued in uninterrupted charge. The appointment of an assistant for the weaving department was sanctioned in January last and Mr. J. W. Coombes was appointed to the post. It is observed that the work connected with the inspection of Technical schools necessitated Mr. Chatterton's absence from Madras for only six weeks.

3. *Accommodation.*—For want of suitable and sufficient accommodation, the weaving department was removed to a rented building in the Mount Road in January last, but this arrangement is now reported to be extremely inconvenient. It does not, however, appear desirable that any change should be made until the lines on which the school is to be worked are definitely settled. The removal of the wood-carving department to a shed in the compound should be expedited so that the museum may be restored as soon as possible to its original use. The repairs to the permanent buildings of the school which are reported to be in a dilapidated condition ought not to be deferred pending the reorganization of the school.

4. *Library and museum.*—The library received no addition during the year. The submission of the detailed proposals in regard to the museum called for in the review of the last report, is, it is stated, deferred pending the reorganization of the school.

5. *Strength and attendance.*—(i) The enhanced scale of fees recently sanctioned by Government and the payment of fees by apprentices for attendance in drawing classes were brought into force in January last. This has told to a marked extent on the strength of the school which fell from 491 to 321, but this decrease, which was anticipated, was no loss as it merely meant the elimination of those pupils and apprentices who had no serious intentions of following a course of technical study. The improvement in the average daily attendance is noted. The decrease in the strength was shared by all classes except Brahmans. The percentage of pupils belonging to the poorer classes to the total strength was 67 against 65 in the previous year. The decline under artisans is regretted. Of the 321 pupils, 286 belonged to Madras, 33 came from thirteen other districts and the remaining two from Mysore. Seventy-eight of the pupils had passed a general education test, seven of them being undergraduates of the Madras University.

(ii) *Drawing classes.*—The elementary classes were those most affected by the general decrease, but the fall in numbers did not affect the monthly income. On the contrary, owing to the enhanced rates brought into force by the new regulations, it increased more than threefold. The strength of the advanced class rose from 35 to 42, and the special painting class contained three pupils.

(iii) *Industrial classes.*—The number of apprentices fell from 222 to 115, and the decrease, which has already been accounted for, related to all the industries, the fall being heaviest in the wood-carving, painting, and carpet-weaving departments. The figures showing the number of apprentices in the several industrial classes on the 31st March, as given in the two tables in paragraph 10, do not agree.

(iv) *Special classes.*—These classes also declined in strength, but the decline has not been explained. The results achieved by the evening class in the technical examinations were satisfactory.

(v) *General education classes.*—The deterioration in the strength of these classes was due to the fall in the number of apprentices. Only a little over 50 per cent. of the apprentices attended them for instruction. The Assistant Inspector who examined the school in March last reported that the results of his examination were fair on the whole. This report will be communicated to the Superintendent in a separate order.

6. *Examinations.*—For the several examinations in drawing 395 candidates appeared, of whom 185 passed, the corresponding figures for the previous year being 453 and 279, respectively. The percentage of passes thus fell from 61 to 47. For the examinations in industries 23 against 33 students in the preceding year were sent up and 15 against 24 were successful, the percentages being 65 against 73. The results obtained at the several examinations were thus comparatively unfavourable to the year under review. Mr. Chatterton considers that the results in drawing were more satisfactory than is apparent from the figures, as the percentage of passes in the examinations of 1900 was unduly high and that this was probably due to a lowering of the standard in that year. The facts, however, would seem to indicate the reverse, for while the percentage of success in 1900 was 61, that of the previous year was 67. The Director is unable to endorse Mr. Chatterton's views in regard to the scale of fees prescribed for the Technical examinations, and the value of the certificates, nor does he consider it desirable that the apprentices of the school should be

admitted to the examination without payment of fees. He is also unable to see that there is any room for what Mr. Chatterton calls "cramming" in preparing pupils for these practical examinations. The propriety of withdrawing from the pupils the privilege they have hitherto enjoyed of paying their fees from their savings appears to be somewhat doubtful, especially as these savings consist of money they have earned. If as Mr. Chatterton thinks the certificates are to many of them of little value, then it should be optional with them to appear for the examinations, but in that case the progress of the pupils in the school will have to be tested in some other way. Information regarding the number of students that passed the Technical Teachers' certificate examinations has not been furnished. This omission should now be supplied.

7. *Former students.*—Of the 32 students who left the school during the year, 18 are reported to have found employment, their emoluments ranging from Rs. 6 to Rs. 30. Nine of these secured employment as drawingmasters, draftsmen and tracers. Only five followed the trades taught in the school.

8. *Finance.*—The total amount of sales in the several departments of the school (excluding the aluminium department) taken together was almost the same as last year, and it would have been much larger but for the smaller amount of sales in the pottery department which under the orders of Government was closed during the year. The total expenditure on the school was Rs. 52,960 against Rs. 50,591. The net expenditure of the year, however, was Rs. 27,170 against Rs. 31,959 of the year previous. The value of the stock of manufactured and unfinished articles and materials was Rs. 1,326 more at the end than at the beginning of the year. The amounts of outstandings and liabilities at the beginning of the year were Rs. 8,854 and Rs. 4,402, the corresponding amounts at the end of the year being Rs. 5,524 and Rs. 3,870, respectively; thus the net amount of recoverable debts due to the school was Rs. 2,798 less at the end of the year than at the beginning. Taking all the transactions of the year into account, there was a balance of Rs. 27,866 against the school corresponding to Rs. 45,766 in the year previous. The aluminium department, from the figures furnished in the report, would appear to have worked at a profit during the year. Under the orders of Government the accounts of this department were recently audited by the Accountant-General and that officer's report will show the exact condition of the industry.

9. *General.*—Paragraph 16 of the report contains a detailed account of the working during the year of each of the industrial departments, the difficulties in the way of the development of the industries and suggestions as to the manner in which expansion of business is hoped to be secured. Special endeavours should be made to complete during the current year the illustrated catalogue of art furniture. The introduction of fresco-painting in connection with the lacquer work or painting department was a new feature. A portion of this paragraph has been omitted as containing controversial matter out of place in a report. Paragraph 17 contains an account of the aluminium department. The figures relating to the quantities of metal purchased and of metal used indicate the increasing expansion of the industry. With the installation of the new machinery a reduction in prices will, it is hoped, become practicable, and the effect of this reduction on the native market will be watched with interest. The correspondence relating to the aëromotor has not passed through this office. The attention of the Consulting Architect will be invited to the remarks of Mr. Chatterton on decorating and painting work contained in paragraph 16 of his report.

10. The working of the institution during the year has on the whole been very satisfactory and, considering the nature of the work, the success that has so far been achieved is creditable to Mr. Chatterton and his assistants. On the art side there is still room for expansion in the manufacture of artistic furniture, in fresco-painting and design. Mr. Chatterton's suggestion that a permanent show room for art work should be opened is worthy of adoption and it is hoped that the Victoria Jubilee Institute will be able to do something in this direction. On the industrial side there has been development in the aluminium department, but progress is still slow as it must be under the circumstances. In the weaving department matters are still in the experimental stage and it is too soon as yet to expect any positive results. It is

doubtful if the jewellery department serves any very useful purpose, and its further continuance is a matter for consideration. There is no lack of skilled native jewellers in this country, and the demand for jewellery is sufficiently met by them and the European firms that have long been established and seem to drive a thriving trade. The only object served perhaps by the department is the training of the apprentices in design, but it is observed that next to the carpet-weaving department it has the smallest number of students, and does not thus appear to be very attractive. In regard to carpet-weaving the eventual transfer of the whole business to Ellore as proposed by Mr. Chatterton would seem to be a step in the right direction.

(A true Extract.)

G. H. STUART,
Director of Public Instruction.

To the Superintendent, School of Arts.

- „ Inspectors of Schools.
- „ Inspectresses of Girls' Schools.
- „ Principals of Colleges.
- „ Managers of Industrial Schools.

Copy to Government, with (C.L.)

„ the Consulting Architect with the Government of Madras
for information with reference to paragraph 9.

ORDER—No. 390, Educational, dated 8th July 1902.

The working of the school during the year 1901-1902 was fairly satisfactory, but the results obtained in the various Government technical examinations were disappointing, and judged by this test the instruction would appear to have been in some respects defective. The Director has shown that Mr. Chatterton's explanation of the failures is untenable, and the Government fear that the teaching side of the school has been somewhat neglected for the industrial. The latter is important, but it is of secondary importance only and it must not be given undue prominence. The matter is one which requires the early attention of the Director of Public Instruction.

2. On the art side of the school fresco painting was started with some prospect of success and modelling classes were opened. On the industrial side there was a still further development of the manufacture of aluminium goods, and a weaving department was initiated with the object of ascertaining by experiment whether and in what manner the efficiency of hand-loom weavers can be increased. For the purposes of experiment, operations on a large scale are not necessary, and this department should not be expanded without the express orders and sanction of the Government. The propriety of entrusting to the Superintendent of the School of Arts the task of making experiments with aëromotors is open to question and the work should certainly not have been undertaken without the sanction of the Director.

3. The Governor in Council approves of the proposal to restrict the number of unpaid apprentices, but he does not share Mr. Chatterton's views regarding the fees for the technical examinations and the value of the certificates granted to successful candidates, and he disapproves of his action in refusing to allow apprentices to withdraw their savings from the bank for the purpose of paying their examination fees.

4. The proposals to transfer the carpet-weaving department to Ellore and to abolish the jewellery branch should form the subject of separate communications from the Director. With reference to the former, it should be stated how the industry could be taught in Madras if the class were transferred.

5. The attention of the Public Works department will be drawn to the remarks about the dilapidated condition of the school buildings, and the suggestion to establish a permanent show-room in Madras will be referred to the trustees of the Victoria Technical Institute for favour of opinion.

6. The report contains too many tabular statements and is much too long. It should not in future exceed the limit of eight pages, which was given as the average length in the table appended to G.O., No. 246, Educational, dated 25th April 1902, and the Director's review should not exceed two pages.

(True Extract.)

H. A. STUART,
Ag. Secretary to Government.

To the Director of Public Instruction.
" Public Works Department.
" Honorary Secretary, Victoria Technical Institute.

EDUCATIONAL DEPARTMENT.

NOTES CONNECTED WITH G.O., No. 390, EDUCATIONAL, DATED
8TH JULY 1902.

[SUBJECT.—*Report on the working of the School of Arts.*]

From the Director of Public Instruction, B.C. No. 4184, dated 28th May 1902.

Mr. Chatterton's report on the school of arts is interesting but diffuse and the Director's review also might have been condensed.

2. *Paragraph 3 of the report.*—The school building is reported to be in a very dilapidated condition. The attention of the Public Works department may be drawn to this.

Yes.

J. T. [HOMSON].

3. *Paragraph 9.*—The average attendance shows a marked improvement, being 78 per cent.

4. *Paragraph 9.*—The number of paying pupils is given as 332, whereas there were only 321 pupils on the rolls on the 31st March 1902. The difference is attributed to the inclusion of pupils who pay extra fees for the engraving and modelling classes. But as there were only six such pupils this does not explain the discrepancy. Six pupils are shown as paying for the English class and this is not understood.

Send an audit slip to obtain the desired explanation.

J.T.

Memo. sent.

T. KANAKASUNDARAM PILLAI,—3-7-02.

It is hardly Mr. Chatterton's fault; his line is in aluminium and any other industry; he would not, I believe, lay claim to being artistic.

A. T. PRINGLE,—14-6-02.

Nevertheless the school is a school of art and apparently is not teaching properly.

J.T.

6. *Paragraph 13.*—Mr. Chatterton proposes that the apprentices in the industrial classes should be admitted free to the Government technical examinations. This concession is now enjoyed by the pupils of the Reformatory school and it may be extended to the apprentices and artisan pupils of the school of arts.

H. A. STUART.

I agree with Secretary.

J.T.

7. *Paragraph 16.*—Copy of the report may be communicated to the Victoria technical institute with reference to the proposal for the establishment of a permanent show-room.

T. KANAKASUNDARAM PILLAI,—14-6-02.

Action may, I submit, be taken as proposed above at **A** and **B**.

2. The Government do not want, it is imagined, to enlarge on the subject of Government does not. It is shelved *pro tem*.
J.T.
How will transfer to Ellore permit teaching in Madras?
J.T.
* Yes, get special reports.
J.T.

3. As to the fly-shuttle Mr. Chatterton's views are in opposition to those of Messrs. Havell and Nicholson: personally I should prefer to trust the latter; they are also opposed to facts in Bengal, where the fly-shuttle is now freely used by numerous weavers whose skill is not, I believe, inferior to that of the Madras workman and whose products are on the same level; the fact is that the Director's excisions have been incomplete.

4. On page 13 there are some interesting remarks by Mr. Chatterton about Grant the profuse ornamentation as of the essence of eastern art, Mr. Chatterton's criticism is more on structural inferiority. That is too true.

J.T.
the product will always be bastard. Is it possible to conceive—to dream—of anything truly eastern where “profuse ornamentation” is not relied on? And if this is so, what possibility is there of correcting the inherent taste of Hindus for ornament and founding a new Madras school which shall shun such a vice? Some of the awful productions which were the result of the endeavours of Messrs. Orr & Sons in old days when the “Swami” worker was placed under the tuition of Europeans who made him carry out amateur designs will not be forgotten by those who saw them. And yet, after all, this is what Mr. Chatterton's plan of reviving the art industries, through the instrumentality of Mr. Sim and his colleagues, must come to; he writes of it very diffidently for a sanguine person such as he is, and acknowledges it to be his “main difficulty”. We may see what Mr. Sim will make of it.

J.T.

A. T. PRINGLE,—14-6-02.

I do not think the report calls for any review or orders. Mr. Chatterton is good on the industrial side but quite hopeless as regards the arts, and when the Government of India communicates its views on industrial schools it will have to be considered whether the art side of the school should not be strengthened. The Indian craftsman is weak in design and a good school of design is much wanted in connection with all the artistic industries. The staff proposed by Mr Chatterton, and accepted by the Director, for art teaching (G.O., No. 468, Educational, dated 22nd August 1901) seems to me quite inadequate, but it is not necessary to go into this question at present.

H. A. STUART,—17-6-02.

You must indite an order which will be more than “recorded”. That sort of order is too much in vogue.

2. As an art school I confess it seems to me contemptible, but I have neither the wish nor right to say so. I am clear enough it should be strengthened, but I do not know how. Design is taught, but is there any talent in that way among the pupils? If there isn't more than copying, what hope is there?

3. Mr. Chatterton's remarks in paragraph 10 regarding unpaid apprentices are for approval. So are the Director's in paragraph 6 of his proceedings regarding fees and certificates.

4. As to weaving—page 15—I do not see that any result of value is being achieved—even Mr. Chatterton's ideas seem crude or ignorant. The experiments so far have apparently been negative, and from what I heard in Madras before coming up Mr. Coombes is not likely to evolve anything. What are “methods of procedure which are of commercial advantage” except an improved product at the same or diminished expense. Is it necessary to keep twelve looms going to experiment to any purpose? “A better system of preparatory machinery” and an “improved loom” must be discovered apart from turning out Madras handkerchiefs.

J. T[HOMSON],—18-6-02.

The draft placed below may issue.

T. KANAKASUNDARAM PILLAI,—27-6-02.

I understand that nothing more is to be said than what is contained in the order placed below.

A. T. PRINGLE,—3-7-02.

H. A. STUART,—7-7-02.

J. T[HOMSON],—8-7-02.

[G.O., No. 390, Educational, dated 8th July 1902.]

Educational (1902) Department.

CURRENT No. 842

From

[Name] The Honble Mr. G. H. Stuart, Esq.,[Designation] Director of Public Instruction,[Station] Madras

DESPATCHED

8

Current No. 4184 of 02Dated 28th May 1902Enclosures one

Received _____ 190 .

Registered DD 190 .

SUBJECT.

Sub. copy of. Proceedings reviewing reports
on the working of the School of Arts, Madras,
during 1901-02.

BACK PAPERS.

to 326: 29.5.02 handwritten	to 212/02	to 39/02
to 280: 2.5.02 copy	" 120/02	" 28/02
255/02	" 176/02	" 11-12/02 copy
221/02	" 187/02	" 5/02 copy
	" 77/02	

FURTHER PAPERS.

to 773/01	to 419/01	to 317/01
" 765/01	" 389/01	
" 741/01	" 555/01	
" 468/01		

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 2927, dated 26th May 1902, reviewing the report on the working of the School of Arts, Madras, during 1901-02.

I have the honour to be,

Sir,

Your most obedient servant,

J R Snow

For Director of Public Instruction:

READ AGAIN G.O., No., dated 190

” ” ” ” ” 190 .

READ ALSO :—

C. No. 842, From the D. P. I C. No. 4184, dated 28th May 1902.

ORDER

P.S.

No. 390, dated 8th July 1902.

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it must not be given undue prominence.

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H. A. S.

4-7-1902.

To

The D.P.I.

" P.W.D.

" Hon. Secy. Victoria

Technical Institute.

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190 .

DATED

CURRENT No.

ENCLOSURES TO G.No.

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LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

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IN ORIGINAL.

N.B.—

F = Print in full.
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K.Klu
10/2/02
5