William Smith: His Maps and Memoirs. By T. Sheppard. Pp. iii+75-253+plates. (Hull:

A. Brown and Sons, Ltd., 1920.) Price 7s. 6d. Mr. SHEPPARD has spared no pains in making bibliography attractive. He has reproduced by photography original title-pages and maps; he has added portraits, and views of William Smith's homes at Midford and at Harkness-the latter from a good oil-painting. By quoting character-istic passages, including "The Geology of England: Mr. Wm. Smith's Claims," published in 1817, he has given a very interesting and effective picture of the man. The rarity of Smith's original works-only 250 copies seem to have been printed of the four parts of "Strata identified by Organized Fossils"-has rendered Mr. Sheppard's collation of various copies a labour of time as well as of pious erudition. The result is a book that will be welcomed in every scientific library. Smith's sections across various English districts are here given in a reduced form, and we are grateful to the Yorkshire Geological Society for undertaking this liberality of illustration when Mr. Sheppard's memoir first appeared in its Proceedings. As the author points out, Messrs. Cruchley of London, in quite recent years, sold road-maps of English counties reproduced from John Cary's plates (though of course with the addition of railways), and on some at least of these William Smith's geological data still appeared. If the original plates exist, it might be possible to reconstruct for libraries Smith's "Geological Atlas," much as it was issued between 1819 and 1824.

G. A. J. C.

Practical Histology. By Prof. J. N. Langley. Third edition. Pp. viii+320. (Cambridge: W.

Heffer and Sons, Ltd., 1920.) Price 10s. 6d. net. PROF. J. N. LANGLEY'S work is a laboratory manual containing full directions for students undergoing a course of practical histology. Though primarily a book of histological methods, a description is given of the appearances which should be found after the instructions regarding each preparation have been carried out, but the volume does not aim at being a descriptive histology, and contains no illustrations beyond those of apparatus. Provision is made for the instruction of both junior and senior students, the large type in general representing the course of practical histology for elementary students in Cambridge. Histological methods vary somewhat in different schools, but whatever the general procedure may be, this volume is full of useful information, and may be turned to in confidence for assistance in the preparation of any histological specimen.

Prof. Langley, in his preface, comments on the desirability of histology being taught by the physiologist, seeing that minute structure and function are so bound together. The plea is a good one, but the point of view of the pathologist must not be neglected, for the medical student rarely arrives at a full appreciation of the value of histology until he has studied the pathological alterations which occur in the normal tissues. 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 intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

## The Separation of the Isotopes of Mercury.

WE have been successful in achieving a partial separation of the isotopes of mercury by evaporating mercury at low pressure and condensing the evaporated atoms on a cooled surface. The rate of evaporation of the isotopes being inversely proportional to the square root of their atomic weight, and practically every atom leaving the liquid being condensed on the highly cooled surface, a partial separation of the isotopes of mercury was to be expected.

By using the pyknometer method the following numbers have been obtained in one set of experiments for the density of the condensed, and in another set for that of the residual, mercury, when taking the density of ordinary mercury as unity:

Condensed mercury ... 0.999980 Residual mercury ... 1.000031

The apparatus contained 40 c.c. of mercury. In the first set of experiments about one-seventh of the mercury was evaporated and the density of the condensed part determined; in the second set about three-fourths of the mercury was evaporated and the residual portion examined. After the separation every portion was distilled again several times in the ordinary way and the density measured after each distillation. No difference was found between these measurements, the error of measurement of density being less than one in a million. J. N. BRÖNSTED.

G. HEVESY.

Physico-Chemical Laboratory of the Polytechnic High School, Copenhagen, September 23.

## The British Association.

THE leading article in NATURE of September 16 directs attention to a matter which must have exercised the thought of most men of science. There is certainly a widespread feeling that the British Association might be better occupied than in listening to papers on special subjects, often given before very small groups of people. Speaking of my own section, that of Physiology, it has become more and more difficult to get promises of communications of this kind, and discussions on questions of interest at the time have been arranged. I am inclined to think, however, that the addresses of presidents of sections are useful when they present general aspects of the science which would be inappropriate in papers pub-lished in the proceedings of learned societies or in journals and describing original discoveries. The discussions would undoubtedly be of more value if the practice of joint meetings of several sections were more extensively made use of than is the case at present, since it is becoming less and less possible for a worker in any one branch of science to acquaint himself with advances in other branches, although these may have a very material bearing on his own work. There can be no doubt that the more he knows of other sciences the better equipped is the worker in any particular branch. If the Association were able to remove some of the dangers of the excessive specialisation into which modern science seems to be drifting, it would be a function useful to men of science themselves. I am inclined to think that the reading of original papers, and probably also discussions on subjects of interest, to one section only might well be given up.

But, however this may be, I thoroughly agree that the chief function of the British Association is to

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