

used in agriculture. Flexible cables must be provided between the moving machine and the fixed distribution lines, together with some auxiliary form of power (or a heavy and expensive battery) for movement about the farm. Although several ingenious systems are in use on the Continent for reducing to a minimum the inevitable inconvenience of the flexible cables, the British farmer will need much persuasion before he adopts the system.

Electric stimulation of plant growth is discussed more optimistically than the present position of scientific investigation in this intricate subject really warrants, and the same is true, although to a lesser degree, of the chapters dealing with light treatment of plants and animals. A full account is given of the undoubted improvement that electricity could provide in the amenities of the farm homesteads and the rural areas generally.

Although the object of the book is to pave the way for electro-farming, perhaps its chief immediate value is that it directs attention to the numerous ways in which the forms of power at present available could be applied with advantage on the farm.

*The Year-Book of the Scientific and Learned Societies of Great Britain and Ireland: a Record of the Work done in Science, Literature, and Art during the Session 1926-27 by numerous Societies and Government Institutions.* Compiled from Official Sources. Forty-fourth Annual Issue. Pp. vii+416. (London: Charles Griffin and Co., Ltd., 1928.) 18s. net.

It is with much pleasure that we welcome once more this useful annual; the publishers deserve our sincere thanks for the labour and expense they devote to it. Moreover, they realise that a reference book must be distinctively and strongly bound; lightly bound reference volumes, which fall to pieces after a few weeks of use, are most irritating.

An important part of the volume is the note on the title-page—"Compiled from Official Sources." It shows that the information provided can be depended upon, and our thanks should also go to the officials of societies, many of them busy men serving in an honorary capacity, who take the time and trouble to make it available. As regards the contents of the book, it is sufficient to say that the various societies are classified according to subject, and under each one is given its address, officers, meetings, publications, and so on. Local photographic and medical societies are dealt with briefly at the ends of the appropriate groups. Particularly valuable are the reports from the Government institutions. There is a good index.

The penalty of providing useful information is that it invites suggestions for improvements. We still lament the omission of most of the industrial research associations, an omission that is doubly strange in view of the increased attention that is given to research in the industries themselves and among the public. We also think that the Viking Society and the Spelæological Society would be

more appropriately grouped under archæology than under biology, and that the Sociological Society and the Eugenics Society would come better under biology, which includes anthropology, than under psychology.

*The Circle and the Cross: a Study in Continuity.* By A. Hadrian Allcroft. In 2 volumes. Vol. 1: *The Circle.* Pp. x+370+4 plates. (London: Macmillan and Co., Ltd., 1927.) 12s. 6d. net.

MR. ALLCROFT'S interesting book is devoted to the thesis that the sacred pagan symbol, the circle, surviving from prehistoric into Christian times, can be detected not only in occasional circular churchyards, but also in the modern word *church* itself. Beginning with the round barrow as the first expression of the sacred circle, Mr. Allcroft traces the evolution of the holy sepulchral ring, and maintains that this acquired additional importance from its frequent use as a moot. It is as moots, indeed, that he would explain the stone circles of Great Britain, and he couples with this interpretation the assurance that they are in reality of much later date than is commonly supposed; in fact, he seems to think most of them were built so late as the fourth century B.C., if not later still.

On this point the verdict will assuredly be that Mr. Allcroft's case is not proven, but his survey of the stone circles and earthen 'amphitheatres' in Great Britain is none the less an important and thorough piece of work. Moreover, he cannot be accused of too narrow an outlook, for he has chapters on the Achæan and Latin moots, and on the Danish *ting*; and he gives, furthermore, an interesting account of the Nordic peoples, about whom he holds views that are often in opposition to orthodox theory.

Especially interesting are Mr. Allcroft's remarks on the difficult subject of the Picts; but it should be observed that as a guide to the course of the Celtic invasions of these islands, his book must be read with considerable caution. However, he may reasonably claim the indulgence due to those engaged in pioneer work—for such is the nature of his book—and this is no less than his due. Indeed, it would be churlish to deny that he has given us a learned and entertaining work.

*Lehrbuch der Geophysik.* Herausgegeben von Prof. Dr. B. Gutenberg. Lieferung 4. Pp. 609-796. (Berlin: Gebrüder Borntraeger, 1927.) 11-40 gold marks.

PART 4 of Gutenberg's "Lehrbuch" deals mainly with atmospheric phenomena. A section on the structure of the atmosphere, by Prof. L. Weickmann, gives a very thorough account of existing theories of its composition, the distribution of temperature and density with height, and the propagation of sound. Atmospheric optics is then treated in considerable detail by Prof. F. Linke and Prof. A. Wegener (who was not included in the list of collaborators as originally announced). Atmospheric electricity is discussed by Prof. H. Benndorf.