

soil, insect and fungoid pests, the size of farms, and the use of machinery, etc.

The last section of the book deals with the different wheat-producing countries. Australia is described first, then the Argentine, and next the United States, which has a larger wheat production than any other country in the world; then follows an account of Canada, finally of the European and Asiatic wheat-producing countries.

The illustrations are well chosen and add considerably to the value of the book. Altogether it makes a very interesting volume, which we put down with the feeling that the authors have done their work well and produced something that will be of much value to teachers. E. J. R.

Post-Mortem Methods. By Prof. J. Martin Beattie. Pp. viii+231. (Cambridge: At the University Press, 1915.) Price 10s. 6d. net.

It is now generally recognised that the diagnosis and scientific treatment of disease must be based on a sound knowledge of the abnormal conditions present in the various organs and tissues in cases of disease.

Such knowledge can only be obtained in the post-mortem room, and it is very important that the examinations should be conducted systematically and by some routine method of procedure. The object of the author of this book has been to set out a definite method of procedure, and such modifications of this procedure which may be demanded by special circumstances. We think that Prof. Beattie has successfully accomplished these aims; the book is thoroughly practical without being too full of detail, and the scheme of examination suggested is a sound one. A chapter is included on post-mortem examination for medico-legal purposes, and another on the examinations required in the various diseases; in this reference is made to the principal tropical maladies. Finally, in an appendix a summary is given of the methods employed for the preparation of museum specimens, the preparation of tissues and sections for microscopical examination, and of bacteriological culture media and stains. The book is illustrated with eight half-tone plates and some figures in the text. R. T. H.

The Year-Book of the Scientific and Learned Societies of Great Britain and Ireland. Compiled from official sources. Pp. viii+351. (London: Charles Griffin and Co., Ltd., 1915.) Price 7s. 6d. net.

THIS thirty-second issue of a very useful annual work of reference will be welcomed by many workers in science. We notice the inclusion of several new societies, and these additions serve to increase the value of the year-book. The particulars given about the British Association run to some eighteen pages, but they refer to the Australian meeting of August, 1914, no account of the proceedings of the Manchester meeting last September being included, though the particulars have long been available. The volume deserves a place among the reference books in every scientific library.

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LETTERS TO THE EDITOR.

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The Liesegang Phenomenon and Concretionary Structure in Rocks.

THE curious formations illustrated were produced during some experiments made to support a suggestion that the Liesegang phenomenon might be attributed to adsorption (*Science Progress*, x., 369, 1916). The tubes contained 15 c.c. of 1 per cent. agar gel, in which small quantities of either liver of sulphur or manganese sulphate had been dissolved, and were treated with 10 c.c. of a standard solution of the other reagent. Particularly in the case of the gels containing the polysulphides, the resulting stratification differed from that hitherto observed, in that many of the zones were separated into a number of concretions, which in some instances were joined by rods to those of the succeeding zone. The concretions were

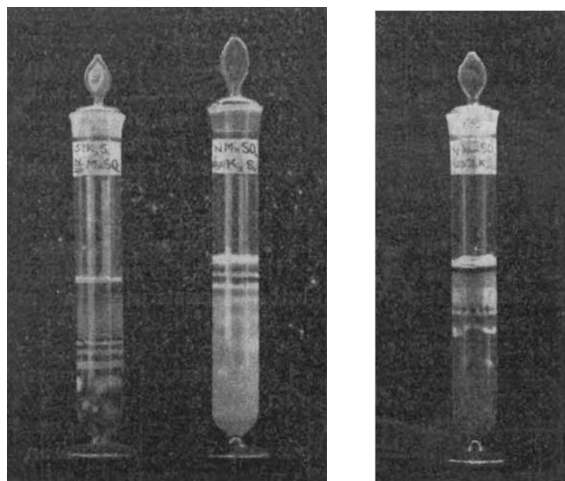


FIG. 1.

FIG. 2.

FIG. 3.

all sharply defined; the indistinctness of Fig. 2 is due to their being imbedded in the gel. The peculiar structure may be due to the presence in the gel of small nuclei in the shape of deposited sulphur, or possibly to the composite character of one of the solutes. The separate spheroids, once started, would grow by adsorption in the same way as the solid strata. To determine the exact conditions of their formation requires further investigation, but it should be possible to repeat the experiment with the carbonates of calcium and magnesium.

The structures appear closely to resemble the concretionary limestones described by Sedgwick (*Trans. Geol. Soc.* (2), iii., 1835), Garwood (*Geol. Mag.*, (3), viii., 1891), Abbott (*Q. J. Geol. Soc.*, lix., 1903), and others. Indeed, certain specimens, which Mr. Abbott kindly showed me, appeared identical in detail with the formation of Fig. 3. To one who is not a geologist it is difficult, at first sight, to refuse the conclusion that similar causes have been at work in each case. Silicic acid gels are known to occur in nature. A gel may contain as little as 1 per cent. of silica. Should solutions of calcium and magnesium salts come into contact with a dilute silicic acid gel, containing alkali carbonates, under the proper condi-