the adjoining countries are well known to specialists, and the present work is an amplification of the economic branch of his investigations. Persia has been specially noted from time immemorial for its drugs, dyes, perfumes, and other vegetable productions, but much yet remains to be done in the elucidation of the plants which yield them. Dr. Aitchison was attached to the last military expedition to Afghanistan, and he was also naturalist to the "Delimitation Commission," and made very extensive collections of botanical and zoological objects, especially of the former. During the latter expedition he specially investigated the origin of the drugs, such as the asafœtida, obtained from umbelliferous plants, and the main results are given in a handsomely illustrated memoir that appeared in the Transactions of the Linnean Society.

The "Notes" now offered to the public afford another proof of the immense energy and perseverance of the author in collecting materials and information, often under great difficulties; and they will be welcomed by all interested in the subject. As the author informs us in some prefatory remarks, he has brought these notes together as a guide to future workers, having himself greatly felt the want of some such aid.

We believe that Dr. Aitchison contemplates another journey to Persia in order to extend his researches into the products of the country. W. B. H.

Metal-Turning. By a Foreman Pattern Maker. (London: Whittaker and Co., 1890.)

THIS book is written to explain and illustrate the practice of plain hand turning, and slide-rest turning as performed in engineers' workshops. The ornamental section of the craft is therefore entirely excluded. No attempt is made to describe all the numerous types of heavy lathes which are to be found in large workshops. The author tells us this in the preface, his object evidently being to treat the subject thoroughly from the works point of view, and not from that of the amateur manufacturer of ivory boxes and the like. The section on tools and tool angles is excellent, and will repay careful reading by turners; many, who are in all other respects good workmen, often make a fearful hash when grinding their tools.

When the much-abused "practical man" is induced to give his experience to the world in the form of a book, there is generally something worth reading and remembering to be found. This is the case in the work before us, which can be well recommended to all interested in its subject-matter. N. J. L.

The Century Arithmetic (complete.) (London: Blackie and Son, Limited, 1890.)

IN glancing through the pages of this volume, we are struck by the immense number of examples that are inserted; in fact, the work consists of practically nothing more than a series of exercises, commencing with simple addition and concluding with stocks. They have been arranged in an easy and progressive manner, and at the beginning of each new series of examples a typical case is worked out fully, and at the conclusion are mental tests which are given by inspectors. Intended as they are for Board schools and the like, the exercises should be found most instructive, for the subject can be grasped best by the constant working out of examples such as those that are here so copiously brought together.

LETTERS TO THE EDITOR.

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Biological Terminology.

IN a recent number of NATURE (December 11, p. 141), Prof. T. J. Parker gives three suggestions in biological terminology, on which you will perhaps permit me to make one or two remarks, as his notes are *à propos* of some criticisms of mine on his paper on that subject (Proc. Austr. Assoc. Adv. Sc., vol. i., 1888).

(1) The term *agamobium* for the asexual generation in plants and animals, as suggested by Prof. Parker, certainly escapes the objection I raised to the term *blastobium*. I am not sure, however, that botanists, even though they might agree with Prof. Parker's general views on terminology, would be inclined to designate as an *agamobium* both the asexual state of a *Vaucheria* (for example) and the asexual generation of a fern. Prof. Bower in a recent paper (*Ann. Bot.*, vol. iv. No. 15) has drawn attention to the distinction made by Celakovsky between homologous and antithetic alternation of generations. The important differences between those two types of alternation would, I think, be in danger of being once more lost sight of if the asexual stages both of the homologous and of the antithetic type were known by the same name.

(2) My objection to Prof. Parker's use of the anglicized form of *ovarium* (ovary) would disappear, if "ovary," in its ordinary acceptation in botany, could be got rid of altogether, "ovule" of course following in its train. Megasporangium (for "ovule") is now generally in use, and it is possible that in time "ovary" may give place to some more suitable term, which will express the true morphological value of the structure known as the "ovary." For uniformity's sake one might wish to see either classical names or their English equivalents used throughout, and since we have already adopted *megasporangium*, *microsporangium*, *ovum*, *sperm* (or *spermatozoon*), &c., and may adopt *gamobium* and *agamobium* (for which there are no English equivalents), the balance seems to turn distinctly in favour of the classical as opposed to the English names.

(3) Prof. Parker advocates the use of special terms for certain "important stages in plant development." All botanists will, I think, accept—at least in time—the term *oosperm* in place of "oospore." That this term ought to be applied to the *unicellular* embryo only there can be no question. Prof. Parker objects to the use of *oosperm* (in Haddon's "Embryology") to indicate the advanced mammalian embryo. I unite with him in his protest, but might add that *oosperm* as applied to an advanced embryo is far preferable to the term *ovum* for the same structure (McKendrick, "Text-book of Physiology," vol. ii. p. 746). In Quain's "Anatomy," for instance, such phrases as "in an ovum of from five to six weeks" (vol. ii. p. 765, 9th ed.) are of frequent occurrence. Whether names *are* required for successive stages in plant development is perhaps an open question. At all events, I cannot see that Prof. Parker is justified in applying the term *polyplast* to the fully formed sporogonium of a moss. A body with the histological differentiation observable in the sporogonium of *Polytrichum* or even of *Jungermannia*, cannot surely be designated by the same term as that applied to the body to which Haeckel gave the name of *morula*. If "highly differentiated," surely it has ceased to be a *polyplast*. Personally, I would feel inclined to use the general term *embryo* for all stages of development after segmentation has begun.

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Streamers of White Vapour.

I STAND this morning in my private room in the University building, looking out over the harbour, and away to the open expanse of Lake Ontario. The shore is to the south of me, and runs east and west. The wind is blowing from the north, and hence from the land over the water. The temperature of the air is about 3° or 4° F., and the temperature of the water is about 45° F.

The whole surface of the water, as far out as the eye can distinguish, is covered with a perfectly white mist like a low-lying fog, so that the appearance of steamers on the bay is that of vessels drifting through a cloud bank, but with the higher upper works and the smoke-stacks mostly elevated above the cloud.

The most peculiar phenomena, however, are the streamers of white vapour which rise in straight or spiral columns, very limited in breadth, but reaching to a great height. These may be seen by hundreds, some rising to a greater height, some to a less, although from the large extent of surface under view, the more prominent ones cannot be very near together. I have watched these streamers from year to year with great interest,

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