in French millimetres, and not in parts of German inches, which require reduction.

As the asci vary much in length, only the thickness is given, though, under certain circumstances, as in Sphæriæ, it is often quite as variable as the length. In one or two instances we should have been glad to see more critical remarks, as, for example, under Peziza venosa, where the larger figure so exactly accords with that of Fries in the "Atliga och giftiga Svampar" of Discina perlata, that we should have been glad to have heard whether there is any real distinction between the two. As we used to find it every spring in our younger days, it was more like the figure of Greville's Peziza reticulata, than that before us. Something again might have been said respecting the resemblance of our author's very curious Peziza corium, to the North American Peziza craterium. with which it has evidently a close affinity. There is, we think, no doubt that the Verpa digitaliformis of England is the same with that figured by Herr Weberbauer. We shall be truly glad to find that this beautiful work meets with such success as to ensure its continuance.

It is quite curious to observe how an interest in fungi has rapidly increased in this country. The late Fungus Show at South Kensington was so well attended that the Council offer for next year a very ample list of figures. and as especial prizes are to be given for collections of novelties, or for cultivated species, the meeting will be one of much importance. Even in Scotland, where a short time since fungi were looked on as "abominations," there is a very active movement in their favour, especially amongst the clergy, who have made some very interesting additions to our Mycology, and a fungus-show is projected next autumn at Aberdeen. In England, where some of the older students are passing away, it is a great pleasure to know that the subject is taken up by such strictly scientific observers as Mr. Plowwright, Mr. Renny, and Mr. Phillips, not to mention many other names of M. J. BERKELEY great promise.

## OUR BOOK SHELF

Beeton's Science, Art, and Literature. A Dictionary of Universal Information; comprising a complete Summary of the Moral, Mathematical, Physical, and Natural Sciences; a Plain Description of the Arts; an Interesting Synopsis of Literary Knowledge; with the Pronunciation and Etymology of every leading term. Containing nineteen hundred and eighty Columns, and upwards of six hundred Engravings. 2 vols. (London: Ward, Lock, and Tyler. No date.)

This book does not pretend to be, and very evidently is not, more than a compilation from other cyclopædias, and from works on the various subjects of which it treats. So far as we have examined it, most of the information contained in it is derived from the former source, and it is impossible that any thoroughly trustworthy reference-book can be compiled in this manner, especially if the compiler or compilers have no special knowledge of the subjects with which they deal. The work pretends to give only a summary of facts, but in many of the articles much space is wasted by comment and reflection. There is absolutely no article on the Spectroscope, which is referred to Spectrum, an article without any illustrative cut, occupying one-third of a column, that might have been written twenty years ago. Why is there no article Evolution? and why, under Development, is the greater

part of the short article occupied with the "Vestiges of Creation," and no reference whatever made to the state of the doctrine in Germany and America? Under the very specific heading Crannoges the general subject of Lake-dwellings is discussed, the writer evidently not being aware of the important distinction between the Crannoges of Ireland and the Lake-dwellings of Switzerland. very poorly-executed copy of Keller's restoration of a Swiss lake-dwelling is the illustration to the article Crannoges. We say again no work of this kind can be regarded as a standard reference-book unless the editor has at his command a band of master specialists. The illustrations, as a rule, are inferior, and many of them seem well worn; many, moreover, are totally useless, such as those put beside the article *Drawing* and similar articles, which seem to be inserted simply to make the book take with a certain class. We think there is still room for a comprehensive reference dictionary containing information on all subjects compactly put together, No one at the present day, when there are such multi-tudes of special treatises in every department of human knowledge, would ever think of resorting to an encyclopædia to study a subject; and thousands, we believe, would be thankful for an all-comprehensive referencebook which should present in the briefest possible space the leading and latest facts under each heading free of all comment and speculation. Such a work might be as comprehensive as the "English Cyclopædia," or the "Encyclopædia Britannica," perhaps more so, and yet not exceed in bulk of matter the work at the head of this notice. All the scientific articles in such a work, however, and many others besides, could only be written satisfactorily on such a plan by men of special knowledge in each department; such men alone can judge what is of primary and what is of secondary importance.

Scientific Handicraft; A Descriptive, Illustrated, and Priced Catalogue of Apparatus. Vol. I. Mechanics, Hydrostatics, Hydrodynamics, and Pneumatics. By J. J. Griffin. F.C.S. Pp. 186. (London, 1873).

This is a useful Catalogue of Apparatus, which contains an account of the method of using the principal pieces of apparatus which are described. There are also suggestions for keeping instruments in good order. It will be found useful by those who select apparatus for purposes of school teaching or public lecturing; and Mr. Griffin has done good service by endeavouring to introduce as many new forms of apparatus, or modifications of old forms, from Germany and France, as he could obtain knowledge of.

## 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 Shrinking of the Earth and Terrestrial Magnetism

SINCE writing my previous letter (vol. ix. p. 141) I have received a note from Mr. Darwin, who says that in his work on "Coral Reefs," he arrived at the conclusion that volcanoes are not found in areas of subsidence. As I have succeeded, I think, in eliminating them from areas of upheaval, it may be that they occupy the boundary line of the oscillating land, and are stationed on or near the fissures and joints along which the earth's crust has given way. At all events, I invite a careful examination of those areas which we know to be rising, such as the northern circumpolar region, Australia, &c., in the firm conviction that volcanoes will not be found on any of them.

On another point I am very glad to say Mr. Darwin agrees with me, and I am therefore supported by his great authority. He tells me that in his work on "Volcanic Islands" he arrived at the conclusion that the great continents are rising, and the ocean beds sinking. This, of course, is only an hypothesis, and will remain so until the world has been carefully surveyed, but the large number of facts I have collected, and which will,