

The book is written for the general reader who wishes to know, without too much detail, something substantial about the chief things which go to nourish his kind—"the oil to make him a cheerful countenance, and bread to strengthen man's heart." To the English reader, however, there is hardly sufficient novelty, either in the substance of the essays or in their form, to make it worth his while to peruse the book, unless he wishes to give his German an airing.

C. SIMMONDS.

#### OUR BOOK SHELF.

*Studies in Blood Pressure: Physiological and Clinical.* Second edition, enlarged. By Dr. George Oliver. Pp. xii+255. (London: H. K. Lewis, 1908.) Price 4s. net.

IN this second edition Dr. Oliver has carried the subject of clinical pulse gauging a distinct step forward. Not only has he greatly improved his compressed-air manometer, but he has made further clinical observations on blood pressure, and he presents the subject in a series of generalisations which cannot fail to be of practical value. The alterations he has effected in his instrument concern each of the three portions constituting it—the glass tube, the armlet, and the apparatus for regulating the air pressure in the tube. This latter is now closed at the distal end, thereby doing away with the necessity for a tap, and effectually avoiding leakage. The armlet no longer consists of a gutta-percha bag which completely encircles the limb, but of a canvas bag, constructed to encircle the limb partially, and provided with three straps; this is a great improvement on the older contrivance, admitting, as it does, of ready adjustment to the limb. Finally, instead of regulating the air pressure by a ball-pump, which causes the index to move along the tube in a series of bounds, Dr. Oliver now employs a compressor fashioned concertina-wise, the size of the chamber being controlled by means of a screw passing between the two boards constituting respectively the top and the bottom, an arrangement which enables the air pressure to be regulated with great evenness and nicety.

Dr. Russell recently directed attention to the fact that a thickened, sclerosed artery may vitiate the findings obtained with the armlet method. In this Dr. Oliver agrees. He finds that the readings he obtains with the armlet method may be higher than those yielded by his earlier spring instrument (hæmodynamometer). In the slighter degrees of arterial sclerosis the difference in the readings obtained by the two methods is small—from 10 to 20 mm. Hg.—but in advanced sclerosis this difference may be much greater, reaching to 40, 50, 70, and even 100 mm. Hg. But, as the author points out, this very difference may be of advantage, affording, as it does, a means of estimating the degree of arterial sclerosis present. He has, moreover, shown that in old people very high armlet readings may be observed in conjunction with low hæmodynamometric readings, without any evidence of cardiac strain—the actual blood-pressure, *i.e.*, being low, though a high degree of sclerosis is present. Only when the arterial wall is normal are the readings furnished by the two methods identical.

One of the most interesting parts of the book is that which deals with the causes of excessive arterial blood pressure. The condition is attributed essentially to constriction of the arterioles as the result of chemical irritation, and the sources of the chemical

agents capable of bringing this about are discussed. Dr. Oliver is to be congratulated on the production of these valuable studies.

*Dairy Laboratory Guide.* By Prof. C. W. Melick. Pp. v+129; illustrated. (London: Archibald Constable and Co., Ltd., 1907.) Price 5s. net.

IN some parts of Great Britain, and in most parts of Ireland, dairying is being gradually transferred from the farm to the factory, and an increasing demand for properly trained managers has to be met. Not only must such managers be experienced in the practical operations of butter- and cheese-making, but they must also be able to manipulate the machinery providing power to the dairy, be able to carry out the chemical analysis of milk and cream, possess a knowledge of dairy bacteriology, and be business men. At three of the dairy schools in Great Britain the equipment should be sufficient for providing the course of training required, but no courses specially intended for dairy managers seem yet to be given.

In the State agricultural colleges in the dairying parts of North America, short courses of training for dairy managers are regularly given, and it is for such courses that Prof. Melick has prepared this series of exercises. The book should be useful on this side of the Atlantic by indicating the general lines on which courses can be arranged. In detail, however, the exercises are not entirely suitable for use in this country. The use of the hand churn and butter worker is nowhere referred to, but, though skill in making butter by hand is unnecessary to the creamery manager, the process provides a training which cannot be obtained by more mechanical methods. The three exercises given in hard and soft cheese-making are totally insufficient, and if the plea is offered that there is no time for more, it would surely be better to omit the making of "dried milk cocktail," "butter-milk pop," and a dozen other dietetic delicacies and nostrums which are given as exercises to the students. Again, the economics of dairying should be dealt with far more thoroughly, and the bacteriological exercises should be extended beyond the bacteriology of impurities in milk to the bacteriology of the ripening of cheese and cream.

Nor on literary grounds can the book be recommended in this country as a students' text-book. Partly owing to numerous "printer's" errors, partly to clumsy phraseology, and partly to the use of American technicalities, the meanings of which are unknown to us, portions of the book become almost unintelligible. For example, the student is directed to "make nutrose by boiling together in any alkaline solution dried casein and caustic acid," and again to "make eulactol by dissolving proteic vegetable substance and adding hydrates of carbon, salts, such as phosphate of calcium, cooking salt, or carbonate of sodium, and allow to vaporize" (pp. 107-8). On the other hand, Gray's method for the determination of moisture in butter is admirably described.

*Discoveries in Hebrew, Gaelic, Gothic, Anglo-Saxon, Latin, Basque, and other Caucasian Languages, showing Fundamental Kinship of the Aryan Tongues and of Basque with the Semitic Tongues.* By Dr. A. E. Drake. (Denver: The Herrick Book and Stationery Company; London: Kegan Paul, Trench, Trübner and Co., Ltd., 1907.) Price 25s. net.

JUST as in the sphere of the natural sciences men from time to time arise who believe that they have discovered perpetual motion, or that the circle can be squared, or that one can demonstrate that the earth is flat, so, too, in comparative philology writers are