All those in North America should be included in the book who have made contributions to the natural and exact sciences. The standards are expected to be about the same as those of fellowship in the American Association for the Advancement of Science or membership in the national scientific societies which require research work as a qualification.

The compilation of the new edition will of necessity involve much labor; this will be materially lightened if men of science will give the assistance here requested.

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3939 GRAND CENTRAL TERMINAL,
NEW YORK, N. Y.

SCIENTIFIC BOOKS

Ancient Hunters and Their Modern Representatives. By W. J. SOLLAS, professor of geology and paleontology in the University of Oxford. Third Edition, Revised. London: Macmillan and Company, 1924.

THOSE who have read the first (1911) and second (1915) editions of "Ancient Hunters" have another treat in store for them in the third edition. The plan of the work remains the same, except for minor details. The number of the chapters and their headings are identical, with the exception of Chapter V, the title of which has been changed from "The Most Ancient Hunters" to "Lower Paleolithic Chellean and Acheulian Ages"; to this chapter the discussion of Piltdown Man and Heidelberg Man has been transferred from Chapter II. At the end of the last chapter there has been added a chronological table, not found in the previous edition.

The chapters have been expanded largely through the addition of new material, so that the reader now has a volume of 689 pages and 368 illustrations, in comparison with 591 pages and 314 illustrations of the second edition. In a perusal of the pages, one notes evidences of revision as well as expansion. For example, his attitude on the subject of eoliths has undergone a change. After a brief study of the Westlake collection from Cantal, Sollas concludes that "in the present state of our knowledge, I think the balance of probabilities distinctly points to the conclusion that these eoliths are the work of an intelligent being."

The large bone implement from Piltdown is referred to the Chellean Epoch and is supposed to be of the same age as the skeletal remains of *Eoanthropus*. The pointed end of a wooden spear found by Hazzledine Warren in a bed containing remains of *Elephas antiquus* at Clacton-on-Sea is thought to be of a somewhat later age, namely, the Lower Acheulian Epoch. Sollas accepts the evidence for a warm stage ushering in the Mousterian Epoch.

Depéret's theories regarding strand-like correlations with glacial phenomena are accepted, which will please some critics and displease others. It will be recalled that Depéret's nomenclature for the old shore lines beginning with the highest are: Sicilian (90 meters), Milazzian (60 m.), Tyrrhenian (30 m.) and Monastirian (20 m.). Sollas would refer *Pithecanthropus* to the Lower Sicilian, *Eoanthropus* to the Lower Tyrrhenian and Neanderthal man to the Lower Monastirian. It is evident therefore that the author has not suppressed his personal opinions on controverted questions; granting that some of these may be wrong, there is much in the book to commend.

The numerous illustrations add materially to the text, although some of the borrowed ones have suffered somewhat in the reproduction process and the sketch map (Figure 106) of the district of Les Eyzies is antiquated.

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SCIENTIFIC APPARATUS AND LABORATORY METHODS

A SIMPLE METHOD FOR MAKING DIFFERENTIAL COUNTS OF SMALL SPORES

EVERY one who has attempted differential counts of small spores by counting the number of each kind in a field knows how difficult it is to keep from counting the same spores over and over and how tedious the procedure becomes if there are many counts to be made. For many individuals this procedure is subject to considerable experimental error. Incidentally, counting the spores in a field or part of a field and computing therefrom the percentage of each is a slow process. The following method requires two persons, an observer and a recorder, but is very rapid and eliminates some of the experimental error. Select a thin round cover glass and with India ink rule across it two parallel lines a millimeter or less apart. In the middle of the cover draw a third line perpendicular to and joining the first two, thus forming a narrow letter H in the center of the cover. Drop the cover onto the "stop" of an ordinary 10 X eyepiece as though inserting a micrometer disc. Such a cover, unlike an ordinary micrometer disc, does not perceptibly interfere with definition, a factor of importance when observing hyalin spores. Place the slide, which should be prepared so as to give a fairly uniform distribution of spores, in position on a mechanical stage having convenient right and left movement. Arrange the eyepiece containing the cover slip so that the parallel lines coincide with the right and left movement of the stage. With a 3 or 4 mm lens, select, in the region well to the left of the center