Government of Madras.

EDUCATIONAL DEPARTMENT.

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G.O., No. 338, 9th June 1909.

College of Engineering.

Recording report on the working of the — during the year 1908.

Government of Madras.

EDUCATIONAL DEPARTMENT.

2

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G.O., No. 338, 9th June 1909.

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Recording report on the working of the — during the year 1908.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

Read—the following paper:—

Letter—from the Hon'ble Mr. A G. Bourne, D.Sc., F.R.S., C.I.E., Director of Public Instruction, Madras.
To—the Secretary to Government, Educational Department.
Dated—the 15th May 1909.
No.—Cur. 3437.

I have the honour to submit herewith a copy of my Proceedings, Dis. No. 2917, dated 6th May 1909, reviewing the report on the working of the College of Engineering for the year 1908.

Enclosure.

Proceedings of the Director of Public Instruction, dated 6th May 1909, *Dis. No.* 2917.

Read—the following paper:—

Letter—from W. H. James, Esq., B.Sc., Principal, College of Engineering, Madras.
To—the Director of Public Instruction.
Dated—the 19th March 1909.
No.—3262-C.

I have the honour to submit the Administration Report of the College of Engineering for the year 1908.

2. *Staff.*—Mr. F. E. Morgan of the Public Works Department, who had been acting as Professor of Civil Engineering from the 13th of November 1907 pending the arrival of the officer selected for the appointment, handed over charge of his office to me on the afternoon of the 5th March 1908 and reverted to the Public Works Department. Mr. C. H. Lobban appointed Temporary Professor of Civil Engineering by the Secretary of State arrived here and assumed charge on the forenoon of Thursday, the 12th idem.

In October 1908 Sergeant W. C. Old was confirmed in his sub. *pro tem.* appointment as Instructor in Surveying and Drawing in this college with retrospective effect from 2nd September 1907 and was appointed to the eighth grade of the Provincial Educational Service.

M.R.Ry. P. S. Kishna Aiyar, Acting Additional Assistant Instructor, reverted to the Public Works Department on the afternoon of the 30th April 1908.

M.R.Ry. K. Narasimham, Second Assistant Instructor in Drawing and for College purposes Acting Assistant Instructor in Mathematics, was transferred as Sub-Assistant Inspector of Schools, Ellore Range, and M.R.Ry. G. Rama Aiyangar, Sub-Assistant Inspector of Schools, Kavali Range, was appointed in his place. The latter joined for duty at the college on the forenoon of 15th July 1908.

M.R.Ry. A. S. Ramaswami Aiyar, a temporary Overseer of the Public Works Department, Madras, appointed Acting Assistant Instructor, reported himself for duty on the afternoon of the 11th July 1908.

M.R.Ry. M. J. Sampathkumarachar, formerly a temporary Overseer in the Public Works Department, Madras, was appointed a temporary Additional Assistant Instructor in the College for four months with effect from 4th August 1908 and left at the end of that period.

M.R.Ry. R. Venkatesa Aiyar, a permanent second-grade Overseer of the Madras Public Works Department, appointed permanent Additional Assistant Instructor, joined on the forenoon of 27th November 1908 and relieved M.R.Ry. A. S. Ramaswami Aiyar who reverted to the Public Works Department.

S. Ramanuja Aiyangar, the Second Assistant Clerk, was on leave on private affairs for six months from 1st March to 31st August 1908 and a substitute was employed to perform his duties during the period of his absence.

3. *Numbers*—The numbers on the rolls at the end of the year were—

Class.	Practical course.	In college.			Total.
		Third year.	Second year.	First year.	
Engineer class	18	17	20	16	71
Engineer Subordinate class	*35	†33	..	..	68
Upper Subordinate class	..	..	18	‡34	52
Lower Subordinate class	..	..	21	33	54
Sub-Overseer and Surveyor class ..	..	..	33	..	33
Draftsman class	..	..	†31	..	31
Total ..	53	50	123	83	309

*Includes 6 independent candidates.
†Includes 3 casual students.
‡Includes 5 Military probationers.

Excluding the students on practical course, the total number actually in the college on the 31st December 1908 was 256. The corresponding totals for the last five years were—

Years.	Numbers.
1908	256
1907	315
1906	292
1905	293
1904	271

The decrease in the total for 1908 is chiefly due to the drop in the number of admissions to the Lower Subordinate class in July last.

The distribution of the students by classes of the community, by districts, by wealth and occupation of parents, is given in Appendices A, B and C. Of the total number, 75 per cent. were Brahmans, 11·7 per cent. non-Brahman Caste Hindus, 5 per cent. Native Christians, 5·8 per cent. Europeans and Eurasians, and 2·3 per cent. Muhammadans. The percentages of Brahmans, Native Christians and Europeans and Eurasians have risen this year, while those for non-Brahman Caste Hindus and Muhammadans have fallen somewhat.

As regards districts, Tanjore was represented by 23·8 per cent.; Trichinopoly by 9 per cent.; Tinnevelly and Coimbatore by 7·0 per cent. each; Kistna by 6·2 per cent.; Malabar by 5·4 per cent.; Madras by 4·5 per cent.; and South Arcot and Chingleput by 2·3 per cent. each of the total number.

4. *Admissions.*—The selected candidates were admitted to the several classes on the first day of the session. For the Engineer class there were 17 applicants qualified under the new rules with the B.A. Degree and all were admitted, although one being over the age limit was entered only as a casual student. Out of the 34 qualified persons who applied for admission to the Upper Subordinate class 30 were admitted, thus forming with the 5 Probationary military students, who all passed the qualifying examination, a class of maximum strength. It had been announced that 60 students would be admitted to the Lower Subordinate class but we received only 47 suitable applications. This shortage may be due to either the higher standard required for admission—Matriculation as compared formerly with the Lower Secondary Examination—or the low percentage of passes in the University Matriculation Examination of the previous December with the possible result that the smaller number of students who desired to proceed to higher courses preferred to join other colleges at once rather than wait on the chance of being admitted to this college in the following July.

5. *Examinations of April* 1908.—Under the revised College Rules sessional examinations were held for the first time in April 1908 for the Upper and Lower Subordinate classes—

Upper Subordinate Class.—The twenty-four students forming the class gained 55·6 per cent. of the total marks. Five students who failed to reach the qualifying minimum were not promoted and the one military student among them was remanded

to his battery. The four civil students all preferred to resign rather than continue another year in the class.

Lower Subordinate Class.—This class, consisting of 28 students, obtained 54·4 per cent. of the total marks. Seven students failed to qualify and were consequently not promoted. One of the failed students stayed on, but the other six resigned.

Examinations of December 1908—

(*a*) *Engineer Class.*—The third-year division contained 17 students. These students appeared for the final examination and all but one passed. The average percentage of total marks gained was 58·1. Four ex-students presented themselves for the examination as independent candidates and only one passed. The second year division of the class which consisted of 20 students sat for the sessional examination and obtained 50·1 per cent. of the total marks. The third year division which was formed under the new rules will have their sessional examination in April next.

(*b*) *Engineer Subordinate Class.*—The senior division consisted of 30 students exclusive of 3 casual students. Of these 27 appeared for the final examination and only one failed. The remaining three students appeared as independent candidates and two passed. The average percentage of marks gained was 60·0. Nine ex-students presented themselves for the examination as independent candidates and seven passed, but one of these has not as yet obtained the prescribed minimum of college marks. There were no intermediate and junior divisions of the class during the year.

(*c*) *Sub-Overseer and Surveyor Class.*—The 33 students in the senior division of this class appeared for the final examination and 27 passed—3 in the first class and 24 in the second class. The average gained was 58·8 per cent. Fourteen ex-students came up for the examination as independent candidates and only one passed. There was no junior division of the class in the year under report.

(*d*) *Draftsman Class.*—In the senior division of this class there were 28 students exclusive of 3 casual students. They all appeared for the examination and 17 passed—one in the first class and the remainder in the second class. The average obtained was 58·7 per cent. Thirty-eight ex-students presented themselves for the examination as independent candidates and 18 passed. There was no junior division of the class during the year.

6. *Examination Results.*—The percentages of marks, under the several subject heads, gained by the senior divisions of the classes are given in Appendix D together with the corresponding figures for the preceding four years.

7. *Honours and Distinctions.*—The college medals were awarded to the undernamed students of the senior class divisions of 1908 :—

Gold Medal	Engineer class ...	V. Aiyadurai Aiyar.
Silver do.	Engineer Subordinate class.	N. R. Subrahmanya Aiyar.
Bronze Medal	Sub-Overseer and Surveyor class.	G. Venkata Rao.
Do.	Draftsman class ...	S. R. Suryanarayana Aiyar.

The DeWinton Gold Medal for Hydraulic Engineering was awarded to K. Tirumalaiswami Aiyar of the Engineer class on the results of the examinations of 1907.

The University "Rao Bahadur S. Subbarayachariar" Gold Medal was gained by the senior student V. Aiyadurai Aiyar and the University "J. A. Jones" prize for Hydraulic Engineering by T. S. Srinivasaraghavachariar.

New Medal and Prize.—During the year the Harris Gold Medal was founded by Rao Bahadur S. Krishnamachariar, B.C.E., as a memorial to G. S. T. Harris, Esq., for some years Consulting Architect to the Government of Madras, to be awarded to a student of the Engineer class for proficiency in either Architecture or Electrical Engineering, or, failing these, for Building Drawing and Estimating Sufficient interest not having accrued no medal has been awarded this year. Funds were also provided by friends of H. J. Thompson, Esq., M.I.C.E., last Chief Engineer of the

Madras Railway, to found a prize of books in his memory and this also will be awarded next year for the first time to the student of the Upper Subordinate class who stands first in the grouped subjects of Construction, Building Drawing and Estimating.

8. *Practical Courses.*—Eighteen Engineer and 35 Engineer Subordinate students were under practical training from February 1908. Thirteen of the Engineer students including the senior student desired to become Mechanical Engineers and they were accordingly posted for workshop training—6 to the Public Works Workshops at Madras, 3 to Dowlaishweram, 3 to Bezwada and one to the Railway Workshops at Perambur. Five who elected to become Civil Engineers joined Public Works Divisions. Six of these students who had failed in the College Examination in Practical Surveying attended the Survey camp held in July last for further instruction and their practical courses were extended by the period for which they attended the camp. The practical course of an Engineer student who passed out in December 1906 was extended by six months owing to the unfavourable reports received from the Executive Engineer to whose division he was posted in the first instance.

The Engineer Subordinate students were, as usual, attached to Public Works Divisions for practical training. One of the Engineer Subordinate students did not join his division and nothing has been heard from him up to date. The reports received from Executive Engineers were generally favourable and several of the students appear to have shown very fair promise.

Sixteen of the Engineer Subordinate students who had not satisfied the College Staff in practical Surveying attended the survey camp held in July and their courses were also extended to make up the full period under practical training.

The practical course of one of the Engineer Subordinate students of the previous year was extended by six months on account of unsatisfactory progress.

All Engineer students, with the exception of one under training at the Railway Workshops at Perambúr and all Engineer Subordinate students taking the practical course, attended the Body Guard School for instruction in riding.

9. *Military Students.*—The number of military students at the end of the year was as follows :—

Practical course	1
Engineer Subordinate class, senior division	1
Upper Subordinate class, intermediate division	3
Do. junior division	5
Probationers	5

It will be a matter of some difficulty to find accommodation for the additional men who will join next July, but having regard to the possible removal of the College in the near future, expenditure on extending the existing quarters is perhaps hardly justifiable and instead it is my intention to submit proposals for the utilisation of the present mess room as quarters for the men and the erection of a temporary structure to serve the purposes of a mess room.

10. *Survey Camps.*—A short survey camp extending over 16 days was held in accordance with the new rules in January 1908 at St. Thomas' Mount for the students of the Upper Subordinate Class, III Division, and Lower Subordinate Class, III Division, under the management and control of the Instructor in Surveying and Drawing, aided by two Assistant Instructors. The number of students in attendance was 52. The work done by the students during the camp was satisfactory. The conduct of the students and discipline in the camp were good. The cost amounted to Rs. 1,379–7–0.

A second Survey camp was formed for the students of the Engineer, Engineer Subordinate and Sub-Overseer and Surveyor classes under the old rules, first at Avadi and then at Poonamallee and St. Thomas' Mount for a period of one month, from 16th July to 15th August 1908, under the charge of Mr. C. H. Lobban, temporary Professor of Civil Engineering, assisted by the Instructor in Surveying and Drawing and three Assistant Instructors. The number of students including ex-students in camp was 138. Two temporary sheds were erected at Avadi and St. Thomas' Mount

for use as drawing offices, but the accommodation was found somewhat inadequate. By kind permission of the Commandant of the station, a building at the barracks in Poonamallee was used as a drawing office. The work done by the students was, on the whole, satisfactory, but the supervision and re-examination of failed students from previous years by taking up the time of members of the staff probably affected to some extent the quality of the instruction given to the students. This is a drawback inseparable from an attempt under the old rules to raise the standard of the practical surveying, but fortunately it cannot occur under our present rules dealing with the promotion of students.

The total cost of the camp was Rs. 1,594-9-2.

Under our existing arrangements this is the last camp that will be held in the hot weather, and it is hoped that the more favourable weather in January will in future more than make up for the possibly fewer available working hours.

11. *Inspections.*—The Professor of Mechanical Engineering in October accompanied the senior division of the Engineer class on a visit of inspection to the Cauvery Power station at Sivasamudram and other works at Bangalore.

In the same month the Intermediate and Junior divisions of the Engineer class, the senior Engineer Subordinate class and the intermediate Upper Subordinate class in charge of the Professor of Civil Engineering proceeded to Elamanur for an inspection of some of the irrigation works in the Cauvery Delta. From Elamanur they proceeded *viâ* Trichinopoly to the Grand Anicut and thence to Nidamangalam and Coriar Head. The party returned by way of Negapatam in order to visit the South Indian Railway Workshops. The tour occupied about 10 days and although a success in other respects it was marred by the drowning of a student of the Upper Subordinate class while bathing alone in the Cauvery in violation of special orders issued to all the students before they left Madras strictly forbidding them from bathing in rivers or canals while on inspection tours.

The Intermediate Division of the Lower Subordinate class and the senior divisions of the Sub-Overseer and Surveyor and Draftsman classes visited the works at Sangam in the Nellore district with the Instructor in Mechanical Engineering in charge of the party.

The Instructor in Surveying and Drawing took another party consisting of the junior divisions of the Upper Subordinate and Lower Subordinate classes and the Military Probationers to the Red Hills for the inspection of the Madras water-supply system.

The total cost of these tours in which 256 students took part was Rs. 1,046-7-6.

The usual visits were paid during the year to local works such as the Perambúr Railway shops and the Madras Harbour Works.

12. *Workshop and Laboratories* —All classes attended for workshop practice as in previous years and they made very fair use of the time they were able to devote to the work. This training is very necessary for all students of Engineering and with better facilities the course would be capable of much improvement.

A useful double geared drilling machine has been added to the equipment, but it will be impossible to find place for another machine tool without diminishing still further the bench accommodation which is already much too limited. The Peel Hawkins dynamo and motor were handed over during the session to the Director of Industries, who was urgently in need of plant of that type for one of the factories in his department and we are now engaged in fitting up the General Electric Company machines obtained by arrangement in their place. Some care was taken in selecting this plant that it might be suitable for starting laboratory work in Electrical Engineering, and with the battery of accumulator cells obtained at the same time we shall be able to do something, although comparatively little in the matter of the laboratory training of the new Mechanical Engineer class which starts the second year course in July next

A fair amount of testing work for instructional and general purposes was carried out during the year. The investigation dealing with the strength of masonry referred to in last year's report was tentatively completed and the results will be published at

an early date. There was considerable delay in receiving specimens required for an investigation on the strength of timber, but the work is now well under way and some information will be immediately available.

The question of the possible removal of the College and the provision of new laboratories being, I understand, under the consideration of Government, it is hardly necessary that I should refer to the subject again this year, having regard to the remarks made in this connection in the reports of the five or six years immediately preceding.

13. *Physical Training and Recreation Club.*—The usual classes were held throughout the year for instruction in physical exercises and gymnastics. The tests held at the end of the session showed that the majority of the students had taken full advantage of the opportunities afforded to make themselves in this way as fit as possible for out-door work.

Mr. C. L. Cartwright, Professor of Mechanical Engineering, who has kindly undertaken the duties of Honorary Secretary and Treasurer of the Recreation Club reports as follows :—

"Representative teams took part in the various competitions held by the "Madras Collegiate Athletic Association. The College was successful in winning "His Excellency the Governor's Football cup for the second time in succession, the "Travancore Athletic Challenge Trophy by scoring most points in the annual Inter-"collegiate sports, and cups for European gymnastics and swimming. In the Stokes "Hockey Tournament the College stood second after a very strong contest resulting "in three draws before we were finally defeated.

"In the class matches, the Junior division of the Upper Subordinate class won "both Football and Hockey cups, and the Intermediate division of the Lower "Subordinate class won the Cricket cup.

"At the annual sports of the Medical College the 'open mile' was won by "Corporal Wharton, Sergeant Haig coming in third.

"There is still however room for improvement in our cricket eleven. Greater "enthusiasm has been exhibited this year amongst the tennis players and the court in "front of the College building has been put in order to accommodate additional "players.

"Good use of the reading room has been made by students of all classes.

"The balance sheet for the year ending December 1908 shows a credit balance "of Rs. 33-12-1.

"I wish to acknowledge the valuable assistance given by members of the "staff in conducting the affairs of the club. Mr. Old and M.R.Ry. Subramanya "Aiyar have especially given much of their time in forwarding the interests of the "club and its members."

14. *Library.*—The work of re-arranging the library books has been completed, but the new catalogue is still under preparation. During the year 113 new books were added, bringing the total up to 4,808 volumes. The numbers of books issued to students and staff were 1,376 and 706, respectively, against 1,344 and 413 in the previous year, and 150 references were made to special books in the Reference Library.

15. *Attendance and conduct.*—The percentage of numbers present to numbers on the rolls of the college was 94·2. Particulars are given in Appendix E. The conduct of the students during the year was satisfactory.

16. *University Examinations.*—Four students of the senior division of the Engineer class, eleven students under practical training and five ex-students presented themselves for the B.E. Degree Examination, and of these six passed—three in the Mechanical Branch and three in the Civil Branch. There were in all thirty-eight candidates for the First Examination in Engineering, of whom seventeen were second-year students, eleven third year students, three students under practical training and seven ex-students. Twelve were successful—six second-year and four third-year students, and one of each of the other classes.

17. *Employment of Passed Students of* 1907.—Of the 14 Engineer students who completed the practical course early in 1908, the senior N. Parameswaram Pillai was appointed Assistant Engineer in the Provincial Service of the Public Works Department and the remaining thirteen secured the following appointments :—

Local Fund Assistant Engineers	3
Temporary Upper Subordinates, Public Works Department, Madras	9
Upper Subordinate, Public Works Department, Coorg ...	1
Total ...	13

Engineer Subordinates.—Twenty-five Engineer Subordinates completed the practical course early in 1908. The senior M. B. Krishnaswami Aiyangar was appointed a permanent Upper Subordinate, third grade, in the Public Works Department. Other students secured employment as—

Temporary Upper Subordinates, Public Works Department, Madras	14
Overseer, 1st Grade, Cochin Government	1
Temporary Overseer, 3rd Grade, Travancore Government ...	1
Temporary Sub-Overseer, Kumaramangalam estate under the Court of Wards	1
Temporary Surveyor, Kistna Reservoir Project	1
Total ...	18

No information has been received regarding the remainder.

Sub-Overseers and Surveyors.—Of the 45 Sub-Overseers and Surveyors who passed out in December 1907, 27 secured employment as under—

Permanent Sub-Overseers, Public Works Department, Madras ...	4
Temporary do. do. do. ...	5
Do. Surveyors do. do. ...	9
Local Fund Sub-Overseers	5
Sub-Overseers, Corporation of Madras	1
Do. Military Works Services, Tirumulgherry	1
Minor Irrigation Sub-Overseers	2
Total ...	27

The remaining students have furnished no information.

Draftsmen.—Twenty-six students obtained certificates as draftsmen in December 1907, and of these 17 are reported to have obtained employment :—

Draftsmen, Public Works Department, Madras	10
Estimator in the office of the Consulting Architect to Government ...	1
Clerk-Draftsman, T.R.S., Public Works Department, Vellore ...	1
Assistant Draftsman, Electrical and Signalling Engineer's Office, South Indian Railway, Trichinopoly	1
Draftsman, Chief Engineer's Office, South Indian Railway, Trichinopoly	1
Local Fund Draftsman	1
Anicut Superintendent	1
Tracer	1
Total ...	17

No information has been received regarding the remainder.

Particulars of the vacancies notified during the year are given in Appendix F.

18. *Revision of Rules.*—The introduction of separate and more specialised courses of instruction after the first year for Civil and Mechanical Engineering students of the Engineer classes was sanctioned by Government during the year.

The last Engineer Subordinate, Sub-Overseer and Surveyor, and Draftsman classes finished their courses in December, and we now have left only the senior Engineer class under the old rules. The first Engineer class under the new rules was admitted in July, and we shall not have the full complement of classes until July 1910.

The first examinations for the new Upper Subordinate and Lower Subordinate classes were held in April last and in accordance with the rules students who failed were not allowed to proceed to the higher classes. The majority of these students preferred to resign rather than run the risk of failure again so that the new regulation appears likely to have its intended effect. Under the old rules it was often the case that students with no aptitude for engineering studies went on with the course in a hopeless position from the start and naturally failed at the final examinations. In after years they appeared time and again as independent candidates in a vain endeavour to pass the examination necessary for the diploma and it usually resulted in their having finally to take up the poorly paid employment open to unqualified men of their type. It is possible that for a while these regulations will have the effect of keeping down the number of students in the college, but this drawback will be more than counterbalanced by the generally higher standard of the men turned out.

19 *Financial Details.*—This information is given in Appendix G. It will be noted that the receipts of the college amounted to Rs. 19,830–1–0, the charges to Rs. 1,04,359–9–2 and the net cost of the institution therefore to Government was Rs. 84,529–8–2. The average number of students on the rolls was 253 and the net cost per student was Rs. 334–1–9. This increase as compared with last year is due to the smaller fee collection consequent on the reduction in the number of students on the introduction of the new rules. Full financial details for the official year 1907–1908 were submitted with the annual returns. An abstract of receipts and charges for the last five calendar years is given in Appendix H.

20. *General.*—In conclusion I desire to acknowledge the loyal co-operation and assistance I have received from the Professors, Instructors and Assistants in carrying on the work of the college.

APPENDIX A.

Distribution of students according to classes of community on the 31st December 1908.

Classes.	Europeans and Eurasians.	Native Christians.	Muhammadans.	Hindus.			Total.
				Brahmans.	Non-Brahman caste Hindus.	Panchamas.	
Engineer classes	..	2	..	48	3	..	53
Engineer Subordinate class	2	2	1	27	1	..	33
Upper Subordinate classes	* 13	2	..	36	1	..	52
Lower Subordinate classes	..	4	1	38	11	..	54
Sub-Overseer and Surveyor class ..	..	2	3	21	7	..	33
Draftsman class	..	1	1	22	7	..	31
Total ..	15	13	6	192	30	..	256

* Includes five military probationers.

APPENDIX B.

Distribution of students by districts on the 31st December 1908.

Districts.	Engineer class.	Engineer Subordinate class.	Upper Subordinate class.	Lower Subordinate class.	Sub-Overseer and Surveyor class.	Darftsman class.	Total.
Ganjám	..	..	1	..	..	..	1
Vizagapatam	..	..	1	3	..	1	5
Gódávari	4	..	1	2	2	3	12
Kistna	1	..	..	6	5	4	16
Guntúr	..	1	..	2	2	..	5
Bellary	..	..	..	..	..	..	..
Kurnool	..	..	..	..	..	..	..
Nellore	2	..	..	1	1	..	4
Madras	1	2	..	4	3	1	11
Chingleput	2	..	..	2	..	2	6
Cuddapah	..	..	..	..	1	..	1
North Arcot	2	..	..	2	..	..	4
South Arcot	1	2	2	..	1	..	6
Tanjore	15	8	15	7	7	9	61
Trichinopoly	2	5	2	5	4	5	23
Madura	4	..	1	2	2	..	9
Tinnevelly	5	3	2	4	1	3	18
Coimbatore	2	6	6	3	..	1	18
Nilgiris	..	..	..	..	..	..	..
Salem	..	..	1	1	..	1	3
Malabar	2	2	2	5	2	1	14
South Canara	..	1	1	1	..	..	3
Pudukkkóttai	..	..	1	..	..	..	1
Cochin	1	..	1	2	..	..	4
Travancore	3	1	2	2	..	..	8
Mysore	6	1	..	..	..	..	7
Pondicherry	..	..	..	..	..	..	..
Hyderabad (Deccan)	..	..	..	..	2	..	2
Military students	..	1	8	..	..	..	9
Do. probationers	..	..	5	..	..	..	5
Total	53	33	52	54	33	31	256

APPENDIX C.

Distribution of students by wealth and occupation of parents on the 31st December 1908.

Classes in the college.	Wealth.				Occupation.							
	Richer class.	Middle class.	Poorer class.	Total.	Officials.	Petty officials.	Traders.	Landholders.	Artisans.	Mendicants.	Others.	Total.
Engineer class—												
Third year	..	17	..	17	9	..	1	7	..	..	..	17
Second year	..	18	2	20	11	..	..	9	..	..	..	20
First year	..	16	..	16	10	..	..	6	..	..	..	16
Engineer Subordinate class—												
Third year	1	31	1	33	15	1	..	16	..	..	1	33
Upper Subordinate class—												
Second year	..	18	..	18	10	..	1	6	..	..	1	18
First year	..	32	2	34	20	..	2	11	..	..	1	34
Lower Subordinate class—												
Second year	..	21	..	21	10	..	..	11	..	..	..	21
First year	..	31	2	33	15	1	1	16	..	..	..	33
Sub-Overseer and Surveyor class—												
Second year	..	33	..	33	15	1	1	16	..	..	..	33
Draftsman class—												
Second year	1	28	2	31	19	..	1	11	..	..	..	31
Total	2	245	9	256	134	3	7	109	..	..	3	256

APPENDIX D.

Results of Examinations of December 1908.

	Per cent.	Average of preceding four years.
Engineer class, 1st division—		
Mathematics	60·0	60·9
Science	52·9	48·9
Engineering	55·0	53·6
Drawing	54·9	58·0
Surveying	65·2	64·8
Gymnastics	75·1	62·1
Average	58·1	58·5
Engineer Subordinate class, 1st division—		
Mathematics	57·4	52·9
Engineering	57·3	50·7
Drawing	57·3	55·6
Surveying	67·0	63·3
Physical exercises	71·8	56·6
Average	60·0	55·8
Sub-Overseer and Surveyor class, 1st division—		
Surveying	63·0	60·8
Engineering	51·7	52·0
Drawing	55·1	53·5
Physical exercises	69·0	57·4
Average	58·8	55·9
Draftsman class, 1st division—		
Geometrical, etc., drawing	52·4	44·9
Building construction and drawing	61·5	59·2
Machine drawing	67·5	58·3
Estimating	50·9	54·5
Physical exercises	69·0	56·1
Average	58·7	54·6

APPENDIX E.

	Average number on rolls.	Average daily attendance.
Engineer class, third year	17·0	15·5
Do. second year	20·0	19·1
Do. first year	16·0	14·9
Engineer Subordinate class, third year	31·5	30·1
Upper Subordinate class, second year	18·0	17·3
Do. first year	27·7	26·7
Lower Subordinate class, second year	21·0	20·3
Do. first year	31·6	30·3
Sub-Overseer and Surveyor class, second year	33·5	30·9
Draftsman class, second year	31·7	28·4
Military probationers	4·9	4·3
Total	252·9	238·5
Percentage of numbers present to number on rolls		94·2

APPENDIX F.

CLASSIFICATION of vacancies notified during the year 1908.

—	Government.				Local Board and Municipality.				Railways.				Native States.				Private employers.				Total.
	Above Rs. 200.	Rs. 100 to 200.	Rs. 50 to 100.	Under Rs. 50.	Above Rs. 200.	Rs. 100 to 200.	Rs. 50 to 100.	Under Rs. 50.	Above Rs. 200.	Rs. 100 to 200.	Rs. 50 to 100.	Under Rs. 50.	About Rs. 200.	Rs. 100 to 200.	Rs. 50 to 100.	Under Rs. 50.	Above Rs. 200.	Rs. 100 to 200.	Rs. 50 to 100.	Under Rs. 50.	
Engineer or Assistant.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Supervisor ..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2
Overseer ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Sub-Overseer ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Draftsman ..	..	..	2	5	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	9
Surveyor ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Anicut or Conservancy Superintendent.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	1	3	5	..	..	1	..	..	..	..	1	..	1	..	..	..	..	..	1	13

APPENDIX G.

FINANCIAL details for 1908.

	RS.	A.	P.
Receipts—			
Tuition fees	18,343	9	0
Entrance and Final Examination fees	894	0	0
Miscellaneous receipts	592	8	0
Total ...	19,830	1	0
Charges—			
Principal	12,100	0	0
Professors, masters and teachers	51,631	7	4
Clerks, librarian and servants	6,413	5	4
Board of Examiners	6,943	0	0
Library, prizes and medals	770	12	5
Books and instruments	834	12	7
Other Europe stores	5,028	1	0
Other heads of contingent charges	14,395	5	8
Travelling allowances	1,541	7	1
Scholarships	4,547	3	9
Exchange compensation allowance	1,154	2	0
Total ...	1,04,359	9	2

	RS.	A.	P.
Net cost to Government	84,529	8	2
Average number of students on rolls	253	0	0
Net cost per student	334	1	9
Average tuition fees paid per student per annum	72	8	1

APPENDIX H.

COMPARATIVE financial details.

—	1908.	1907.	1906.	1905.	1904.
	RS.	RS.	RS.	RS.	RS.
Receipts	19,130	23,999	31,020	30,920	29,480
Charges	1,04,359	1,10,495	1,14,085	98,871	95,162
Net cost to Government	84,530	86,496	83,065	67,450	65,754
	NO.	NO.	NO.	NO.	NO.
Average number of students	253	313	295	294	274
	RS.	RS.	RS.	RS.	R.
Net cost per student	334	276	282	229	240

Proceedings, Dis. No. 2917 of 1909.

Recorded.

2. The fall in the strength of the College was mainly due to the operation of the revised rules. The Principal's concluding remark in paragraph 18 of the report, viz., that the reduction in strength which is expected to be temporary, will be more than counterbalanced by the increase in the efficiency of the men turned out is noted.

3. The results of the University Examinations were fair, while those of the College examinations compared favourably on the whole with those of the four preceding years. The future conduct of the latter examinations has been entrusted to the College staff, the independent Board of Examiners having been abolished.

A. G. BOURNE,
Director of Public Instruction.

To the Principal, College of Engineering, with a spare copy.
,, Principals of other Government Colleges.
,, Inspectors of Schools.
,, Superintendent, School of Arts.
Copy to the President, Board of Examiners, College of Engineering.
,, Chief Engineer, Public Works Department.
,, Government (with C.L.).

Order—No. 338, Educational, dated 9th June 1909.

Recorded.

(True Extract.)

L. M. WYNCH,
Ag. Secretary to Government.

To the Director of Public Instruction.
,, Public Works Department.
Editors' Table.

PRESS SLIP

FORT SAINT GEORGE.

EDUCATIONAL (1909) DEPARTMENT.

(Copy.)

LETTER to the Under Secretary of State for India.

No. 339, dated 9th June 1909.

FORWARDING copy of the report on the working of the College of Engineering for 1908.

PRESS SLIP

10

EDUCATIONAL DEPARTMENT.

Letter—to

The UNDER SECRETARY of STATE for INDIA.

Sir,

With reference to the instructions conveyed in Lord Hartington's Despatch No. 9, Public Works, dated 18th May 1882, I am directed to forward a copy of the Proceedings of the Madras Government recording the report on the working of the College of Engineering, Madras, during the year 1908.

I have the honour to be,

Sir,

Your most obedient servant,

Ootacamund,
9th June 1909.

L. M. WYNCH,
Ag. Secretary to Government.

NOTES CONNECTED WITH G.O., Nos. 338, 339, EDUCATIONAL, DATED 9TH JUNE 1909.

[SUBJECT.—*Report on the working of the College of Engineering during the year* 1908.]

From the Director of Public Instruction, dated 15*th May* 1909, *No.* 3437.

The report calls for no remarks. It may be recorded and a copy thereof forwarded to the Secretary of State as usual.

2. Drafts are submitted for approval.

3. The report is usually placed on Editors' table.

T.K.—21-5-09.

Paragraph 3 *of the report.*—It is a matter for regret that there was a decline, as compared with the previous year, in the proportion of non-Brahmin caste Hindu and Muhammadan students who sought admission into the College, while that of Brahmins increased.

2. *Paragraph* 12 *of report.*—A site between Guindy Park and the Adayar river, measuring about 200 acres has been selected for the new College of Engineering and plans and estimates for the construction of a building are under preparation in the Public Works Department.

G.O., No. 132, Educational, dated 8th March 1909.

K. RANGASWAMI AIYANGAR—21-5-09.

It is not a very interesting report and may be simply recorded.

C. A. SOUTER—22-5-09.

For approval.

L. M. WYNCH—24-5-09.

G. S. F[ORBES]—25-5-09.

Issue.

L. M. WYNCH—26-5-09.

[G.O., Nos. 338, 339, Educational, dated 9th June 1909.]

[E. & I. / 76.]
2,500—25-2-08.

Educational DEPARTMENT.

with Pro.

12

Enclosure — A

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

" " " " , " 190 .

READ ALSO:—

C. No. 1018, From the D.P.I., No. 3437, dated 15—5—1909.

" " , " " , " 190 .

" " , " " , " 190 .

15 P

ORDER.

P.S.

No. ~~318~~ 338, dated ~~26—5—~~ 9—6—09 1909.

Recorded.

T.K. 21.5-09 R.D. 21.5.09

Letter to ~~319 dt 26—5—1909~~ No. 339 dt 9—6—09

The Under Secy of State for India.

Sir,

With ref. to the instructions conveyed in Lord Hartington's Despatch, no. 9. Public Works, dated 18th May 1882, I am directed to forward a copy of the Pro. of the Madras Govt. recording the report on the working of the College of Engineering, Madras, during the year 1908.

T.K. 21-5-09 R.D. 21.5.09

D.P. 28/5

Please send copy for signature soon. It is to be numbered in pro.

Presented to send sig. copy since by being sent

G.O. no. 101 Edl 21-6-82

Despd with G.O. no. 337 Edl 17/6/9

To
The D.P.I.
" P.W.D.
E. I.

Despd 17/6/9

[42.]
1,500—10-8-08.

PRESS SLIP.

ORDINARY. **PREFERENCE.** **URGENT (a).**

GOVERNMENT PRESS. RECEIVED 28 MAY 09 MADRAS.

13

EDUCATIONAL / LEGISLATIVE DEPARTMENT.

Current No. 1018, dated 1.5.09 ......190 .

G.O., No..... ......, dated ......190 .

16 p

Number of MS. pages sent { Correspondence including order or orders (b) / Notes (b1) ......

Docket ... College of Engineering. Recording report on the working of the ~~College of Engineering~~ College of Engineering during the year 1908

~~Fr. Letter~~ Forwarding a copy of the Principal's report on the working of the College of Engineering during 1908

Number (c) of copies required when struck off (not including copies for volumes and editors' table which are retained in the Press).

For Record.*	Complete Correspondence and orders.	Notes
Madras Records	30	15
Ooty Records	3	3
For filing with original	1	1
Total ...	34	19

For Issue.†

	Letter only.	Complete G.O.	Special issue copies of G.O. (b): No.	Special issue copies of G.O. (b): Papers.
Signature copies	2			
India Office				
Govt. of India ... Dept.				
Public Department				
Judicial Department				
Financial Department				
Revenue Department				
Public Works Department		10		
Local and Municipal Department				
... Dept.				
Total ...				
Spare copies. The Director of Public Instruction	25	5		
The Comr. for Govt. Examinations				
The Superintendent, Govt. Museum				
The Surgeon-General				
The Accountant-General				
The Collector of				
The P. D. B.				
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Total ...	27	15		

* Copies distributed on ......*(Press Clerk.)

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* *To be initialled and dated.*

INSTRUCTIONS FOR THE SECRETARIAT.

(a) If a paper is marked to be printed urgently, the Superintendent of the section concerned should sign the Press slip. The Superintendent should exercise a careful discretion in the matter.

(b) Each letter, memorandum, or order, or set of orders, in the file of correspondence should be headed in succession with the Roman numeral I, II, III, etc., the number being written in red ink or blue chalk above the item. The particular papers to be printed in the special issue-copies should be indicated by the Roman numeral (I, II, etc.) by which that item has been headed in the correspondence file. All matter, including marginal remarks or references, to be printed should be written in ink and matter which should not be printed should be encircled. Initials and signatures that are not quite legible should be re-written distinctly.

(b1) For rules regarding printing of notes, see the rules in G.O., No. 1220, Public, dated 30th November 1900.

(c) The number of copies and the details of distribution should be filled in by the Superintendent or Referencer concerned.

(d) In the absence of special instructions to the Press to keep matter standing for a specified period, ordinary papers of 8 pages and under will be kept standing for *one* week, and larger papers for *two* weeks only. *The type of notes and of all confidential papers is distributed immediately after striking.*

(e) This slip, properly and completely filled in, should accompany every paper sent to Press; it will be returned by the Press when proofs are furnished; it should be sent to the Press when a call is made for revised proofs or when a corrected proof is sent for striking. When finally returned by Press it should be filed with the original order or letter.

INSTRUCTIONS FOR THE PRESS.

(a) If, in the opinion of the Superintendent of the Press, a paper has been marked urgent unnecessarily, he should send the Press slip to the Deputy Registrar with a remark to that effect.

(b) Unless a note to the contrary is made against the matter, pencil entries should not be printed. The Superintendent of the Press may bring to the notice of the Deputy Registrar any instance of incomplete or careless editing.

(c) Signature copies of letters to the Secretary of State or to the Government of India should be printed on hand-made paper.

(d) This slip should be returned by the Press to the Secretariat when proofs are furnished; it will be sent back to the Press when proofs are returned corrected and should be finally returned to the Secretariat when struck-off copies are supplied.

(e) The names of the Secretary and Members should be printed in full when they occur on the right hand side, but only the first time when they appear on the left side, the initials alone being printed later.

TO PRESS, MADRAS. / OOTY.

A	B	C
Please send proof in triplicate. The papers have been carefully edited.	Proof returned corrected. Please strike off and send number of copies as indicated.	As the matter is clear manuscript and has been carefully edited, (*b*) proof need not be sent. Please print and supply number of copies as indicated.
	Type may be released after usual interval / at once.	Type may be released after usual interval.
.....*Clerk.*	.....*Clerk.*	.....*Clerk.*
.....*Supdt.*	.....*Supdt.*	.....*Supdt.*

(*b*) Three copies of proof of all notes should be sent for approval, except when instructions are given to the contrary.

SPECIAL INSTRUCTIONS.

TO BE FILLED IN BY THE PRESS.

Diary.		Initials of Press official.
Received in Press on	28/5/09	
First proof furnished on	7/6/09	
Call for revised proof received on		
Revised proof furnished on		
Corrected proof received for striking on	14/6/09	
Final copies supplied on	16/6/09	

Account of copies.	Complete copies.	Notes.	Issue copies.
Supplied to Secretariat for Record	34	19	
" " " Issue	42	—	
For Volumes	16		
For E. T.	40		
Total	132		