

nida, and Myriopoda—as, to speak the truth, was even more than likely—we have a neat little account of them given here. We have written enough to indicate what a freshly-written and interesting though condensed article this is, though on a well-worn theme, and we must be pardoned for so briefly touching on the burning question of classification.

#### OUR BOOK SHELF

*The Year-Book of Pharmacy, and Transactions of the Pharmaceutical Conference.* 8vo. Pp. 560. (London: Churchill, 1881.)

THIS year-book is divided into several parts—an introduction, which gives a short account of all that has been done in the year, a section in chemistry, another on materia medica and pharmacy, one on notes and formulæ, another on bibliography, and lastly, the transactions of the British Pharmaceutical Conference at York. A number of short abstracts of interesting papers are included in the work. The excitement caused by the recent case of poisoning by aconitine is likely to make the reader turn first to the papers on this alkaloid. Dr. Wright has furnished his researches on the alkaloids of aconite, the chief being aconitine, which is the active principle of the ordinary monkshood, and the pseud-aconitine, which is the still more deadly alkaloid of the *aconitum ferox*. Powerful as those poisons are, one much more powerful has been obtained by Dr. Langgaard from a species of Japanese aconite. Another paper, of much interest from a forensic point of view, is one on ptomaines, or alkaloidal bodies found in human corpses after exhumation. These are actual poisons, formed in the body by putrefaction, and bearing considerable resemblance, both in their chemical reactions and poisonous effects upon animals, to natural vegetable alkaloids. This subject is one of very great importance, as the condemnation of perfectly innocent persons might result from one of these ptomaines being mistaken for a vegetable poison. There are a number of other researches on the active principles of various plants, remedial and poisonous, but all these yield in interest to those on the synthesis of similar bodies, for the great object of medicine is to cure, not by chance, but with certainty, and towards this object all branches of medical science are as present tending. It was formerly the reproach of medicine that doctors poured drugs of which they knew little into bodies of which they knew less; but now, thanks to experiments made upon animals, instead of upon patients, they now know a good deal both of the bodies they have to treat and the remedies which they are using. Hitherto, however, they have been compelled to use many powerful substances derived from plants, but varying more or less in their constitutional actions. Numbers of these substances have now been examined, and it is probable that before long we shall make them artificially. Prof. Ladenburg has now obtained atropine and hyoscyamine from the nightshade, thorn-apple, henbane, and Duboisia, and has lately got a third principle, hyoscine, from henbane. By decomposing atropine he has obtained tropic acid and tropine, and by recombining these products he again formed atropine. In conjunction with L. Rügheimer, he has now succeeded in making tropic acid synthetically from aceto-phenone, and we now await the synthesis of tropine in order to complete the method of preparing atropine artificially. M. Grimaux has succeeded in converting morphia into codia, another of the alkaloids of opium; and such researches as these, taken in connection with the rapid advance of our knowledge regarding the physiological action of these substances, leads us to hope that the day may not be so far distant when a medical man, wishing to produce a certain effect upon his patient, will no longer have to

search haphazard amongst various plants, but will direct the chemist to make the particular body which he requires. We may mention still another paper, less interesting to medical men, but more so to the public at large. Prof. Baeyer succeeded, some years ago, in preparing indigo artificially, but the process was so expensive that it was not likely to be of much practical importance. He has now, however, succeeded in effecting the synthesis in another way, by which he can not only produce the indigo much more cheaply, but can produce it within the fibre of the material to be dyed. The artificial production of alizarin has already wrought a great change in the commercial relations of the South of France, and if indigo be produced synthetically at a lower price than it can be grown, similar alterations may result in some parts of our Indian Empire.

*The New Ceylon.* Being a sketch of British North Borneo, or Sabah. From official and other sources of information. Written and compiled by Joseph Hatton. (London: Chapman and Hall, 1881.)

IT was hardly to be expected that the new British possession in North Borneo, to which the Queen has recently granted a charter, should long remain without its chronicler. Information at first hand respecting the country is very scarce, but, in the absence of this, Mr. Joseph Hatton in his little volume furnishes us with all that we can expect for the present. The materials placed at his disposal consisted of certain private letters and reports from explorers and the correspondence of the directors of the North Borneo Company. In addition to these he has made use of all that has already been written on Borneo, and the result—"a pioneer volume," he modestly calls it—is such as might have been expected from Mr. Hatton's well-known literary skill. The value of the new colony to science is rather potential than actual. In Labuan and Sarawak we have only touched the fringes of this vast island; we know but little of its mineral wealth and other natural resources; its geography, geology, fauna, and flora, have never been thoroughly studied. Even Mr. Carl Bock, in the journey described in his recent volume, only crossed a small corner of Borneo. With a settled government, under the British flag, we may expect a great increase in our knowledge of one of the largest and most interesting islands in the world. Mr. Hatton could, had he chosen, have added an interesting account of the early trade of the East India Company to Bandjermassin and other ports in Borneo from the Calendar of State Papers, Colonial Series, edited by Mr. Sainsbury.

#### LETTERS TO THE EDITOR

- [The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]
- [The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to ensure the appearance even of communications containing interesting and novel facts.]

#### Earth-Currents

THE Astronomer Royal desires me to mention, in regard to Mr. W. H. Preece's communication (p. 289) describing an unusually sudden appearance of earth-currents between 10h. and 11h. p.m. on January 19, that our magnetic and earth-current registers both show, throughout the night of January 19, more or less of unusual disturbance, never however very considerable. The greatest deviation occurred in a sudden wave at 10h. 15m., as Mr. Preece describes. From 10h. 50m. until midnight there was general quiet, and the disturbance afterwards was not great.

WILLIAM ELLIS

Royal Observatory, Greenwich, S.E., January 28