sharp as it was on the day it was made." The best section of this 'floor' was at Stoke Newington Common, where there was found, about four feet below the surface, an immense accumulation of paleolithic implements, of both the pointed and oval types, numerous scrapers and hammer-stones, with cores and flakes innumerable.

Mr. J. A. Brown has been prosecuting similar researches in the north-western part of London, and has discovered in the high-level gravels at Acton 'a paleolithic workshop site,' in which some five hundred or more of such objects have been found at a depth of six feet below the surface. "The whole of the specimens," he says, "are as sharp as when they were flaked off from the cores, and it is clear that they have never been removed from the spot, where they were left by the paleolithic people, who made them, when they retreated before the advancing waters" (p. 57). The present volume, embodying the substance of several papers read before various scientific bodies, contains an interesting narrative of his own investigations, and those of other explorers, and is profusely illustrated by engravings of specimens of all the different objects which have been found by Mr. Worthington Smith as well as by himself. But Mr. Brown has also availed himself of the opportunity of compiling from many sources an extended study of the condition of certain savage races, for the purpose of illustrating the probable mode of life, conditions, and culture of the river-drift men. With one of his conclusions, however, I feel constrained to differ. From what seems to be very insufficient evidence he has drawn the inference that the paleolithic man 'had invented or used the bow and arrow,' His reasons for this opinion, so much at variance with that held by most prehistoric archeologists, are that he has found a few small triangular flakes which he styles "the earliest form of arrow-head," and thinks they "could hardly have been used in any other way" (p. 72); and also other flakes having on one side "worked hollows, which are generally regarded as shaft-smoothers" (p. 116).

Now Mr. O. A. Shrubsole, in an article on 'Certain unfamiliar forms of paleolithic implements' (*Journal of the anthropological institute*, xiv. 196), has argued that man in a primitive state, having only natural forms of growth to avail himself of, such as wood, bone, or horn, would of necessity fashion tools for scraping-purposes, with curved outlines; and to me it seems unreasonable to restrict similar implements to the sole purpose of 'shaft-smoothers' for arrows. Mr. Worthington Smith has reached the conclusion that the makers of the implements, which he has discovered in such abundance, "depended for food upon roots and wild plants, and the bodies of small animals slain by stones thrown from the hand;" and he does not believe that the objects found by him were intended for weapons, but for tools. Mr. Brown's rejected hypothesis, that the small triangular flakes, which he has figured, if indeed they are implements at all, were used as 'points of small harpoons for killing fish' (p. 117), seems much more probable, than that the paleolithic man, as I have attempted to show elsewhere (*Proceedings of the Boston society of natural history*, xxiii. 269), should have invented such an ingenious and complicated instrument as the bow and arrow.

HENRY W. HAYNES.

RIDGWAY'S NOMENCLATURE OF COLORS AND COMPENDIUM.

EVERY naturalist has doubtless at times seriously felt the need of some means of identifying the various shades of color he is called upon to designate in describing animals or plants, or interpret in the descriptions given by other authors. No standard work, duly illustrated, having this end in view, has for many years been available. This want Mr. Ridgway has now attempted to supply. His 'nomenclature of colors' comprizes fifty-eight pages of text and ten colored plates. A brief discussion of principles of color is followed by a chapter on the selection of pigments and their combination to produce required effects, and a comparative or polyglot vocabulary of colors, in which is given the equivalent terms in seven languages of more than three hundred designated shades of color. About one hundred and seventy of these shades are defined and illustrated by the plates, and their composition indicated by explanatory text. This forms part i. of the little manual under notice. Part ii. consists of an 'ornithologists' compendium,' devoted mainly to an extended glossary of technical terms used in descriptive ornithology, illustrated by six outline plates, relating to the topography of a bird, the forms of feathers, the patterns of color-markings, and the contour of eggs.

Mr. Ridgway has thus not only attempted to fix and illustrate a standard nomenclature for the "numerous hues, tints, and shades which are currently adopted, and now form part of the language of descriptive natural history," but has brought together a most convenient mass of technical information of great importance to ornithologists, whether specialists or amateurs.

A nomenclature of colors for naturalists, and compendium of useful knowledge for ornithologists. By ROBERT RIDGWAY. Boston, Little, Brown & Co. 8°.