

(1) La radiation cosmique

Par P. M. S. Blackett. 1: Aperçu général. Pp. 23+4 plates. 10 francs. 2: La méthode de la chambre de C. T. R. Wilson (commandée par compteurs de Geiger-Müller). Pp. 25+3 plates. 8 francs. 3: L'action du champ magnétique terrestre. Pp. 20+2 plates. 7 francs. 4: La perte d'énergie par ionisation. Pp. 21+7 plates. 10 francs. (Actualités scientifiques et industrielles, 230-233.)

(2) Rayons cosmiques

Par B. Rossi. (Exposés de physique atomique expérimentale, 4: Actualités scientifiques et industrielles, 248.) Pp. 48. 12 francs.

(Paris: Hermann et Cie., 1935.)

(1) THESE small books constitute the only connected account of cosmic rays which is available; and although the lectures on which they were based were delivered two years ago, the account given largely represents existing knowledge, and the problems stated remain mostly unsolved. The first part contains a general and historical account; the second deals with the technique and results of the counter-controlled Wilson chamber introduced by Prof. Blackett. This part contains the account of shower production. The third part is specially valuable. It provides a simplified treatment of the paths of electrified particles in the magnetic field of the earth, and the consequent effect of the field on the distribution of cosmic rays over the earth. The original papers in which this theory was developed by Størmer, Lemaître and Vallarta and others are difficult and in some cases inaccessible. The fourth part deals with the behaviour of very fast particles passing through matter. The details of the processes involved are still uncertain both in experiment and theory. They are at present the subject of intensive investigation, and some progress has been made, particularly in connexion with shower production.

(2) This brochure is more limited in scope than those by Prof. Blackett; it is concerned very largely with Prof. Rossi's own experiments on the cosmic rays, by the coincidence counter method. The experiments include analyses of the rays by absorption and by azimuthal distribution, a study of the effect of the earth's magnetic field, and a study of shower production.

Index Generalis

Année 16, 1936. Annuaire général des Universités et des Grandes Écoles, Académies, Archives, Bibliothèques, Instituts scientifiques, Jardins botaniques et zoologiques, Musées, Observatoires, Sociétés savantes. Publié sous la direction de Dr. R. de Montessus de Ballore. Pp. vii+2482. (Paris: Éditions Spes, 1936.) 225 francs.

THIS most recent edition of an extremely useful source of information concerning the universities, etc., of the world has the same format as its predecessors. All information has been obtained from official sources, thus marking the work as an authentic book of reference.

The first part of the volume gives details concerning the officers, professors and other teaching staff,

laboratories and attached institutes of the universities of the world, though, unfortunately, those of the U.S.S.R. are again missing. This is through no fault of the editor of the "Index", who states that he has made repeated efforts to obtain the necessary information. This section occupies 1,213 pages of closely printed type. The next section, occupying 97 pages, supplies information concerning the personnel, publications, instruments, etc., of the astronomical observatories of the world. This is followed by 291 pages concerning libraries and archives. The next 139 pages deal with scientific institutes, such as museums, botanical and zoological gardens, biological laboratories, meteorological and other stations, etc. Societies and academies (with names of members of the more important) occupy the remainder of the text (190 pages). The general name index at the end contains about 95,000 names—a veritable mine for reference purposes; there is also a general geographical index whereby it is easy to trace institutions.

We know of no other single volume publication which brings together in this way so much information regarding the learned world.

The Kātkāris:

a Sociological Study of an Aboriginal Tribe of the Bombay Presidency. By A. N. Welng. Pp. vii+156+15 plates. (Bombay: The Bombay Book Depot, 1934.) n.p.

MR. WELNG's sociological study of the Kātkāris, a criminal tribe of the Bombay Presidency, who survive in considerable numbers in the hilly districts of the Deccan, has appeared at an opportune moment. Not only has there been a tendency to confuse them with the Kunbi, from whom indeed it is not easy to differentiate them, but also, like other aboriginal tribes of India, their institutions are subject to influences which tend progressively in the direction of modification. This process is likely to be intensified rather than arrested among tribes, who still possess something of the hunting culture and of the animistic and magical beliefs, which are of an abiding interest for the anthropologist.

Guide to Philosophy

By C. E. M. Joad. Pp. 592. (London: Victor Gollancz, Ltd., 1936.) 6s. net.

THIS is one of the books which will help considerably the case of philosophy as a subject of fundamental interest and importance. It is held in many quarters that without some knowledge of philosophy, the education of a citizen is far from being complete. Those who oppose this view will no longer be able to point to the lack of reliable and interesting books on this subject; for Mr. Joad provides them now with a practical answer in his "Guide to Philosophy". The subjects discussed in this lucid and attractive work are too numerous and too complex for even a brief review. It will suffice to say that the beginner and the specialist alike should derive both profit and enjoyment from its perusal.

T. G.