

Abstracts of the Weather for June, July, August and September 1841; as also the Determination of the Temperature at Singapore.

Tide Reports for April, May and June 1841.

3. From the Magnetic Observatory at Simla :—

Abstracts of Magnetic and Meteorological Observations for November and December 1841.

Magnetic Observations for February, May, October and December 1841, with Curves for the same period.

April 28, 1842.

FRANCIS BAILY, Esq., V.P., in the Chair.

A paper, entitled, "On the Organic Tissues in the bony structure of the Corallidæ." By J. S. Bowerbank, Esq., F.G.S., communicated by Thomas Bell, Esq. F.R.S., was resumed and concluded.

The author submitted small portions of nearly seventy species of bony corals to the action of diluted nitric acid, and thus obtained their animal tissue, freed from calcareous matter, and floating on the surface of the fluid in the form of a delicate flocculent mass. By the aid of the microscope, this mass was found to be pervaded by a complex reticulated vascular tissue, presenting numerous ramifications and anastomoses, with lateral branches terminating in closed extremities. There were also found, interspersed among these, another set of tubes, of larger diameter than the former, and provided, in many places, with valves; the branches from these larger vessels occasionally terminate in ovoid bodies, having the appearance of gemmules or incipient polypes. In other cases, masses of still larger size, of a more spherical shape, and of a brown colour, were observed attached to the membrane, and connected with each other by a beautiful network of moniliform fibres. Numerous siliceous spicula, pointed at both extremities and exceedingly minute, were discovered in the membranous structure of several corals; and also other spicula of larger size, terminated at one extremity in a point, and at the other in a spherical head; a form bearing a striking resemblance to that of a common brass pin.

Besides these spicula, the author noticed in these membranous tissues a vast number of minute bodies, which he regards as identical with the nuclei of Mr. Robert Brown, or the cytoblasts of Schleiden.

A paper was also in part read, entitled, "Sixth Letter on Voltaic Combinations," addressed to Michael Faraday, Esq., D.C.L., F.R.S., &c. By John F. Daniell, Esq., For. Sec. R.S., Professor of Chemistry in King's College, London, &c.