

PROCEEDINGS
OF
THE ROYAL SOCIETY.

1842.

No. 52.

February 3, 1842.

SIR JOHN WILLIAM LUBBOCK, Bart., V.P. and Treas.,
in the Chair.

The following papers were read, viz.—

1. "Abstracts of the Magnetic Term-day Observations for June, July, August, and September 1841," from the Honourable East India Company's Magnetic Observatory at Singapore.

2. "Graphical representations of the Term-day Observations from April to September inclusive, 1841," from the same Observatory.

3. "Abstracts of the Daily Magnetic and Meteorological Observations for September 1841," made at the Honourable East India Company's Magnetic Observatory at Madras.

4. "Abstracts of the Daily Magnetic and Meteorological Observations for September 1841," made at the Honourable East India Company's Magnetic Observatory at Simla.

The above were presented by the Honourable Court of Directors of the East India Company. Communicated by the Council of the Royal Society.

5. "Variations de la déclinaison et intensité horizontale magnétique observée à Milan, pendant 24 heures de suite, le 22 et 23 Décembre 1841, et le 19 et 21 Janvier 1842." Par Signor F. Carlini, For. Memb. R.S.

6. "A Meteorological Journal for 1841, kept at Allenheads, Northumberland, 1400 feet above the level of the sea, with an Appendix." By the Rev. W. Walton, M.A., F.R.S.

7. "Description of an Observatory constructed at Ardwick, and specification of the work performed in its erection." By John Jesse, Esq., at Ardwick. Communicated by Philip Hardwick, Esq., F.R.S.

8. "On the Steam-wave." By the Rev. Thomas Boys. Communicated by Charles Babbage, Esq., F.R.S.

The term *steam-wave* is employed by the author to denote that peculiar kind of wave which is generated during the motion of steam vessels on the water; and which he shows results from the combination of two separate sets of waves; namely, those occasioned simply by the progressive advance of the vessel, and which consequently recede from it on each side, nearly at right angles to its course; and those arising from the impulses given to the water by the action of the paddles, and proceeding in the same direction as the vessel itself. He ascribes to the cumulative force acquired by these waves at the parts where they cross one another, the extraordinary violence of effect with which they strike against all obstacles opposed to their progress, and which renders them so formidable to boats and other small vessels exposed to the encounter.

The Vice-President in the Chair stated, that he was directed by the Council to call the attention of the Members present, and through them of any philosophical inquirer who might at present be engaged in the prosecution of experimental research, to the existence of a fund at the disposal of the President and Council of the Society, denominated the *Donation Fund*, of which the dividends are to be applied, "from time to time, in promoting Experimental Researches, or in rewarding those by whom such researches may have been made, or in such other manner as shall appear to the President and Council for the time being most conducive to the interests of the Society in particular, or of science in general;" their application to extend to individuals of every country not being at the time Members of the Council;" and such dividends not to be hoarded parsimoniously, but be "expended liberally, and, as nearly as may be, annually, in furtherance of the declared objects of the Trust."

The fund was instituted by the late Dr. Wollaston, who contributed £2000 three per cent. Consols, and it received the following additions:—from the late Mr. Davies Gilbert, £1000 three per cent. Consols; from Mr. Warburton, £105; from Mr. Charles Hatchett, £105; from Mr. Guillemard, £100; and from the late Sir Francis Chantrey, £105.

The Vice-President in the Chair farther stated, that the dividends in the present year would amount to £140 16s. 6d.

Mr. W. Archibald Armstrong White, F.R.S., present at this meeting, gave £16 to the Donation Fund.

February 10, 1842.

LIEUT.-COLONEL WM. HENRY SYKES, V.P., in the Chair.

Thomas Glanville Taylor, Esq., was balloted for, and duly elected into the Society.