Public (1895) Department.

ORDINARY MS.

G.O., No. 956-956A

Dated 19 Nov. 1895

[Despatch Abstract.]

KODAIKANAL OBSERVATORY.

Forwarding, for the orders of the Government of India, a letter from the Government Astronomer submitting proposals in regard to the equipment of the Observatory to be constructed at Kodaikanal.

BACK PAPERS.

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

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
No 442 of 96							

THE OBSERVATORY,
NUNGUMBAKKUM,
Madras, 8th November 1895.

No. 220

FROM

THE GOVERNMENT ASTRONOMER,
Madras.

TO

The Honble Mr. J. F. Price,
Chief Secretary to Government.

SIR,

I have the honor to submit the following proposals with regard to the equipment of the Kodaikanal Observatory. They are those submitted to, and approved of by, the Solar Physics Committee (see G.O. dated 2nd September 1895, Nos. 725, 726 (Public)) and have been prepared after a careful examination of the observatories at Greenwich, Julse Hill, Edinburgh, Glasgow, Dublin, Cambridge, and Oxford, and after very full discussion of the whole question with the leading Astronomers at home.

2. (1) For photographing the Sun.

A Photo-heliograph on the Rossi principle.

This instrument has already been sent out by the Greenwich

Greenwich Observatory and is lying in the cases in which it was sent out, as there is at present no place in which it can be erected.

(2) For general astronomical work and for special Spectroscopic work on the sun.

The 6-inch Cooke equatorial sent from Poona now in the Observatory. The telescope is itself in fair order though damaged in certain parts, but the Spectroscope is practically useless. By permission of the Government (vide Telegram 271 dated 9th May 1895) I sent the spectroscope home to the Maker and after discussion with him and with others - especially Dr. Huggins whose opinion in such a matter must carry the greatest weight - I propose that it be modified in the following way:-

(a) That the prisms be cut in two and reground to an angle of 60°.

(b) That the observing and collimating telescopes be replaced by new ones with $1\frac{3}{4}$ in.

(c) That a new stand be prov

arranged so that the light shall pass only once through them.

(d) That a camera be added for photographing the spectrum.

These with certain minor alterations which it is unnecessary to specify would cost about £65.

(3) For photographing comets &c.

The Lerebour and Secretan telescope of this Observatory and a six inch Photographic Objective should be mounted as twin telescopes driven by a clock with Russell control. (This is the cheapest form of effective control.)

For this the instrument would have to be sent home as the present mounting cannot be satisfactorily adapted and is, in fact, practically worn out. It has been in use for more than 45 years. No satisfactory estimate of the cost can be obtained without sending the instrument home but it should not exceed £75.

(4) For general ~~photographic~~ Spectroscopic

Are entirely new instrument, as approved by the Indian Observatories Committee (loc. cit.) should be obtained for this purpose.

It would consist of

(a) a 6-inch Grubb's reversible or Cooke's triple lens of 40 feet focal length.

(b) a Rowland grating of about 25 feet radius (4-inch plate)

(c) Slit, camera, and mounting on Rowland's principle

(d) a heliostat.

The cost would be about £250.

(5) Clocks &c.

1 Sidereal Clock
1 Mean Time Clock } fitted with electric Contacts } cost about £200
1 Chronometer

1 Chronograph – probably from G. T. Survey.

(6) Electrical apparatus – say £50

(7) Micrometer for measuring spectra. £30

(8) Minor apparatus, Chemicals &c. – £50

3. It is of importance that the question of equipment should be settled at as early a date as possible

possible since the final plan for the observatory cannot be prepared till it is known exactly what instruments are to be in it.

4. It would also be a great advantage if early sanction could be given – if the plan is approved of – for the commencement of the work on the actual instruments. Work of this kind cannot be done quickly if it is to be done well, and it is most important that the instruments should all be ready by the time that the Observatory is built.

5. It is of particular importance that the repairs to the Spectroscope [2. (2)] should receive early sanction as that instrument should be fit for use as soon as the Astronomer's house is ready, since on it and the 6-inch Cooke equatoreal it will be possible to begin work without waiting for the completion of the building of the Observatory, and even before that it could be used with advantage in Madras for training the Observers

7. The following is an abstract of the cost as estimated.

Abstract of Probable Cost.

Remaking the Spectroscope —	£65
Remounting Lerebour & Secretan —	75
New Spectrograph ———	250
Clocks and Chronometers ——	200
Electrical Apparatus ——	50
Micrometer ———	30
Minor Apparatus ———	50
	£720

I have the honor to be,

Sir,

Your most Obedient Servant,

C. Michie Smith

Govt Astronomer.

Public Department

From

The Govt. Astronomer

Madras.

No: 220

Dated 8th } November 1895.
Recd. 9th }
Regd. 11th

Pub Gr 725-26 & 2-9-95 orig
- Desp No 3 of 95
- Gr 359A & 9-5-95

The Finl. dept
for favour of early remarks.
FDB
13/11/5.

Public Dept

As the G. of I. has accepted the charges on account of the Kodaikanal Observatory against Imperial, the present Expenditure should be met by India.
CS.
14.11.95

UNDER SECRETARY
NOV 95
PUBLIC ETE DEPT

Submitting proposals regarding the equipment of the Kodaikanal Observatory.

[G. / 24.]
5-10-95.

Public DEPARTMENT.

Papers to be read in proceedings:—

Again G.O., dated 189 , No.
Again G.O., dated 189 , No.
Current No. 3804 of 1895, dated 8/11, from the Govt. Astronomer.
" " " 189 , " , "
" " " 189 , " , "

ORDER. No. 956 d 19 Nov '95

Ordered to be forwarded for the orders of the Govt. of India.

To
The Govt. Astronomer.

LETTER, No. 956 A. 19 Nov 95

To

The Secretary to the Govt. of India,
Revenue & Agri. Dept.

SIR,

In continuation of my endorsement No. 726, Public, dated 2nd September 1895, I am directed to forward for the orders of the Govt. of India a communication from the Govt. Astronomer submitting proposals in regard to the equipment of the Observatory to be constructed at Kodaikanal.

FDB
8/11/95

B

No.220,d/ 8-11-95.

When given for copying _____
When copied _____
When examined _____ } 189
When signed _____

READ AGAIN G.O., No. 189 DATED

CURRENT No.

ENCLOSURES TO O. No.

ORDER OF GOVERNMENT	A	A	A	A	A	A	A	
LETTER OF GOVERNMENT.								
STATEMENT WITH DITTO.								
PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH IN ORIGINAL.								

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