

Government
of Bengal. }

1901.

{ GENERAL
DEPT.

EDUCATION.



AUGUST.

File $\frac{4-C}{36}$

Nos. 20-22.

Presidency College, Calcutta.

[Improved arrangements in the astronomical observatory and the chemical, geological, and biological laboratories].

LIST OF PAPERS.

- 20-21. Letter from the Accountant-General, Bengal, No. 161P.A., dated 16th July 1901, forwarding, after verification, a letter from the Director of Public Instruction, Bengal, No. 804T., dated 11th June 1901, and enclosures, containing proposals for making improved arrangements in the laboratories and the astronomical observatory of the Presidency College.
22. Letter to the Director of Public Instruction, Bengal, No. 2070, dated 15th August 1901, sanctioning (1) the cost of Rs. 350 for purchase of furniture for geological laboratory, (2) the raising of the contingent grant of the College from Rs. 3,000 to Rs. 4,000 a year, and (3) his proposals for revision of establishment of the College.

Endorsement No. 2071, dated the 15th August 1901, to the Financial Department of this office for information.

PRESIDENCY COLLEGE, CALCUTTA.

[Nos. 20-21.]

[FILE $\frac{4-C}{36}$ 1]

No. 161P.A., dated Calcutta, the 16th July 1901.

From—W. H. MICHAEL, Esq., Off. Accountant-General, Bengal,
To—The Secretary to the Government of Bengal, General Department.

I HAVE the honour to forward the accompanying proposition statement, in duplicate, for revision of the establishment of the Presidency College, Calcutta, together with the necessary re-appropriation statement, received with the letter No. 864T., dated 11th June 1901, from the Director of Public Instruction, and to state that the "present scale" has been duly examined and found correct.

The re-appropriation proposed by the Director of Public Instruction is admissible.

No. 864T., dated Darjeeling, the 11th June 1901.

From—A. PEDLER, Esq., Director of Public Instruction, Bengal,
To—The Secy., Govt. of Bengal, Genl. Dept., (thro' the Acctt.-Genl., Bengal).

I HAVE the honour to state that I have received from the Principal of the Presidency College proposals for making improved arrangements in the astronomical observatory and the chemical, geological and biological laboratories of that College for teaching the course for the B. Sc. and D. Sc. degrees instituted by the Calcutta University. The enclosed copies of communications addressed to the Principal by the Professors in charge of the departments concerned contain detailed reasons for the proposals.

2. Having gone carefully into the proposals, I beg to recommend that sanction be accorded to the following additional expenditure:—

Present scale of establishment.	Proposed scale of establishment.	Increase per mensem.
	<i>Astronomical Laboratory.</i>	Rs.
	1 Bearer on Rs. 10, rising to Rs. 12 by an annual in- crement of Re. 1 ...	11
	<i>Chemical Laboratory.</i>	
	Rs.	Rs.
1 Compounder ...	9	9 ...
1 Bearer ...	8	9 1
1 Do. ...	7	8 1
2 Bearers on Rs. 6 each ...	12	14 2
1 Tindal ...	25	35 10
1 Gas engine-driver	20	22 2
1 Fireman ...	8	10 2
	1 Compounder (addi- tional) ...	15 15
	<i>Geological Laboratory.</i>	
	| 1 Bearer ...	7 7
	<i>Biological Laboratory.</i>	
	| 1 Bearer ...	8 8
		59

3. The present grant of the College for contract contingencies is Rs. 3,000 a year. Of this Rs. 1,500 is retained for general use of the College, and the balance is divided equally between the chemical and physical laboratories. Mr. Stapleton, Professor of Chemistry, estimates the requirements of the chemical laboratory under this head at Rs. 1,960 instead of Rs. 750 hitherto allowed. In consultation with Mr. Edwards, I am of opinion that an addition should be made to the contingent grant of the College of Rs. 1,000 a year for the chemical laboratory; of Rs. 190 a year for the geological laboratory; of Rs. 240 a year for the biological laboratory, and of Rs. 170 a year for the astronomical observatory, or of Rs. 1,600 in all. I am fully aware that any increase in the contingent grant of an institution within the currency of a contract is contrary to the fundamental principles of the system of contract contingencies, but as the increase is due not to an increase in the ordinary contingent charges of the institution, but to an important change in the curriculum of the University, I presume, I am not precluded from applying to Government for an additional

grant, especially as the departmental allotment is quite inadequate to meet an additional demand like this. In these circumstances, I have to recommend that the contingent grant of the Presidency College may be increased from Rs. 3,000 to Rs. 4,600 a year for 1902-1903 and future years. As, however, it is proposed to give effect to the scheme from 1st July 1901, when the new session commences, and as one-third of the current official year will have elapsed by that time, an additional grant of Rs. 1,066 should suffice for the remainder of the year.

4. I have also to recommend that sanction be accorded to the expenditure of Rs. 350 asked for by Mr. Holland for furniture, &c., for the geological laboratory.

5. The following is a summary of the additional expenditure required during the current year:—

Additional permanent establishment at Rs. 59 a month	Rs.	
for eight months of the year	...	472
Additional contingent grant for eight months	...	1,066
Furniture for the geological laboratory	...	350
Total	...	<u>1,888</u>

6. As regards re-appropriation of funds, I have to point out that sufficient savings may be anticipated out of the budget provision under the head "Colleges" and "Inspection" on account of the salaries of Messrs. Tiery, Macdonell, Bridge, Stein, and Hill (whose successor has not yet arrived) : but I would specifically propose to re-appropriate the savings out of the salary (Rs. 600) of Mr. Tiery (Class II, Provincial Educational Service), who has gone on furlough for eight months from 8th April 1901, there being, besides the furlough allowance (Rs. 300) of Mr. Tiery, an expenditure of Rs. 50 a month on account of the acting allowance drawn by an officer of the Subordinate Educational Service, acting in the arrangements made in his place.

7. The usual proposition and re-appropriation statements are herewith submitted.

Dated Calcutta, the 17th April 1901.

From—H. E. STAPLETON, Esq., Professor, Presidency College,
To—The Principal, Presidency College.

IN accordance with your request for a detailed statement in support of the application to Government for an increase (a) in establishment of the chemistry department (b) in contingent grant, as well as for certain items of proposed extraneous expenditure, I beg to submit a statement which, I trust, will be comprehensive enough to satisfactorily explain the reasons for making these requests.

The various items have all been carefully discussed by Dr. Ray and myself after consultation with Chandra Babu, who, as Senior Demonstrator, will have most work to do in connection with the starting of the new B. Sc. and B. A., practical classes next term.

I also enclose for reference a table of the proposed lectures for next term, together with a summary of the various requests embodied in the statement.

<i>Present Establishment.</i>		<i>Proposed Establishment.</i>	
	Rs.		Rs. to Rs. Yrs.
1 Compounder	...	9	
1 Bearer	...	8	1 Compounder 12 to 21 in 15
1 Do.	...	7	1 Ditto 10 to 15 in 10
2 Bearers, each	...	6	4 Servants at 7 to 10 in 12
1 Tindal	...	25	1 Tindal at 25 to 35 in 10
1 Ditto	...	20	1 Tindal at 20 to 25 in 10
1 Fireman	...	8	1 Fireman at 8 to 15 in 14

One extra compounder is therefore asked for.

<i>Present expenses.</i>	<i>Contingent grant asked for.</i>
	Rs.
At present including special grants &c., Rs. 1,000 nearly.	
<i>N.B.</i> —The above amount represents the approximate annual expenditure of the laboratory as ascertained from the college office. The accounts are too complicated to be given in detail.	
	On account of kerosine 800
	Coal ... 300
	Iron retorts ... 160
	Chemicals, acids, ammonia, alcohol 400
	Chemical apparatus of local manufacture, retort stands, ring filter-stands, charcoal chauffers, &c., and petty expenses ... 300
	Total ... <u>1,960</u>

Proposed additions and alterations to the laboratory.

Steam bath for advanced students.
 Stone ware funnel for water bath.
 Verandah to the gas analysis room.

Table of proposed lectures next term.

Class.	Theoretical Hours.	Practical Hours.
M. A. ...	6	8
Fourth year Honour B. Sc. ...	6	6*
Ditto ditto B.A. ...	4	6
Fourth year Pass B. Sc. ...	4	6*
Ditto do. B.A. ...	3	...
Third year Honour B. Sc., B.A. ...	5	4*
Ditto Pass B. Sc., B.A. ...		
Second year F. A. ...	4	...
First do. F. A. ...	4	...

* Additional practical work.

Statement in support of an application to Government for an increased grant for the Chemical Department of the Presidency College.

From the commencement of the next term in addition to the existing B.A. Pass on Honours classes there will be opened the B.Sc., Pass and Honours, theoretical and practical classes. Thus the number of hours in the practical classes of the third and fourth year students will be doubled. As almost all the students will be required to work in the practical classes, the attention of the Assistant in charge of these classes will have to be directed to the students themselves. It will thus be seen a new hand will be required who should be able to prepare solutions of reagents generally, under instructions from the Assistant, and to fill up the reagent bottles, of which there will be about 1,200 to 1,500 in number. The practical class for advanced and research students on the other hand being on the ground floor, another man will be required to provide the students with reagents and also to give out and receive back those apparatus which are too costly to be given to each student separately for the whole term. As the work which these men have to do in a laboratory is altogether different from and superior to that done by ordinary laboratory bearers, one who has got some laboratory experience and who can read and write a little English may be employed in this case, at a monthly salary of Rs. 12. He may further be granted an increment of Rs. 3 a month each time at the end of his five, ten, and fifteen years' service. The present compounders in that case will have to do the other portion of the work, and as such, may be allowed to commence at Rs. 10 a month and draw an increment of Re. 1 a month every other year rising to Rs. 15. The work of the bearers of a chemical laboratory is altogether different from that of ordinary bearers, requiring a little special knowledge and skill. Hence they have to be trained properly for a few years in the laboratory before they can make themselves useful. Under the circumstances, instead of recruiting these men every now and then from the class of ordinary bearers who do more harm than good by breaking while handling fragile glass apparatus, and who do not care to stick to their posts at Rs. 6 or Rs. 7 a month, it is suggested that they may be employed at a slightly increased pay and with somewhat better prospects. They may therefore be allowed to commence at Rs. 7 a month and draw an increment of Re. 1 every four years rising up to Rs. 10. Should any one prove specially useful and equal to the qualification required of a compounder, he may be promoted to such a post when opportunity occurs.

Since the present laboratory has been built and used, it has often been urged that the contingent grant of this laboratory has been very inadequate for its proper working, and although nearly Rs. 1,000 on an average has been spent annually, the work has continually suffered, as will be seen from the following statement.

Thorough ventilation of the laboratory at least during that part of the year when the classes are held regularly, is essentially necessary, both for the building and those who work under it. There being no other means of removing the noxious fumes that are constantly generated in one part or other of the laboratory, it is necessary that the fan should be running daily from 10-30 A.M. to 4-15 P.M., and to do this 300 cubic feet of gas are required daily. Assuming 200 working days in the course of a year, the total volume of gas required will be $200 \times 300 = 60,000$ cubic feet. If it be further assumed that one hundred Bunsen burners, consuming 2 cubic feet of gas per hour, are allowed to burn on an average for three hours daily for uses to which gas is generally put to in a chemical laboratory, the total annual consumption for this latter purpose will be $200 \times 100 \times 2 \times 3 = 120,000$ cubic feet. The total annual consumption of gas will thus be $60,000 + 120,000 = 180,000$ cubic feet, and as every fifty American gallons of kerosine, costing Rs. 17, can yield on an average 3,500 cubic feet of illuminating gas, the total cost on account of oil alone will be Rs. 800 nearly. The next important item of expenditure in this laboratory is coal. This expenditure of coal divides itself into two portions, one portion arising out of that which is required for the manufacture of gas and the other for pumping up water into tanks on the roof. The latter part of the work has increased considerably, the engine having had to supply water in

addition to the caemical laboratory, to the physical laboratory, and to the two bath-rooms on the first floor of the old building. To meet this increased demand, the steam-engine has to pump up water thrice every week, and has also to supply steam for five days a week to the steam baths and water baths of the ground floor. The total annual consumption of coal on the two different accounts will be about $450 + 400 = 850$ maunds, costing about Rs. 300. To the account of manufacture of gas must be added the price of six cast-iron retorts, namely, Rs. 160, as six of them have to be replaced every year.

Having regard to the increase of work of the tindals and of the fireman, it is desirable that the following changes may be made in the scale of their pay and in the nature of their service that they may be induced to stick to their posts permanently. In Calcutta, the average pay of an experienced tindal who may be made responsible for the engines and furnaces is much above Rs. 30 a month. There are very few men to be found in the town who understand the construction of a gas engine, and who can fit it up ready for work if taken to pieces. So also as regards the fireman, his average pay ranges from Rs. 10 to Rs. 15. Besides, he is practically responsible for the proper preparation of gas from kerosine. That he is paid considerably below the average pay of such men is evident in our having had to take new hands four or five times in the course of the last seven or eight years. Under the circumstances, it may be suggested here that—

- (1) The senior tindal who drives the steam-engine, and who is also responsible for the whole set of machinery in the laboratory, should commence at Rs. 25 a month and receive an increment of Rs. 5 per month at the end of the seventh or fifteenth year of his service.
- (2) The junior tindal who drives the gas engine should commence at Rs. 20 a month and receive an increment of Rs. 2 and Rs. 3 at the end of his fifth and tenth year of his service.
- (3) The fireman who prepares gas and is responsible for the whole of the gas plant should commence at Rs. 8 and receive an increment of Re. 1 every second year rising up to Rs. 15.

It may further be suggested here that the services of these men may be made pensionable and thus induce them to stick to their posts.

The cost of chemicals, like acids, ammonia, alcohol, &c., which are purchased locally from Messrs. D. Waldie and Company runs up to Rs. 300 a year. Having regard to the increase of work proposed in the practical classes, it is desirable that it may be raised to Rs. 400 a year.

Having also regard to the changes that are going to be introduced into the nature of work in the elementary practical classes, an expenditure of Rs. 25 a month on account of purchase of articles of local manufacture (retort stands, filter rings, filter stands, repair work, &c.), and petty expenses is asked for.

As regards the fittings of the laboratory we desire to ask for the following additions and alterations.

- (1) The steam bath for advanced students has never worked satisfactorily, and is now practically useless. A new steam bath of nine chambers is urgently required, and it may be either made locally or procured from Messrs. A. Gallen Kemp and Company, Limited, London whose catalogue price for it is £ 44.
- (2) The water bath should be now filled up with stoneware funnels to draw up steam and fumes, and prevent dust falling into evaporating liquids. These may be made by Messrs. Burn and Company to order.
- (3) The average temperature reading of the gas analysis and balance room varies during the hot weather months from 30 C at 11 A. M. to 35 or 36 C at 4 P. M. As such variation of temperature prevents any accurate work being done, it is suggested here that a tiled verandah may be added on to the west wall of the room where the servants can also do their washing up of apparatus, &c.

Summary of proposed increases in contingent expenses.

	Rs.
Approximate cost of kerosine	800
Coal	300
Six iron retorts	160
Chemicals, like acids, ammonia, alcohol, &c., purchased locally	400
Apparatus of local manufacture and of petty expenses at Rs. 25 a month	300
Total	1,960

In the covering letter addressed to the Principal, Presidency College, there will be found a general statement of—

- (a) Proposed increase in establishment.
- (b) Ditto in contingent expenses.
- (c) Proposed additions and alterations in the laboratory.

A table is also included giving the number of hours during which work in chemistry will be carried on in the College next term.

Statement of proposition for revision of establishment.

[Gazetted officers have been omitted from the Statement.]

Number.	Date.	Office to which the proposition refers.	PRESENT SCALE.					NATURE OF CHARGE.					PROPOSED SCALE.				PROPOSITION.				Local Government's recommendation.	Remarks.	Remarks.	Orders.					
			Number.	Designation.	Minimum.	Increment.	Maximum.	Average cost.	Number.	Designation.	Minimum.	Increment.	Maximum.	Average cost.	Increase per month.	Decrease per month.	PERMANENT.	TEMPORARY.	Amount.	Period.					Amount.	Period.	Amount.	Period.	
1			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				
			<p>Section A.</p> <p>1 Gymnastic Master</p> <p>Section B.</p> <p>1st Assistant, Physical Laboratory. Physical</p> <p>2nd Assistant, Physical Laboratory. Physical</p> <p>1st Assistant, Chemical Laboratory. Chemical</p> <p>2nd Assistant, Chemical Laboratory. Chemical</p> <p>Section C.</p> <p>Head clerk</p> <p>2nd "</p> <p>3rd "</p> <p>4th "</p> <p>5th "</p> <p>Librarian</p> <p>Assistant Librarian</p> <p>Section D.</p> <p>Daftri</p> <p>Do.</p> <p>Dirwan</p> <p>Chaprasiss at Rs. 7 each</p> <p>Bearers " 7 "</p> <p>Farash</p> <p>Bearers, at Rs. 6 each</p> <p>Malis " 6 "</p> <p>Mehlturs " 5 "</p>																										
Presidency College.			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				

1	2	3	NATURE OF CHARGE.			PRESENT SCALE.			PROPOSED SCALE.			PROPOSITION.						ORDERS OF THE GOVERNMENT OF INDIA.								
			Number.	Designation.	Number.	Average cost.	Number.	Designation.	Number.	Average cost.	Minimum.	Increment.	Pay.	Minimum.	Increment.	Pay.	Maximum.	Average cost.	Grounds of proposition.	Local Government's recommendation.	Remarks.	Remarks.	Orders.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
																										PERMANENT.
			1	Mechanic	40	1	45	43 5 4	1	Physical Laboratory.	40	1	45	43 5 4	..	..	..	..	..	..	..	..	..	..	..
			1	Carpenter	20	1	25	23 5 4	1	..	20	1	25	23 5 4	..	..	..	..	..	..	..	..	..	..	..
			1	Fireman	15	..	15	15 0 0	..	..	15	..	15	15 0 0	..	..	..	..	..	..	..	..	..	..	..
			1	Bearer	10	..	10	10 0 0	..	..	10	..	10	10 0 0	..	..	..	..	..	..	..	..	..	..	..
			2	Bearers at Rs. 7 each	14	..	14	14 0 0	2	..	14	..	14	14 0 0	..	..	..	..	..	..	..	..	..	..	..
			1	Bearer	6	..	6	6 0 0	1	..	6	..	6	6 0 0	..	..	..	..	..	..	..	..	..	..	..
				Chemical Laboratory.																						
			1	Tindal	25	..	25	25 0 0	1	Chemical Laboratory.	35	..	35	36 0 0
			1	Gas engine-driver	20	..	20	20 0 0	1	..	22	..	22	22 0 0	..	..	..	..	..	..	..	..	..	..	..
			1	Fireman	8	..	8	8 0 0	1	..	10	..	10	10 0 0	..	..	..	..	..	..	..	..	..	..	..
			1	Compounder	9	..	9	9 0 0	1	..	9	..	9	9 0 0	..	..	..	..	..	..	..	..	..	..	..
			1	Bearer	7	..	7	7 0 0	1	..	8	..	8	8 0 0	..	..	..	..	..	..	..	..	..	..	..
			2	Bearers at Rs. 6 each	12	..	12	12 0 0	1	..	14	..	14	14 0 0	..	..	..	..	..	..	..	..	..	..	..
			1	Bearer	8	..	8	8 0 0	1	..	9	..	9	9 0 0	..	..	..	..	..	..	..	..	..	..	..
				Astronomical Observatory.																						
			1	Bearer	10	..	10	11 0 0	1	Astronomical Observatory.	10	1	12	11 0 0
				Geological Laboratory.																						
			1	Bearer	7	..	7	7 0 0	..	Geological Laboratory.	7	..	7	7 0 0
				Biological Laboratory.																						
			1	Bearer	8	..	8	8 0 0	..	Biological Laboratory.	8	..	8	8 0 0
					1,013 10 8	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
					59	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

"Present scale" examined and found correct.

COUNTERSIGNED.

P. C. JACOB,
Asstt. Accountant-General, Bengal.

A. PEDLER,
Director of Public Instruction.

A. C. EDWARDS,
Principal, Presidency College.

ORDERERS OF THE GOVERNMENT OF INDIA.
HOME DEPARTMENT.
FINANCIAL DEPARTMENT.

Order sanctioning present establishment—Government of Department.

Office to which the proposition refers.

Presidency College—concltd.

Re-appropriation Statement to meet additional charges on account of an additional establishment, &c., for Chemical, Geological, Astronomical and Biological Departments of the Presidency College in 1901-1902.

Major, minor and detailed heads under which the charge falls.	Budget grant for the detailed head under which the charge falls.	Amount of extra charge.	RE-APPROPRIATION PROPOSED BY THE OFFICER MAKING THE APPLICATION OUT OF GRANTS AT HIS DISPOSAL.		RE-APPROPRIATION PROPOSED BY HEAD OF DEPARTMENT OUT OF GRANTS UNDER HIS CONTROL.			RE-APPROPRIATION SUGGESTED BY ACCOUNTANT-GENERAL.		Expenditure up to last completed account being for month.	Anticipated savings at the end of the year.			
			Heads under which savings will be effected.	Amount.	Office or offices in which saving will be effected.	Heads to be reduced.	Amounts.	Major head, out of the savings of which the extra charge may be met.	Budget estimate.					
1	2	3	4	5	6	7	8	9	10	11	12			
<i>22, Education, Arts Colleges.</i>														
	Rs.	Rs.					Rs.							
Salaries	30,000	} 472	.....	.....	} Inspection	Salaries ...	1,888					
Establishment	41,928													
Contingencies	17,110		1,416						

[No. 22.]

[FILE 4-C 2.]

No. 2970, dated Calcutta, the 15th August 1901.

From—L. E. B. COBDEN-RAMSAY, Esq., Under Secretary to the Govt. of Bengal, General Department,

To—The Director of Public Instruction, Bengal.

WITH reference to your letter No. 834T., dated the 11th June 1901, I am directed to convey the sanction of Government to the following establishment for making improved arrangements in the astronomical observatory and the chemical, geological, and biological laboratories of the Presidency College for teaching the course for the B. Sc. and D. Sc. degrees instituted by the Calcutta University:—

	Month.	Rs.
For the Astronomical Laboratory—		
1 Bearer on	10	Rising to Rs. 12 a month by an increment of Re. 1.
Geological Laboratory—		
1 Bearer on	7	
Biological Laboratory—		
1 Bearer on	8	

The following establishment is also sanctioned for the chemical laboratory of the College in place of that now entertained:—

	Month.	Rs.
1 Compounder on	9	
1 Additional compounder on	15	
1 Bearer on	9	
1 Bearer on	8	
2 Bearers on Rs. 7 each	14	
1 Tindal on	35	
1 Gas Engine-driver	22	
1 Fireman on	10	

2. The proposals to raise the contingent grant of the Presidency College from Rs. 3,000 to Rs. 4,600 a year, and to incur an expenditure of Rs. 350 for the purchase of furniture required for the geological laboratory of that college during the current year 1901-1902 are sanctioned. The necessary expenditure during the current year will, as proposed by you, be met by re-appropriation, and that for future years will be provided in the budget of the Education Department.

No. 2071.

COPY of the above, with a copy of the proposition and re-appropriation statements, with the orders of Government noted on each, forwarded to the Financial Department of this office for information and communication to the Accountant-General, Bengal.

By order of the Lieutenant-Governor of Bengal,

L. E. B. COBDEN-RAMSAY,
Under-Secretary to the Govt. of Bengal.

CALCUTTA,
The 15th August 1901.

Govt. of {1901} Bengal.

GENERAL DEPT.

EDUCATION. File *4-C*
36

K.-W.—A PROGS. FOR AUGUST 1901, Nos. 20-22.

SUBJECT—

Presidency College, Calcutta.

[Improved arrangements in the astronomical observatory and the chemical, geological, and biological laboratories.]

Notes and Orders.

20-21 From the Officiating Accountant-General, Bengal, No. 161P.A., dated the 16th July 1901.

PLEASE see the Director of Public Instruction's letter No. 864T., of the 11th June 1901, received through the Accountant-General, Bengal, on the 17th July 1901, for making improved arrangements in the astronomical observatory and the chemical, geological and biological laboratories of the Presidency College.

2. It will be seen that, for the purposes indicated, the following charges will have to be incurred:—

	A year.
	Rs.
(1) Permanent establishment at a cost of Rs. 59 a month, or ...	708
(2) Additional contingent grant ...	1,600
(3) Furniture for the biological laboratory at a cost of Rs. 350 once for all ...	.....
Total ...	<u>2,308</u>

3. Items Nos. 1 and 2 will have to be provided in the Education budget for the year 1902-1903, and as shown in page 3 of the Director of Public Instruction's letter, a sum of Rs. 1,888 will be required during the current year 1901-1902 for expenditure under the heads mentioned, for which the Director of Public Instruction has proposed re-appropriation, which the Accountant-General certifies in his letter No. 161P.A. of the 16th July 1901, as admissible.

4. If it is decided to sanction the charges, the Financial Department may be consulted whether they will have any objection on financial grounds.

H. D. B.—22-7-1901.

E. L. M.—22-7-1901.

SECRETARY—

The Director of Public Instruction, with a view to making improved arrangements in the astronomical observatory, and the chemical, geological and biological laboratories in the Presidency College for teaching the course for the B. Sc. and D. Sc. degrees has submitted an estimate involving a yearly charge of Rs. 2,308, which he

requests permission to budget for in his budget for 1902-1903. The charge for the current year is Rs. 1,888, which he can meet by re-appropriation, which the Accountant-General, Bengal, certifies to be admissible. The institution by the Calcutta University of the degrees referred to above have led to the necessity for providing means for instruction in this course. As the Director of Public Instruction points out, the increase in the contingent grant asked for is due to a change in the curriculum of the University, and not to an

	Rs.
Additional estimate ...	708
Contingent grant ...	1,600
Total ...	<u>2,308</u>

Notes and Orders—continued.

increase in the ordinary contingent charges of the College. If it is decided to accept the proposal, the Financial Department may be consulted.

L. E. B. COBDEN-RAMSAY—22-7-1901.

I PRESUME the astronomical, geological and biological laboratories existed before the new Science degree courses were started. If so, why should they now need bearers and what was done before?

Again, I notice that in the case of the chemical laboratory, the proposal involves almost a general increase of salary to the existing staff. I see no reason for this. Again, it is proposed to have another compounder—no reason given—on Rs. 15 per mensem, whereas the existing one gets Rs. 9. Why the new man, if sanctioned, should not get Rs. 9 is not stated.

Unofficially ascertain from the Director of Public Instruction's office.

F. A. SLACKE—22-7-1901.

To the Personal Assistant to the Director of Public Instruction for submission to the Director of Public Instruction.

H. D. B.—22-7-1901.

E. L. M.—22-7-1901.

To SECRETARY—

The Principal has been addressed. His reply will be forwarded when received.

J. S. SLATER—23-7-1901.

THE proposed communication may be awaited.

H. D. B.—23-7-1901.

L. E. B. COBDEN-RAMSAY—23-7-1901.

WITH reference to the Secretary's orders above, please see the Director of Public Instruction's demi-official letter of the 31st July 1901.

H. D. B.—2-8-1901.

E. L. M.—2-8-1901.

RETURNED for a proper note, please.

L. E. B. COBDEN-RAMSAY—2-8-1901.

THE Director of Public Instruction, in his letter No. 864T., of the 11th June 1901, submitted proposals for making improved arrangements in the astronomical observatory and the chemical, geological and biological laboratories of the Presidency College for teaching the course for the B. Sc. and D. Sc. degrees instituted by the Calcutta University. The proposal involves a yearly expenditure of Rs. 2,308, which the Director of Public Instruction requests permission to budget for in his budget for 1902-1903. The charge for the current year is Rs. 1,888, which can be met by appropriation, which the Accountant-General certifies to be admissible.

2. From page 2 of the Director of Public Instruction's letter, it will be seen that it is proposed to employ bearers for the astronomical, geological and biological laboratories. For the first a salary of Rs. 10 rising to Rs. 12 is proposed, and for the second and third, a salary of Rs. 7 and Rs. 8, respectively, is proposed. In his note of the 22nd July 1901, above, the Secretary presumed that the laboratories in question existed before the new Science degree courses were started. If this presumption was correct, he wanted an explanation as to the need for these bearers. The Director

CALCUTTA,

The 31st July 1901.

MY DEAR SLACKE,

In reference to the proposal sent up to Government with this office No. 864T., dated 11th June 1901, on the subject of making improved arrangements in the astronomical observatory and the chemical, geological and biological laboratories of the Presidency College for teaching the new Science degree courses, you made certain inquiries in your office file, which I returned to you, with the promise of an early reply.

2. I have now to inform you that, with the exception of the chemical laboratory, the other laboratories and the astronomical observatory had not been in existence before the institution of the new degrees last year. Nor do they possess at present any menial establishment whatever, as paragraph 2 of this office letter above quoted will show. The geological and biological laboratories have not been fitted up yet. The new building for the transit instrument has only quite lately been completed, and the big telescope of the astronomical observatory has just been fitted up. The administrative sanction of Government for fitting up the geological and biological laboratories has very recently been obtained, but the work has not yet been taken in hand. You will thus see that the arrangements that have to be made in these laboratories will be altogether new.

3. As regards the appointment of a new compounder and the increase of pay of other employes in the chemical laboratory, I have to refer you to the statement prepared by Mr. Stapleton, Senior Professor of Chemistry, copy of which was enclosed with this office letter. The Professor gives detailed reasons why the pay of the new compounder should be higher than that of the one now employed, and again why the pay of the other employes should be raised. It will be remembered that under the new arrangement, the amount of practical work will be doubled, and that the increased work devolving upon the men, coupled with the increased experience obtained by them, appear to fully justify the slight increase in their pay recommended. You will also see that Pedler has not accepted the increased rates proposed by the Professor, but has, from his personal experience of the men and of the work that has to be done by them,

Notes and Orders—concluded.

suggested such economy as he thought might be made consistently with efficiency.

Yours sincerely,
J. S. SLATER.

To F. A. SLACKE, Esq.,
Secy. to the Govt. of Bengal, General Dept.
With the file, please, quickly.
F. A. SLACKE—1-8-1901.

of Public Instruction, in his demi-official letter of the 31st July 1901, say that these laboratories had not been in existence before the institution of the new degrees, nor do they possess at present any menial establishment whatever.

3. The next question put by Secretary is relating to the general increase of salary to the existing staff of the chemical laboratory, and the need for an additional compounder on Rs. 15 a month, instead of Rs. 9, which the present compounder gets. It is explained that, under the new arrangements, the amount of practical work to be done by the men will be doubled. Hence a slight increase in their pay is recommended. His explanation why the new compounder should get more pay than the present compounder is given in pages 1-2 of Mr. Stapleton's note attached to the Director of Public Instruction's letter No. 864T., of the 11th June 1901. It will be seen that Mr. Stapleton's proposal was to fix the pay of the present compounder at Rs. 10 rising to Rs. 15 a month, and that of the new man at Rs. 12 rising to Rs. 21 a month. But the Director of Public Instruction has proposed for them a salary of Rs. 9 and Rs. 15, respectively.

For orders.

H. D. B.—5-8-1901.

E. L. M.—5-8-1901.

SECRETARY—

The above note clears up the points raised by Secretary in his note dated the 22nd July 1901. Sanction may be given to the proposal with Financial Department's consent.

L. E. B. COBDEN-RAMSAY—5-8-1901.

F. A. SLACKE—5-8-1901.

DRAFT awaited.

L. E. B. COBDEN-RAMSAY—5-8-1901.

To Financial Department.

H. D. B.—5-8-1901.

E. L. M.—5-8-1901.

THE expenditure during the current year will be met by re-appropriation; that for next year will be provided for in the budget.

As the General Department are inclined to sanction, we may say no objection.

N. N. B.—7-8-1901.

B. B. B.—8-8-1901.

SECRETARY—We may say no objection.

S. R. HIGNELL—9-8-1901.

H. M. KISCH—10-8-1901.

SUBMITTED. We may now issue orders.

H. D. B.—12-8-1901.

SEE orders above, please. "Drafts awaited."

L. E. B. COBDEN-RAMSAY—12-8-1901.

22 O. I. Nos. 2970-71, dated the 15th August 1901.