

high antidotal properties. If dried, an antivenomous serum retains its neutralising power for a long period, and it possesses this great advantage over a mere chemical antidote, that it can also antagonise venom which has been absorbed, and may thus be of service for a longer time after injection of the venom.

*Bathy-orographical Map of Africa.* 1-8,400,000.  
*Bathy-orographical Map of Asia.* 1-9,300,000.  
(Edinburgh: W. and A. K. Johnston, Ltd.) Price 12s. each.

WE must congratulate Messrs. W. and A. K. Johnston on these excellent additions to their series of orographical maps. The elevations in Africa show 10,000, 5000, 2000, and 1000 feet and below sea-level. The general effect is satisfactory, though the very deep green is, we think, somewhat unpleasing. The 10,000-foot contour shows the higher elevations of the Atlas, Abyssinia, the Lakes Plateau and the Drakensbergen, but the tint is indistinguishable by a class. It would, however, have probably made the map more useful if the 8000-foot line had been selected, as the highest points are not of great importance for an educational map except in the region of the great lakes. As it is, the mountainous areas do not indicate their special character.

The other contours selected show the formation of Africa well. The sea depths shown are 100, 1000, 2000, and 3000 fathoms. It is to be regretted that the same contours have not been chosen to represent both the land and sea, as the plateau character of Africa would have been brought out with much greater effect.

Both in Africa and Asia, physical names have been very fully shown. As they cannot be read by a class, it is a pity that they have not been printed faintly in blue, like the initial letters of towns. The mass of black lettering largely spoils the graphic character of the maps.

Actual mistakes are few, though one may be noted—in the north-east of Abyssinia the area below sea-level has been coloured as more than 1000 feet.

The map of Asia is more effective than that of Africa, possibly owing to the selection of the contours. The 10,000-feet affords a means of comparison with Africa, but it should, if possible, have been printed the same depth; then the 15,000- and 20,000-foot lines would, with suitable graduation, have illustrated the character of the Tibet Plateau. At present minute and close examination is necessary to distinguish the features of the North-West Frontier. The lower elevations are much better shown. The 100, 3000, and 6000 feet bring out well the great river valleys and depressions of Asia.

In spite of these defects, the maps are likely to prove more useful for schools than any that have previously been published of these continents.

*Publications of the Research Defence Society.* March, 1908, to March, 1909. Selected by the Committee. Pp. xv+216. (London: Macmillan and Co., Ltd., 1909.) Price 2s. 6d. net.

THE Research Defence Society was founded on January 27, 1908, "to make known the facts as to experiments on animals in this country; the immense importance to the welfare of mankind of such experiments; and the great saving of human life and health directly attributable to them." The president is the Earl of Cromer, himself a champion in the cause of kindness to animals; the committee is a strong one, its members representing all branches of science, and also including many theologians and laymen, and in March of this year the membership of the Society numbered more than 2250.

This first volume of publications contains the president's address at the inaugural meeting, a review of the Home Office Report for 1907 on, and some facts as to the administration of the Act regulating, experiments on animals, and several essays (also published separately in pamphlet form) by well-known experts dealing with the knowledge that has been derived from experiments on animals, and the saving of human life therefrom. Prof. Cushny shows that the nature of the action and therapeutic use of all drugs of recent introduction, and the potency of the preparations of many of the older drugs (*e.g.* digitalis and ergot), have been elucidated solely by experiments on animals, the value of diphtheria antitoxin and of serum treatment in epidemic cerebro-spinal meningitis (spotted fever) is discussed by Dr. Courtauld and Dr. Robb respectively, Sir David Bruce writes on the extinction of Malta fever, and Dr. Bashford's article in NATURE on recent advances in knowledge of cancer is reprinted. The evidence of Lord Justice Fletcher Moulton before the Royal Commission on Vivisection is given *in extenso*, and is a powerful vindication from the ethical side of the right to employ experiments on animals for the benefit of mankind.

If the standard of its publications be maintained at the level of those contained in this volume, the Society will be doing excellent work in the cause of experimental research.

R. T. H.

*Milk Testing. A Simple Practical Handbook for Dairy Farmers, Estate Agents, Creamery Managers, Milk Distributors, and Consumers.* By C. W. Walker-Tisdale. (Northallerton: W. R. Smithson.) Price 1s. net.

THE author of this little book is already favourably known by his early publications, jointly with Mr. T. R. Robinson, on butter-making and soft cheese-making. He holds an important position in the dairy world, and, as general manager of the Wensleydale Pure Milk Society, knows at first hand all the difficulties that beset the dairyman. The result is an admirable little volume, sound in regard to analytical methods, and direct in its appeal to the man for whom it is intended. It is more than a mere collection of methods, and includes discussions of such cognate subjects as the use of preservatives. Occasionally a request is heard in certain quarters that a preservative should be allowed in milk, but our author will have none of it, and advises the dairyman to keep clear of them all, even of a certain preservative offered for sale, "guaranteed to contain no boron or boric acid, and claimed to be undetectable by chemical analysis"! Quite apart from considerations of the general health of the community, the author shows that the dairyman himself would suffer, since foreign milk would invariably be imported if preservatives were allowed.

E. J. R.

*The Journal of the Cooper Research Laboratory.* Edited by Walter E. Collinge, Director. (Berkhamsted: The Cooper Research Laboratory, 1909.)

THE fact that the principal of a large and well-known firm like Messrs. Cooper should start a research laboratory and publish a journal is a satisfactory proof of the widespread interest now being taken in science by all who have to do with agricultural and horticultural matters. The special province of the firm—treatment of insect and fungoid pests—certainly borders more closely than usual on pure science, and no doubt a trained staff would have been wanted in any case. But here we have something more. The laboratory, we are told, "is in no sense a financial venture or business concern." Its functions are to answer inquiries from farmers, fruit-growers, and gardeners as to preventive and remedial treatment for diseases of plants and parasitic diseases