

MADRAS RECORD OFFICE.

Government of Madras.

Public DEPARTMENT.

G.O. No.	876	Press ~~Mis.~~
Dated	20-7-1867	

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Department

20th July 1867.

No. 214. . Read the following letter from the Inspector General, Indian Medical Department, and the Government Astronomer, to the Acting Chief Secretary to Government, Fort Saint George; dated Madras, 11th July 1867.

With reference to the Proceedings of the Madras Government, Public Department, 10th April 1867, No. 379, paragraph 2, we have the honor to submit to your consideration the arrangements which, after due deliberation, we have decided upon, for the speedy commencement of the series of Meteorological Observations at the various stations selected in the Madras Presidency. We have also to request information upon a few points requiring more definite explanation and sanction, to enable us to carry out the scheme in the most effective possible manner.

1. In regard to the instruments, a supply of superior instruments, by Messrs. Negretti and Zambra, having been recently received at the Medical Stores, we have the pleasure to state that we are prepared to equip nine stations with nearly complete sets of Meteorological apparatus, and the entire number with the principal instruments requisite for carrying on the most important records desired. The following statement will exhibit at sight what we have on hand, and what remain to be supplied to render the whole of the eighteen stations (counting the Madras Observatory as one) practically similar in their equipments, a point which we consider of the utmost importance, when the results are to be strictly and immediately comparable, as must be the case in the present instance :—

No.	Instruments.	Ready.	Deficient.	Remarks.
1	1st class Standard Barometers.	9	9	Very superior instruments, but No. 3 might be used instead.
2	Wall Brackets for ditto...	9	9	Easily supplied by Mr. Doderet.
3	2nd class Standard Barometers.	10	.....	
4	Dry and Wet Bulb Hygrometers.	19	.....	Requiring slight alteration throughout by Mr. Doderet.
5	Solar Radiation Thermometers in Vacuo.	19	.....	
6	Ditto ditto freely exposed.	.....	18	Desirable, but not of immediate importance. Possibly obtainable at the D. P. W. Stores.
7	Self-registering Maximum Thermometers.	19	17	Only 18 of each wanted for immediate use, but being easily deranged duplicates are considered necessary at every station. All most probably obtainable at the D. P. W. Stores and Workshops.
8	Ditto Minimum Thermometers.	19	17	
9	Terrestrial Radiation Thermometers.	19	.....	
10	Copper Rain Gauges with Glass measures.	19	.....	
11	Wind Vanes.....	10	8	Of Mr. Adie's make. The deficient number should be had out immediately. Two, rather worn, available from the Observatory.
12	Robinson's Anemometers...	10	8	
13	Moffatt's Ozonometer with Scale	19	.....	Easily supplied by Mr. Doderet.
14	Ozonometer Cages.....	.....	18	Indispensable, and must be provided for each station.
15	Ordinary Clocks (American would suffice).	.....	18	Best constructed by Mr. Doderet expressly for each station.
16	Floating Sun Dials for finding local time.	.....	18	

Eighteen copies of "Drew's Practical Meteorology" should be also obtained, one to be distributed with each set of instruments supplied.

From the above statement, and the remarks appended, it is evident that, with the exception of the eight deficient Robinson's Anemometers, all other demands can be provided for on the spot, if the assistance of Mr. Doderet, the Mathematical Instrument Maker to the Department Public Works, can be granted to the Government Astronomer, for the construction of such items as it is suggested can be readily supplied by him.

A small number of instruments should be retained in store, ready to replace deficiencies which are sure to occur from time to time.

A set of instruments, formerly used at Secunderabad by Dr. Arnold Smith, but now no longer required by that Officer, might be advantageously purchased for this purpose, in addition to the few in the Medical Stores over and above what are required for the immediate starting of the eighteen Meteorological stations, and the Government Astronomer will, if permitted, assign their present value, and submit the total amount thereof (under Rupees 200) for sanction of its payment to their present owner. They have been in the Observatory Store-room for above a year past, and were some of them used for special observations made for the Gun Cotton Committee of the Royal Society in May and June 1866.

2. *Out-door stands for Thermometers, &c.*—One of the chief precautions requisite to render all the observations taken at different stations comparable is, to have all the thermometers fairly exposed, and yet effectively sheltered from direct or reflected sunshine, from radiated heat, draughts and rain.

The form of stand most desirable would be a pent-house or box, supported on four legs, about $4\frac{1}{2}$ feet from the ground, open below, length 4 feet, breadth 3 feet, and height about 3 feet; the sides consisting of venetian flaps, hinged at the top, and the whole covered over by a stout thatched roof or chupper, about 12 by 8 feet, so constructed as to exclude sun and rain, but to admit of free ventilation and perfect exposure to the actual temperature of the surrounding atmosphere. The instruments at the Madras Observatory are fairly placed in a north verandah, freely exposed on a board, but as such an arrangement may not be convenient at the up-country stations, and the middle of a compound is undoubtedly the most satisfactory position for thermometers, some uniform pattern of stand should be agreed upon, and one set up in the Observatory compound for trial before the rest are constructed. The cost of each chupper and pent-house would be about 100 Rupees, but the Astronomer is unable to say without trial whether the pent-house (at least two-thirds of the expense) is really necessary or not. It is proposed, therefore, to erect in the Observatory compound a trial chupper, with a simple board stand, and a pent-house as described, and to test by actual comparison whether thermometers so situated read precisely alike, and also whether they are in agreement with the standards of the Madras Observatory. A single day's trial will settle the question; but whatever form of stand is adopted, it will be desirable that a set of thermometers shall be similarly arranged and recorded at the Observatory, and in all probability it will be found that the temperatures recorded in the new and unquestionable position proposed, will be identical with those in the

8. As regards the last question, travelling expenses cannot be granted under the rules to selected candidates for expenses incurred in transit to and from Madras, nor can salary be paid until a public servant has been actually appointed.

9. The Government think, however, that payment of their salaries may fairly commence from the date on which the Observers may, by order of the Astronomer, join their appointments at Madras.

(True Extract).

Acting Chief Secretary.

To the Inspector General, Medical Department.

- „ Government Astronomer.
- „ Public Works Department.
- „ Accountant General.
- „ Examiner of Claims.

Ed. J. Talloch.

north verandah of the Observatory before named, in which all past observations have been made. The five Astronomers, in successive permanent charge, have all considered the position of the thermometers unexceptionable, but it will be satisfactory to find their judgment confirmed by actual comparison with a set perfectly clear of all buildings, and placed as may be deemed best for uniform adoption at the new Meteorological stations.

3. *Observers.*—Seventy-two applications of apparently suitable men, chiefly Natives, all sufficiently acquainted with mental decimal arithmetic—the most imperative demand next to integrity and general good character—have already been registered by the Government Astronomer. The majority of these candidates are youths who have passed either the Uncovenanted Civil Service or Matriculation Examinations, solely with a view of obtaining employment under Government. But as the work is of a peculiar nature, for which no official public examination is any guarantee, and as the Observers employed most certainly cannot be allowed leave of absence agreeably to the ordinary rules of the Uncovenanted Civil Service, it is evident that whenever a man can be found on the spot, with his family connexions around him, possessed of the requisite qualifications and taste, he will make a far better Meteorological Observer for such station, whether a passed man or not, than any stranger who sees fit to apply for the post merely for the sake of the pay it will secure him. Every Observer not previously experienced in the use of such instruments must pass through a brief course of training and instruction at the Madras Observatory, and definite orders from Government upon the following points will facilitate the selection of the most suitable hands, and hasten the starting of the entire scheme :—

i.—Is it compulsory that the persons selected as Observers shall have passed either of the examinations now prescribed, before entering upon their duties ?

ii.—Will the ordinary Uncovenanted Civil Service pension and gratuity regulations be applicable to the employés in this service ?

iii.—Will selected candidates be allowed their travelling expenses to and from the Madras Observatory, and salary while undergoing their training for the space of a week or ten days, in that establishment ?

iv.—Will Government permit the Astronomer, in communication with the Inspector General, Indian Medical Department, and the Medical Officers in local charge, to appoint the men found to be best qualified as Observers ?

A negative reply to Query 1 will enable us to commence operations at Secunderabad, Trichinopoly, Coimbatore, Bangalore, and Rangoon, immediately that the form of stand best adapted for general use has been decided upon, and the instruments prepared for their respective destinations. The candidates recommended for the first two places named have each had several years' experience in keeping the past records thereat : the one for Bangalore has had instrumental practice and training in the Trigonometrical Survey ; and the other two are youths of excellent character and possessed of the requisite knowledge for such duties.

An affirmative reply to Query 2 will further enable us to recommend two of the Observatory Assistants for Salem and Negapatam.

20th July 1867.

4. Printed Instructions and Forms should be at once prepared for the guidance and use of the Observers, and the Government Astronomer is now occupying himself with the compilation of these, and of the requisite Reduction Tables. Permission to procure a moderate supply, sufficient for the first twelve months' use, is therefore requested, and the Astronomer suggests that they will be best printed at the Military Male Orphan Asylum Press, which has for many years past been employed for the publication of the Hourly Magnetical Observations taken at the Madras Observatory and for the forms in use at that establishment.

No. 215. ORDER THEREON, 20th July 1867, No. 876.

In their letter above recorded the Inspector General, Indian Medical Department, and the Government Astronomer report the arrangements which have been made by them for the commencement of a system of Meteorological Observations throughout the Presidency, in accordance with the instructions laid down by Government in April last.

2. Nine stations can be at once equipped completely with instruments, and the most important of these can be supplied to all. The list given in the 1st paragraph of the letter now under consideration shows the instruments for which provision must be made: all of these can be obtained in Madras, with the exception of eight "Robinson's" Anemometers, if the services of Mr. Doderet be placed at the Astronomer's disposal.

3. The purchase of the instruments which are still required is sanctioned, and Mr. Doderet will be requested to place himself in communication with the Government Astronomer, and afford every assistance in the construction of the instruments which can be locally supplied.

The purchase of 18 copies of "Drew's Practical Meteorology" is also sanctioned.

4. The Government approve the purchase of the set of instruments formerly used by Doctor Arnold Smith, at a cost not exceeding Rupees 200.

5. The Government Astronomer is authorized to incur the cost of erecting a stand with thatched roof, and pent-house, with a view to deciding on the cheapest and best form of stand for thermometers to be used at every station.

6. With regard to the questions propounded in the 3rd paragraph of the letter the Government, while fully recognizing the necessity of adhering in any but the most exceptional cases to the Uncovenanted Service Examination Rules, are of opinion that, having regard to the exceptional nature of the duties required of the Observers, duties which necessitate a very considerable acquaintance with arithmetic, and more than average intelligence, and to the fact that each Observer will have to undergo a short course of instruction at Madras, the rule requiring that no candidates who have not passed the prescribed Special Test shall be employed in posts, the salaries of which exceed Rupees 20, may, as a special case, be relaxed: the Government desire, however, that whenever practicable preference may be given, *ceteris paribus*, to passed candidates. The Government will leave the selection of the best qualified Observers entirely in the hands of the Inspector General, Indian Medical Department, and the Government Astronomer.

7. In answer to the second query, it is observed that the establishment being a permanent one, the ordinary rules relating to pensions will be applicable to all Uncovenanted Servants employed therein.

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PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following letter
from the Inspector General, Indian
Medical Dept. and the Govern-
ment Astronomer

Here, enter 11th July 1867

Order 20 July 1867 No 870

In their letter above
recorded the Inspector General
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and the Government Astronomer
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throughout the Presidency, in
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W. G. M.

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2 list given in the first para-
3 graph of the letter now
4 under consideration shows
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7 in Madras, with the ex-
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required is sanctioned and
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in communication with the
Government Astronomer
and afford every assistance
in the construction of the
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locally supplied.

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of Brew's Practical Meteorology
is also sanctioned.

4 The Government approve
the purchase of the set of
instruments

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Servants employed therein.

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question, travelling expenses
cannot be granted under
the Rules, to selected can-
didates for expenses incurred
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be paid until ^{a public} the servant
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the Observers may, by order
of the Astronomer, join their
appointments at Madras.

12 B.

To the Insp. Genl. Mad. Dept.
- a - Govt. Astronomer
- a - Public Works Dept.
- a - Post General
- a - Secy of Finance

Recd 26/11

24. 215

W. H. H.

1867 Department.

No. 8276

PROCEEDINGS OF GOVERNMENT.

Dated. 20 July 1867.

7444 1382-1790.

20 July
1867

No 1

Statement showing the amount realized under Act I of 1865
(Madras), in the Municipality of Oombum within the half
year ending 30th April 1867.

	Rs.	As.	Pas.
Amount realized under Schedule A. _____	7	15	3
Amount realized under Schedule B. _____	835	12	
Amount realized under Schedule C. _____			
_____ and by Registration of Cattle. _____	361		
Amount realized from tax on Horses _____	330	12	
Fines _____	57		
	Total 2999 11		
	11		

J. Cunn
President

Statement showing the Expenditure during the half year
ending 30th April 1867.

	Rs.	As.	Pes.
Head Clerk and Gumarla	60	7	4
Toll gate keepers	185	15	8
1 ~~Row~~	55	11	9
Scavengers	148	6	4
4 Carts	114	"	"
Cart stand	33	5	8
1 Cartine	38	15	"
Toll gates. Fines for toll gate keeper boats &c.	40	10	"
Five Plates to put on registered Carts	15	"	"
Stencil plates. Painting numbers on registered			
Carts.	17	10	8
Seal	8	4	"
Contingent Charges	40	15	11
Total	759	64	

Chancellor
President

141

Memorandum showing the Expenditure, from 1st to 31st
 incurred for the repairs & maintenance and the collection of
 taxes during the year 1867-68 in the Municipality of Cumbria.

1 Manager at 30 Rupees per month	360 . .
1 Overseer at 10 Rupees per month	120 . .
1 Quasim at 7 Rupees per month	84 . .
2 Bill Collectors at 6 Rupees per month	144 . .
1 Kow at 6 Rupees per month	72 . .
6 Toll gate keepers at 6 Rupees per month	432 . .
10 Scavengers at 5 Rupees per month	600 . .
Cart stands	100 . .
Latrines	150 . .
Repair of Roads	500 . .
Office furniture	50 . .
Contingent Charges	100 . .
	<u>Total 2712 . .</u>

C. A. A. K.
 President

Amount likely to be realized in Oumbun during the
Year 1867-68 under Act X of 1865.

	Rs.	A.	P.
Under Schedule A .	1314	.	.
Under Schedule B .	1667	.	.
Under Schedule C .			
and by Registration of Cattle	722	.	.
By House Tax at 7 Percent	900	.	.
Road Cops	90	.	.
Fines	100	.	.
Sale of refuse &c.	100	.	.
	Total - 4893	.	.
Government Contribution	1223	4	.
	Total <u>6116</u>	4	.

Quar
President

Public Library

Public Library

A Statement showing the probable expenditures to be incurred for Sums to be paid for the Sums of
 Current in the District of Columbia for the Official year 1866/67.

Pay of 2 Head Constables at \$22 Purses each per Annum	528 "
" 2 Deputy Constables at \$12 1/2 Purses each	300 "
" 10 1st Class Constables at \$8 Purses each	960 "
" 16 2d Class Constables at \$7 Purses each	1344 "
Flotting for 2 Head Constables at \$15 40 each per Annum	308 "
" 2 Deputy Constables at \$13 10 each	274 "
" 26 Constables at \$13 70 each	349 6 "
(Recruitment for 2 Head Constables at \$6 Annus each per Annum	" 12 "
" 2 at \$12 1/2 Constables at \$8 Annus each	1 "
" 26 Constables at \$8 Annus each	13 " "
Coxtra for lighting at \$15 00 per Annum	36 " "
" Sweeping at \$1 00 per Annum	12 " "
" Stationary at \$1 Annus per Annum	2 40 "
" Hospital charges & Purses per Annum	60 " "
	<u>110 4 "</u>

*The
Mort & Co. Inc.*

Attest 3664 2

*W. P. Reid (Attorney)
Selling & purchasing for the
Mort & Co. Inc.*

*J. C. Curren
President*

Enclosure in a letter No 387
dated 22^d Nov 1866.

Madras Observatory

1867 July 11th —

From

~~The Government Astronomer and~~
The Inspector General Indian Medical Department
and the Government Astronomer. —

To

The Honourable R. Ellis. C. P.
Acting Chief Secretary to Government.
Fort Saint George

Sir,

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meteorological apparatus, and the entire number with the principal instruments requisite for carrying on the most important records desired. — The following statement will exhibit at sight what we have on hand, and what remain to be supplied to render the whole of the eighteen Stations (counting the Madras Observatory as one) practically similar in their equipments; a point which we consider of the utmost importance, when the results are to be strictly and immediately comparable, as must be the case in the present instance. —

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The form of Stand most desirable would be a

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We have the honor to remain,

Sir

Your most obedient Servants,

J. MacKenzie Esq.

Inspector General, Indian Medical Department.

N. R. Pogson

Government Astronomer & Meteorological Superintendent.

No 10 April 1894-55

Pres. 20 July
Ricketts 1887 1888

From
The Sup. Gen. Indian. Mat. Dep.
and the Government of Minnesota
to the Hon. S. S. M. S. S.
Chief Secretary to Government
Post St George.

Madam Secretary, July 11th. 1884.

Received 12

General suggestions in regard to the
history of the Anthropological Service
recently submitted by Government.

69
918
819
214