

the effect of impulsive mania; that is, seclusion in a criminal asylum for an indefinite period until a complete cure is established, or until the patient passes into some other condition that renders a repetition of the act an absolute improbability. Campili thinks that it would be difficult to apply the same punishment to an hypnotic criminal, since he did not commit the crime of his own accord but under the influence of a third person, who is the true culprit: the hypnotic subject is simply an instrument of crime in the hands of the hypnotizer the same as a revolver or a knife, and it is he who ought to bear the responsibility of the act. This is a subtle distinction. The hypnotic subject, like the epileptic, is a dangerous person, a veritable *malade*, since he allows a very simple manoeuvre to make him commit a crime. It is absolutely necessary to put him beyond the possibility of doing harm. Moreover, it is probable that the dread of punishment exercises a restraining influence over the minds of those who submit voluntarily to be hypnotized: in fact, Binet holds, many persons who are slightly hypnotizable may resist hypnotization successfully, and ought to be responsible for consenting to submit themselves to the experiment. There is the strongest reason for this conclusion if the subject knows in advance, before going to sleep, that a criminal suggestion will be given to him. There is one curious hypothesis that Campili has not anticipated, and one which well-known facts render extremely probable, and that is that we may find some day in some band of thieves or assassins a hypnotic subject who of his own accord yields himself to criminal suggestions: the usefulness of hypnotic suggestion under such circumstances is easily understood, for those who are under the control of a suggestion have more audacity, more courage, and even more intelligence, than when they act of their own accord. There are patients who, dreading to be put to sleep by some one that they dislike, offer to the hypnotic suggestion of one of their friends a power of resistance that they do not have naturally. Others, wishing to accomplish some act, and fearing that their courage will fail at the last moment, suggest themselves the act that they wish to do. In these circumstances the subject should be punished as the principal and the hypnotizer only as an accomplice.

The Paris correspondent of the *Medical record* writes last December that an epidemic of hypnotism prevails there, and he paints the prevailing distemper in exceedingly dark colors. Every steamer brings some new book on hypnotism or mental suggestion, and the amount of literature that has accumulated within the past year is enor-

mous. Public exhibitions of hypnotism have been interdicted in Germany, Italy, and Austria. This is but one side of the shield, however, and brilliant therapeutical results have been reported by the skilled coterie of French physicians that has advanced our knowledge of hypnotism so much within the past few years. Yet on the whole, perhaps, it is a matter for congratulation that the more stolid American mind has been little affected by hypnotism up to this time, not even to the extent of furnishing sufficient subjects for the Society for psychical research. It may be that the 'mind-cure' is our cross, and at any rate the connection between this and hypnotism offers a promising field to the investigator.

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#### PALEOLITHIC MAN IN LONDON AND ITS NEIGHBORHOOD.

EVER since Dr. John Evans, in the year 1860 (*Archeologia*, xxxviii. 301), showed that the object was a genuine paleolithic implement of the Chellean type, which, under the disguise of 'a British weapon found with elephant's tooth near Gray's Inn Lane,' had been lying for years unnoticed in the British museum, a peculiar interest for prehistoric archeologists has attached to the quaternary gravels of the valley of the Thames. This noteworthy implement seems to have been discovered some time at the close of the seventeenth century, and an account of it, illustrated by a rude engraving, had been printed so early as 1715. Consequently the city of London may lay claim to be the site of the first recorded discovery of the earliest implements of mankind. Similar discoveries have continued to be made in different parts of the valley of the Thames, especially in that portion of it lying within the county of Middlesex. Mr. Worthington G. Smith, in particular, published in the *Journal of the anthropological institute* accounts of finding paleolithic implements in the little tributary valleys of the Lea and the Brent. But in 1883, after five years of patient research, he made known the interesting discovery (published in the same journal, xiii. 357) of a 'paleolithic floor at North-east London.' He showed that a stratum of worked flints of the paleolithic age lay spread for many miles a few feet beneath the present surface of the ground. The majority of the implements contained in it were found at the height of about seventy-five feet above the present level of the Thames. "As a rule," he says, "every implement and flake is as

*Paleolithic man in north-west Middlesex. The evidence of his existence and the physical conditions under which he lived at Ealing, and its neighborhood, etc.* By JOHN ALLEN BROWN. London, Macmillan.

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.

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#### 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' comprises 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°.