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M.O. 1-10/100-15-10-37

MADRAS RECORD OFFICE.

Government of Madras.

Police DEPARTMENT.
1387

G.O. No.	1387	Press Mis.
Date:	1-1-37	19-1-37

Not to be folded or roughly handled

No. 29. Read the following letter from N. R. POGSON, Esq., Government Astronomer and Meteorological Superintendent, to the Acting Secretary to Government, Fort Saint George; dated Madras Observatory, 1st October 1869.

I have the honour to submit a few brief remarks for your consideration in reference to a very groundless and mischievous attempt on the part of a person who signs himself "S. M. Saxby, R.N.," to prognosticate severe gales all over the world on or about Tuesday, October 5th. His opinion is pretentiously backed up by some sounding though most obscurely-worded arguments, which, worthless as they really are, may nevertheless mislead, and thereby cause great uneasiness, not merely to the ignorant and superstitious, but also to thousands of persons not sufficiently familiar with science at once to see the fallacy of his assertions.

2. It has long been too well-known and regretted by the most experienced meteorologists that no reliance can be placed upon weather-prognostications made for more than a day or two in advance. No storm need ever overtake us unawares, for the barometer is an unfailing guide when its movements are properly interpreted, and it is surprising that the use of so simple and truthful an indicator is so limited and so rarely understood. No astronomical configurations of sun, moon or planets, have ever been found to exert the slightest influence upon the weather, although repeated laborious attempts have been made to detect any coincidences between celestial and atmospherical phenomena which might lead to predictions of the latter. Every one is familiar with the fact that the tides are due to the disturbing influences of the sun and moon upon the waters of the ocean, and a hasty unphilosophical mind will naturally jump at the conclusion that the atmosphere is subject to similar disturbances; forgetting that the vast difference in the densities of sea water and air render such disturbances practically imperceptible in the latter case. A steamer ploughing the sea at fifteen knots per hour produces a considerable commotion and swell in its track long after it has passed, while an express train rushing along at four times the speed makes only a momentary impression upon the air, and leaves no trace of its disturbing influence a few seconds after it has flown by. It is precisely the same with our atmospheric tides due to solar and lunar attraction. Undoubtedly they exist, but their action is so diffused and insignificant as to be utterly beyond any present means of measurement, or even of detection. The moon in perigee, that is when nearest the earth, exerts an attractive power greater than she possesses when in apogee, or at her greatest distance, nearly in the proportion of seven to five, and this change of force, though causing the very considerable difference between spring and neap tides in the ocean, goes on quietly enough through every successive lunar month without producing any visible atmospheric change. Hence though the very simple and natural coincidences of lunar attraction, upon which Captain Saxby bases his needless alarm, cannot fail to produce universally high spring tides about the 4th, 5th, and 6th instant, no evil effects need be anticipated in the way of stormy weather or atmospherical disturbance of any kind whatever. The occurrence of a gale at the same time, in any part of the world, would be a mere coincidence, and most certainly not a result of the lunar influences at work. Captain Saxby further states that "at noon of the same day the

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Proceedings of the Madras Government, Public Department,
6th October 1869.

moon will be on the earth's equator—a circumstance which never occurs without marked atmospheric disturbance.”

3. It is true that our satellite will cross the earth's equator on the 5th, but as this also happens twice in every lunar month, without the slightest effect upon the weather, the fallacy of the Captain's assertion needs no argument to expose it. Such a notion deserves only to be classed with the superstition so long and shamefully encouraged in Moore's Almanac, and similar disreputable productions, assigning to successive days in each lunar month an influence upon the neck, head, arms, legs, and various members of the human body; and, whatever Captain Saxby's unreasoning imagination may lead him to believe, has not a shadow of foundation in fact.

4. A very able letter upon the subject by Mr. H. F. Blanford, Meteorological Reporter to the Bengal Government, appeared in the *Englishman* a few days back, and has been reprinted in the Madras papers. Every statement it contains I most heartily endorse as my own opinion also.

5. It is, however, most desirable, and I would urge a duty owing to the public of this Presidency, that every precaution should be taken, and every facility afforded me, especially throughout the months of May, October, and November, for giving prompt and timely warning of the approach of a gale or cyclone which may at any time visit the land. If daily telegrams of the principal meteorological readings at 10 A.M. and 4 P.M. were furnished me from Vizagapatam, Masulipatam, Negapatam, and Trichinopoly throughout the three months named, I should be in a position to watch for danger, and to give timely warning of the approach of stormy weather along the coast when occasion required. I do not wish for telegrams during the other nine months of the year, as I consider them quite unnecessary and mere waste of time. I should also be in telegraphic communication with, and authorized to send weather messages to, the Madras Telegraph office; as in case of the sudden approach of stormy weather, the time lost in communicating by peons and notes, between the Observatory and the Telegraph office, would undo all the good arising from the daily telegraphic reports suggested. The same posts which support the Fort-gun-wire might carry a second line down to the Telegraph office, and an alarm-bell kept ready for discharge would call attention to any signals I might have occasion to transmit. Lastly, I beg leave to urge the advisability of the commencement of the new gun-firing arrangements before the setting in of the monsoon. Correct Greenwich time on board is a great safeguard to a Captain, and only properly determinable by the means proposed. Chronometers brought ashore through the surf cannot avoid changing their daily rate, so that even when sent to the Observatory for comparison they are unreliable before they can be returned on board. Steamers and ships making only a passing call can rarely have their chronometers compared at all under the present system, the error of the gunfire not being available at the Master Attendant's office until the following morning, and only appearing in the newspapers on the second day following. The firing of the gun by telegraphic signal will obviate all this, and will give two trustworthy signals per day; while beyond the repair of the line little or no extra expense need be incurred. The apparatus is all ready for use, and can be set up immediately and used forthwith, as soon as the requisite authority is conceded.

Proceedings of the Madras Government, Public Department,
6th October 1869.

No. 30. ORDER THEREON, 6th October 1869, No. 1387.

With advertence to the concluding paragraph of the foregoing letter the Government authorize the despatch of occasional telegrams to the Government Astronomer from the ports indicated, whenever the barometer falls much below the average. The Government Astronomer should submit an average table for guidance.

2. Mr. Pogson's proposals regarding the gun-firing arrangements have been disposed of in the G. O., under date the 24th ultimo, No. 1332. His request to have the Observatory placed in immediate telegraphic communication with the Telegraph office will be referred to the Superintendent of Telegraphs, with reference to that order.

(True Extract.)

Actg. Secy. to Govt.

TO THE GOVERNMENT ASTRONOMER,

„ Superintendent of Telegraphs, Madras Division.
„ Accountant General.

Exd. J. Wright.

disposed of in the

Public

Read letter from Mr. Astronomer
1 Oct 1869

no 1387. 6 Oct /69.

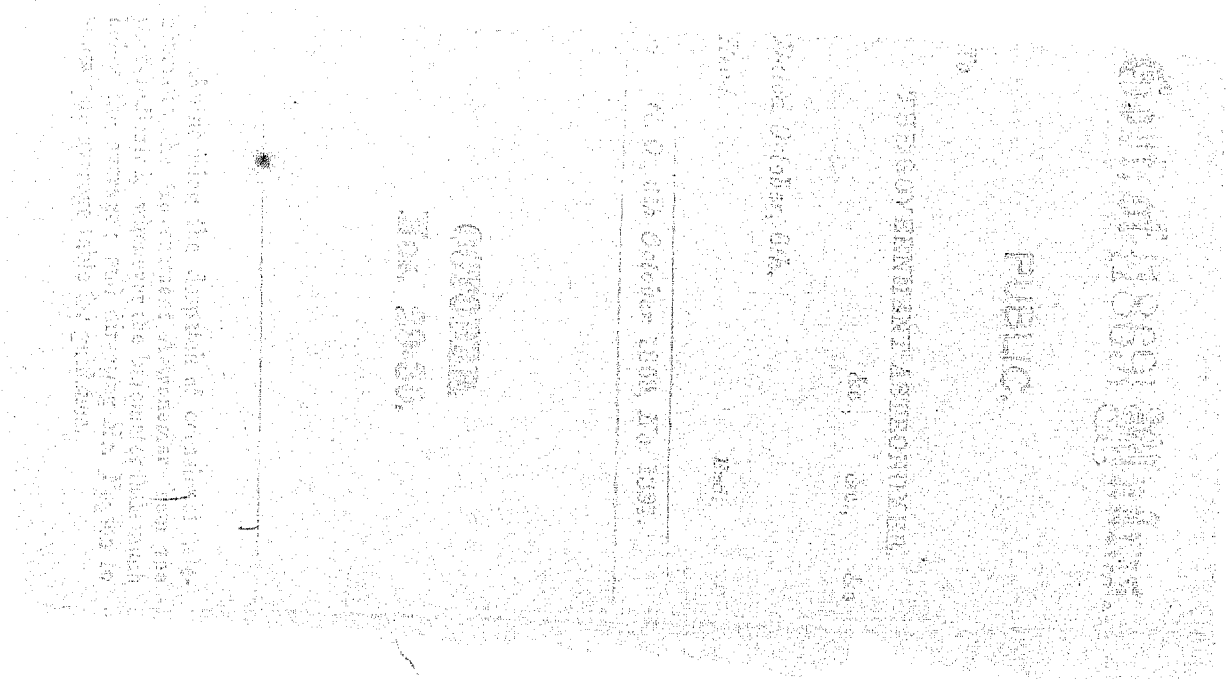
The foregoing letter will
be found in the Station table

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W.H.

A.D.



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reference to that order.

AAA.

The Asst. Astronomer
Insp. of Telegraphs, Madras Division
Asst. General

Madras Observatory, October 14th 1867.

From

N. R. Poyson, Esq.,

Government Astronomer & Meteorological Superintendent.

My dear Mr. Dalrymple,

I enclose you a sample sheet of
the principal meteorological readings telegraphed daily
to Calcutta by order of the Supreme Government.
This I look upon as great waste of time and
money, as it is only of the slightest use or interest
in successive times when storms are probable.

I would ^{now} only ask for barometer reading, temperature,
and Wind Direction, when the barometer was
below average, agreeably to a Table for general
use which I will try to submit to Government
before the 15th.

My little budget allowance cannot stand
the fall of daily telegrams most assuredly.
They would be desirable, but even less will do.
At present I have no authority, even out of my
budget, to incur telegraphic charges, but of
Government will not give me the daily messages.

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free - permission to allow my Observers to send
messages, to be paid for out of the Meteorological
Superintendent's contingent allowances, will answer
the purpose this year, and some better arrangement
may await future consideration when cash is less tight.

I have Observers working at Trichinopoly, Nagapattam,
and Maachipattam; and Vizagapatam is one of the
remaining six stations to be set going, and one which
I hope to have in full play before the year is out.
Meanwhile Dr. Adams would send me barometer readings.

The Madras gun line and the telegraph lines
to the Fort and Station are by far the most
important. - Correct chronometer time is a power
of safety in a good Captain's hands. Of course
there are many other dangers on the sea than
error of longitude, but it is a great one, and
whatever enables a man to secure correct Time
and Daily Rate of his Chronometer enables him to
steer in the right direction if he can and will! -

I quite forgot my Budget Estimates for 70-71
and have been very busy preparing them to day. -

Kindly excuse the delay, but with so much
distressing illness about and overcast it is

not very surprising that they should have
 escaped recollection. In great haste
 Believe me, my dear Sir,
 Most sincerely yours
 W. R. Piggott

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Meteorological Telegraphic Report for the period 30th May to 5th June 1869.

STATIONS.	May.	Hour.	Barometer reduced to 32°.	THERMOMETER.		Humidity Sat. = 100.	WIND.		Rain.	Weather initials.	Cloud.
				Dry.	Wet.		Direction.	Velocity			
			Inches.	°	°			Miles.	Inches.		
CALCUTTA.	30th	10	29.621	90.5	85.5	80	S by W	...	0.21	...	Seeds from S by W
	1st	10	29.518	94	85	67	S	...	...	...	Seeds from S
	1st	16	29.670	91.5	82.5	66	S by E	...	...	...	Seeds from S by E
	1st	16	29.582	94	83	61	S	...	...	...	K
	2nd	10	29.731	91	83	70	S	...	...	...	K
	2nd	16	29.602	95	82.5	56	S S E	...	...	...	K
	2nd	16	29.714	93.5	83	62	S S E	...	...	...	K
	3rd	10	29.584	94	84	64	S	...	...	...	K
	3rd	16	29.627	91	83	69	S	...	...	...	K
	4th	10	29.499	94.5	82	69	S by W	...	...	...	K
SALUGOR ISLAND.	4th	16	29.618	91	83	70	S by E	...	...	...	K
	5th	10	29.506	96	83.5	57	S	...	...	...	K
	5th	16	29.005	92.5	82	62	S by E	...	...	...	K
	5th	16	29.501	98	83	51	S E	...	...	...	K & Seeds from S by E
	30th	10	29.040	90	86	84	W S W	21.8*	1.19	...	N
	31st	10	29.570	89	85	84	S S W	16.3*	...	...	K
	31st	16	29.720	89	85	84	S S W	18.3*	...	...	K
	31st	16	29.598	90	85	80	S S W	20.5*	...	...	K
	1st	10	29.748	89	85	84	S S W	13.6*	...	...	K
	1st	16	29.654	91	85	77	S	13.5*	...	...	K, S
CHITTAGONG.	2nd	10	29.716	90	86	84	S	11.1*	...	...	K, S
	2nd	16	29.639	91	85	77	S	16.5*	...	...	CK, S
	3rd	10	29.630	90	85	80	S W	16.0*	...	...	CK, S
	3rd	16	29.645	91	85	77	S S E	14.8*	...	...	CK, S
	4th	10	29.646	91	84	73	S S W	12.1*	...	...	CK, S
	4th	16	29.551	91	84	73	S	16.5*	...	...	CK, S
	5th	10	29.643	91	85	77	S	11.6*	...	...	CK, S
	5th	16	29.538	93	86	74	S S E	19.1*	...	...	CK, S
	May 30th	10	29.602	87	83	79	S W	8.6*	...	...	K, CK
	31st	10	29.510	89	84	80	S W	13.8*	...	...	K
CUTTACK.	31st	16	29.642	88	84	83	S	5.9*	...	...	K
	June 1st	10	29.527	90	84	76	S W	10.5*	...	...	K
	1st	16	29.672	88	82	76	S	5.8*	...	...	K CK
	2nd	10	29.550	89	82	73	S W	11.0*	...	...	K
	2nd	16	29.655	87	82	79	S	5.4*	...	...	K
	3rd	10	29.545	87	82	79	S W	12.3*	...	...	K, K S
	3rd	16	29.575	87	81	76	S	4.7*	...	...	K
	4th	10	29.499	89	83	76	W	16.2*	...	...	K
	4th	16	29.552	88	82	76	S	5.5*	...	...	K
	5th	10	29.457	90	83	73	W	14.2*	...	...	K, C S, K S
MADRAS.	5th	16	29.502	88	82	76	S	5.7*	...	...	K
	5th	16	29.483	88	83	80	S	10.0*	...	...	K S
	May 30th	10	29.446	101	85	49	S	1	...	...	K S, C S
	30th	16	29.566	98	84	54	S E	1	...	...	K S, C S
	31st	10	29.516	99	84	51	S E	1	...	...	C S
	31st	16	29.629	96	86	65	S	1	...	...	CK C S
	June 1st	10	29.561	98	85	56	S by W	1	...	...	CK, C S
	1st	16	29.651	95	81	61	S	1	...	...	CK, C S
	2nd	10	29.504	96	83	56	S by E	1	...	...	CK, C S
	2nd	16	29.634	93	82	60	S E	1	...	...	CK, K S
AKUL.	3rd	10	29.526	96	81	59	S E	1	...	...	CK, K S
	3rd	16	29.584	93	83	64	S by E	1	...	...	CK, K S
	4th	10	29.454	96	82	53	S E	1	...	...	CK, K S, C S
	4th	16	29.561	95	83	54	E by S	1	...	...	CK
	5th	10	29.431	93	84	51	S E	1	...	...	C S
	5th	16	29.579	96	81	59	S by E	1	...	...	S, CK
	May 30th	10	29.615	88	80	69	S S E	17*	...	...	K, K S
	30th	16	29.709	96	80	43	N	6*	...	...	K
	31st	10	29.571	91	80	62	S E	11*	...	...	K
	31st	16	29.666	100	80	39	W	18*	...	...	K, K S
MADRAS.	June 1st	10	29.553	94	80	52	S S E	15*	...	...	K, K S
	1st	16	29.681	97	74	39	N W	12*	...	...	K, K, C, CK
	2nd	10	29.630	89	80	66	E by S	8*	...	...	C, C S, S, N
	2nd	16	29.740	86	76	61	N W	8*	...	...	C
	3rd	10	29.618	89	78	68	S E	16*	...	...	C
	3rd	16	29.692	95	76	38	W by N	20*	...	...	C, CK, K S
	4th	10	29.521	94	81	55	E	8*	...	...	K
	4th	16	29.694	91	76	47	W S W	15*	...	...	K
	5th	10	29.614	93	77	41	W by S	16*	...	...	K
	5th	16	29.704	94	79	49	W S W	11*	...	...	C, K
AKUL.	May 30th	10	29.712	89	82	73	S W	1	...	...	K, K S
	30th	16	29.617	89	82	72	S S W	1	...	...	K
	31st	10	29.747	85	81	83	S W	1	...	...	K
	31st	16	29.655	88	82	76	S S W	2	...	...	K, K S
	June 1st	10	29.639	88	81	72	S E	2	...	...	K, K, C, CK
	1st	16	29.672	88	80	69	S S W	2	...	...	C, C S, S, N
	2nd	10	29.796	79	76	86	S E	...	5.32	...	C
	2nd	16	29.796	85	80	76	S E	...	...	...	C
	3rd	10	29.673	83	79	83	S S E	1	...	...	C, CK, K S
	3rd	16	29.577	86	80	75	S W	2	...	...	K
AKUL.	4th	10	29.667	86	80	75	S E	1	6.20	...	K
	4th	16	29.652	88	81	72	S W	1	...	...	C, K

Recd with love
Feb 9 1869

File 2264-
File 2834-

10/4/2

Govt. of Madras.

Public

To
The Govt. Astronomer
- &c.

Order Oct. 6.

Recd.

10/3

N. O. 6 Oct 1869, No 1387

Nos. 29-30.

~~711~~ 2334-
2264

Authorizing the dispatch of
occasional telegrams to the
Govt. Astronomer from the
Port indicated whenever the
barometer falls much below
the average, and directing
Mr. Poisson to submit an
average table for guidance.