

course. That regarding "microscopists" and spontaneous germ-formation is especially deserved and well laid on. This race of pseudo-experimenters, who do not know the simplest necessities of accurate experiment, but who by mere assertion endeavour to bear down genuine scientific men, is really the class which does mischief alike to science and to the cause of religion. Dr. Tyndall is certainly not fairly censured by the so-called "religious" press, but does it ever deal either praise or censure fairly? His remarks on the Materialists at the end of the Address are quite conclusive as to the absurdity and injustice of calling him by that name. There is a verse in Scripture that would suit the case exactly, but we leave the problem as a puzzle to the Editor of the *Record*.

The Student's Manual of Comparative Anatomy and Guide to Dissection. By G. Herbert Morrell, M.A., B.C.L. (Oxford: Shrimpton.)

WE have received the only part as yet published of this treatise, viz., that relating to the Birds. Mr. Morrell gives with great care, in a tabular form when possible, a condensation of all the information to be obtained in such works as Huxley's "Lectures on the Skull," and "Classification of Birds," Wagner's, Siebold's and other manuals, and the "Cyclopædia of Anatomy and Physiology," supplementing this by extracts from his own notes of dissections in the anatomical laboratories of the Oxford University Museum, and of Professor Rolleston's lectures given there. It is proposed to issue an atlas of woodcuts borrowed from various works to illustrate the letterpress. The book will be found very convenient by students at Oxford and elsewhere, who are carefully studying the comparative anatomy of the Vertebrata. We must decidedly object, however, to the omission of one group of organs *entirely*—the reproductive. It is a concession to a strange prejudice, and really renders a good work incomplete.

E. R. L.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his Correspondents. No notice is taken of anonymous communications.]

The Eclipse Expedition

I WRITE you a brief account of the doings of the English Eclipse Expedition up to the present time, thinking it may be interesting to your readers.

After leaving London we proceeded direct to Naples, staying on the road only a few hours at Cologne, half a day at Verona, and a day at Rome. Everywhere on the journey the most marked kindness was shown to the Expedition as the representatives of English Science. From Ostend to Verona we never changed carriages, and there only on account of a slight breakage in the carriage itself. Never once were we asked for passports, never once were our instrument cases overhauled, or anything beyond mere personal baggage, at the custom houses. At Naples we stayed a day, which was occupied in taking the lids off all the cases, repairing one or two slight accidents which had befallen the instruments, and making plans for our distribution in Sicily.

At four o'clock in the afternoon of Wednesday, the 13th, we were all on board the *Psyche*, a despatch boat which had been lent by the Government to convey ourselves and instruments to Sicily. A delicious sunny afternoon, a sea as smooth as molten glass, a ship's company receiving us with the utmost kindness and hospitality, how could the evening not pass as merry as a marriage bell? I cannot retail to you all the jokes which passed, the lively chats and quiet strolls by moonlight, the polariscopes and spectroscopes pointed to the sea and sky, ere long destined to address their momentous questions to the Sun himself, now having their merits and demerits freely discussed by the *savants*; but you can imagine it all. At last we turned in to enjoy that repose which sea air always induces in landsmen.

At about six we were all called and told we were approaching the Straits of Messina, the very Scylla and Charybdis of our

classical lore. In moonlight, soft, cool, and delicious, we beheld those rocks of Scylla and steered through Charybdis, though we felt it not, and so onwards in the rising sun through the Straits. After breakfast we held our (as we then thought) final council only about an hour before we were to separate for our various Sicilian stations. Scarcely had the council broken up, when the sad event occurred which was destined to alter all our plans. We were steaming along about ten miles north of Catania, the gigantic cone of Etna, capped with snow, appearing to rise from the cliffs of lava under which we were passing, when the ship struck on a treacherous sunken rock, shown in none of the charts. I cannot pass over this sad catastrophe without referring to the noble behaviour of our gallant commander, Lieut. Fellowes, to whose coolness and energy we owe the safe disposal of ourselves, instruments, and baggage at Catania, without any serious loss. Mr. Lockyer, at the request of the captain, immediately telegraphed to Malta, whence the *Royal Oak* came to the aid of the *Psyche*. More lately the admiral of the Mediterranean fleet (Sir Hastings Yelverton) has arrived in the *Lord Warden*, and anchored beside her, and I am glad to be able to say that if the present calm weather continues there is every prospect that the ship may be saved.

For this expedition it was found necessary to make Catania the head quarters instead of Syracuse, as had been originally intended, as there would inevitably have been too great delay in removing the heavier instruments to Syracuse to carry out the original plan. Since our arrival, we have received all possible help from our own and the Italian Governments. From the latter we obtained the use of the garden of the Benedictine monastery, where we are working, as well as guards at some of our stations. Both here and elsewhere the American and Italian observers join heartily with us, and to their co-operation we owe much.

The arrangement of the English parties are now as follows. At Catania we are strong in the spectroscope. Mr. Lockyer and Mrs. Lockyer are working with a large reflecting mirror fitted with a single prism, but with special adaptation for giving plentiful illumination, as well as for placing the hydrogen spectrum side by side with the spectrum obtained from the corona. Mr. Seabrokes has a large refractor fitted with a spectroscope of six prisms for examining the chromosphere. Mr. Pedler works with a small direct-vision instrument. Prof. Thorpe has mounted his apparatus on the top of a portico in the garden, and has been engaged the last few days in making out daily curves of the chemical intensity. To Mr. Vignolles, sen., and Mr. Vignolles, jun., and myself are committed the time and general observations. In addition to the above, we hope to have the assistance of several of the officers from ships in the neighbourhood, who will make sketches of the appearances, and help the observers in various ways.

Our next detachment, under the charge of Prof. Roscoe, has left us, intending to find a stage of observation as high as possible on Etna. It is confidently expected that, by leaving some seven or eight thousand feet of the densest atmosphere behind, delicate but important observations may be made which would be impossible at a lower level. This party is piloted by Prof. Sylvestre, of the University of Catania, who, in common with all the authorities here, has shown the utmost courtesy toward the Expedition. The spectroscope observations will be conducted by Prof. Roscoe, with the assistance of Mr. Bowen; the polariscope is under the charge of Mr. Harris; photographic arrangements under Dr. Vogel; while Mr. Darwin will sketch the appearances presented.

At Agosta we are strongest in the polariscope, this instrument requiring the longest possible duration of totality. The party is under the charge of Prof. Adams (of King's College, London), who, in the polariscope, is assisted by Messrs. Ranyard and Clifford. The only spectroscopist stationed here is Mr. Burton, and the sketcher, Mr. Brett. This party have been living under canvas for the last few days, and, I need hardly add, received the utmost kindness from a military detachment stationed there with them.

At Syracuse we are only represented by one photographer, Mr. Brothers, assisted by Mr. Fryer and by Mr. Griffith, who will take observations with his polarimeter.

The authorities at Malta sent us here two sappers, thanks to whose exertions our observations have been erected with great rapidity, enabling us to station our instruments and make preliminary trials in the very positions they will occupy during the Eclipse. Since our arrival these preliminaries have kept us all