

admitted that this conclusion needs confirmation from future discoveries before it can be definitely accepted. The specimens on which the new genera *Coryphænopsis* and *Bayeria* (Fritsch) are founded are certainly remarkable.

Dr. Fritsch's section of the work shows that all the usual groups of Cretaceous Reptilia are represented in the Bohemian rocks. There are undoubted fragments of Plesiosaurs, and there is one interesting brain-cast which the author describes as probably referable to *Polyptychodon*. Dr. Fritsch, however, overlooks the fact that the skull of *Polyptychodon* is actually known in England, and is undoubtedly Plesiosaurian or Pliosaurian, not Mosasaurian. Chelonian remains occur, evidently representing turtles related to the small *Chelone Benstedii* from the English Chalk. Some fragments appear to be Mosasaurian, but those described under the new name of *Iserosaurus litoralis* are extremely problematical. Other fragments, ascribed without much reason to Dinosauria, scarcely suffice to justify the new names bestowed on them. Some good new figures of the interesting wing-bones of the small Pterodactyl, *Ornithocheirus hlavaci*, are given, and the volume concludes with a systematic list of species.

A. S. W.

Die Bedeutung des Experimentes für den Unterricht in der Chemie. By Dr. Max Wehner. Pp. 62. (Leipzig and Berlin: B. G. Teubner, 1905.) Price 1.40 marks.

This brochure forms part of a "Sammlung naturwissenschaftlich-pädagogischer Abhandlungen," and is very hard reading for an ordinary English chemist. It is divided into two parts, the first of which deals with the importance of experiment for attaining the object of chemical instruction, and the second with the importance of experiment in relation to method in chemical instruction. It is hard reading in the sense that one has to wade through detailed arguments which culminate in conclusions such as "description does not suffice for the instruction of the pupil in chemical processes," and "the development of the laws concerning chemical processes from experimental observations is more effective for chemical teaching than their deduction from quoted examples." The work is, in fact, an example of pure pedagogical exercitation, and it may be recommended with confidence only to those who have a liking for that kind of literature.

A. S.

Monographie des Cynipides d'Europe et d'Algérie. By l'Abbé J. J. Kieffer. Tome second. 2me. fascicule. Pp. 289-748; plates ix-xxi. (Paris: A. Hermann.) Price 18s.

This is the conclusion of vol. vii. *bis* of André's great series of monographs, "Spécies des Hyménoptères," and completes the Cynipides, or gall flies. The previous portions have already been noticed in NATURE (vol. lxvii. pp. 124-5, December 11, 1902, and vol. lxxviii. p. 221, July 9, 1903), and the part now published completes the Cynipides, 5e tribu, Figitinæ; and also includes the Evaniides (divided into two tribes, Evaniinæ and Gasteruptioninæ), the Stephanides, Trigonalides, Agriotypides, general supplements, a "Catalogue méthodique et synonymique," extending from pp. 653 to 741 (double columns), and general indices.

The plan of the work is uniform throughout, and as the previous portions have already been discussed at considerable length, an extended notice is here unnecessary.

W. F. K.

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The Gum-Bichromate Process. By J. Cruwys Richards. Pp. 119. (London: Iliffe and Sons, Ltd., n.d.) Price 2s. 6d. net.

This process of photographic printing is about fifty years old, but it is only during the last ten years or so that it has been adopted for practical purposes. When first introduced it was deliberately rejected, because it was not equal to the then known processes in reproducing the detail of the negative; latterly it has been taken up and very much appreciated by some of those who desire to be able to alter or "control" their photographic printing, and so obtain results that, while they can lay no claim to mechanical accuracy, more nearly please the æsthetic taste of the worker. At the present time there are more methods of photographic printing than there were a generation ago that are excellently adapted for the purposes of photography pure and simple; therefore the gum-bichromate process is still more than it was then a process for the specialist in the direction named. The author of this volume is well known as a successful worker of the method. He gives his own formulæ, and states clearly the practical details that he prefers to follow, but he also describes the methods of others. He is a warm advocate of "multiple printing"; that is, after coating the paper, exposing, developing with warm water aided with a brush or by other mechanical means, coating, exposing, and developing a second or even a third or more times, so gradually building up the picture with the maximum opportunity of "control." It will be obvious that every possibility of improvement in the hands of the skilful is a probability of error in the hands of the artistically ignorant, and that the process does not claim attention from a photographic point of view at all, but as enabling an artist to express his ideas with less trouble and perhaps with more accurate drawing than if he worked wholly by hand. The volume includes several reproductions of the author's works, some of them showing the print in its various stages of evolution.

LETTERS TO THE EDITOR.

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Recent Changes in Vesuvius.

I BEG to enclose a somewhat free translation of a letter I have recently received from Prof. G. Mercalli, of Naples, concerning certain changes which have taken place in Vesuvius this year. During a visit to the mountain on August 14-16, I was able to approach quite near to the sources of the lava streams described by him, and also to examine the remarkable tunnels formed at certain places by the cooled surface of lava streams which had subsequently diminished in volume, or had even "run dry."

During the week preceding my visit, many incandescent bombs of pasty rock had been ejected from the crater at the summit, mostly in the direction of the side facing Pompeii, and these successively rolling down the ash-slope presented a beautiful spectacle at times. The lava streams proper often presented that curious double appearance, due to the fact that the colder and darker scoriæ, floating down the stream, keep to the more swiftly-moving current in mid-stream, and avoid the sides.

Yesternight (August 20) but one of the lava streams referred to by Prof. Mercalli was visible from Naples, the other having apparently ceased.

The explosions of Stromboli are occurring at intervals of about 3½ minutes.

R. T. GÜNTHER.

R.M.S. *Oroya*, off Stromboli, August 21.