

implements from the Middle Glacial gravel and Chalky Boulder-clay of Suffolk; and Dr. Marie Stopes gives an illustrated account of the Red Crag shell portrait (see *GEOL. MAG.*, 1912, pp. 285, 334). Among other articles is one on "The Problem of the Eoliths", by Mr. F. N. Haward, who thinks that "very few are humanly chipped".

X.—NORFOLK AND NORWICH NATURALISTS' SOCIETY.

AN interesting and instructive article on "The Topography and Vegetation of the National Trust Reserve known as Blakeney Point, Norfolk", by Professor F. W. Oliver, F.R.S., and Dr. E. J. Salisbury, F.L.S., has been published in the Transactions of this society (vol. ix, pt. iv, 1913). The Topography, by Professor Oliver, is of considerable geological interest, as it deals with the changes which have affected the coast. This comprises a shingle spit which leaves the shore near Weybourne, and extends about eight miles seaward slightly N. of W. On the landward side is the tidal inlet known as Blakeney Harbour, which at Cley receives the waters of the River Glaven. The area includes Blown Sand, unreclaimed salt marshes (saltings), and some reclaimed tracts, together with much bare mud; the National Trust Reserve comprises  $3\frac{1}{2}$  miles of the shingle spit from the Headland, and a strip of saltings abutting on the reclaimed marshes between Blakeney and Cley. It is remarkable that twenty-five small lateral shingle banks extend from the lee side of the main spit, and some of these known as 'Marams' are considered by Dr. Salisbury to possibly indicate the former extent of sand dunes, although the Marram grass (*Psamma*) is not now conspicuous. The marshward flow of the shingle is arrested to some extent by *Suaeda fruticosa* and other plants. The distribution of the plants is fully dealt with by Dr. Salisbury, and the subject generally is well illustrated by maps and photographic views.

XI.—BRIEF NOTICES.

1. THE PALEOLITHIC IMPLEMENTS OF KANSAS.—A work entitled *The Weathering of Aboriginal Stone Artifacts*.—No. 1: "A consideration of the Paleoliths of Kansas," by Mr. N. H. Winchell, has been issued by the Minnesota Historical Society (8vo, cloth, St. Paul, pp. 186, illustrated by twenty figures and nineteen half-tone plates, 1913). In this volume the author applies the term Paleolithic "to any people, and their artifacts, which antedated the Kansan Glacial epoch. Early Neolithic includes the time elapsed between the Kansan and the Wisconsin Glacial epochs, and Neolithic applies to people who have existed in Kansas since the Wisconsin". Paleolithic types of implements were, however, found to continue into Neolithic times. The characters and patination of various implements are described and illustrated by the text-figures and plates.

2. YORKSHIRE CHALK FOSSILS.—"The Chalk Fossils in the Hull Museum" form the subject of an article by Mr. George Sheppard (*Trans. Hull Scient. and Field Nat. Club*, iv, 1913). A useful list is given of the species, a few of which are figured in two plates.

3. NORTH OF ENGLAND BIBLIOGRAPHY.—Mr. Thomas Sheppard continues his helpful list of “Papers and Records relating to the Geology and Palæontology of the North of England”, those for 1912, Yorkshire excepted, being printed in the *Naturalist* for July last. It is announced that the Yorkshire items will be included in a memorial volume to the late C. Fox Strangways, that will shortly be published by the Yorkshire Geological Society.

4. COAL-FIELDS OF INDIA.—In vol. xli. of the Memoirs of the Geological Survey of India (1913), the work on Coal-fields, by V. Ball, has been entirely revised and largely rewritten by Mr. R. R. Simpson. He gives a practical account of the subject, illustrated by views of colliery works and machinery, by maps of the Raniganj and Jharia Coal-fields, and a more general map of the Central Provinces and districts further east, including Burma. There is also a useful bibliography.

5. WATER-SUPPLY PAPERS, Nos. 305, 307, and 308 (1913), continue the records of “Surface Water Supply of the United States”, and give particulars relating to Hudson Bay and Upper Mississippi River, Lower Mississippi River Basin, and Western Gulf of Mexico. No. 318 (1913) is on the “Water Resources of Hawaii”, by Messrs. W. F. Martin and C. H. Pierce. Maps are given of the drainage of Hawaii and associated islands; there are particulars of gaugings, rainfall, etc.; and views of scenery, irrigation-works, etc.

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## REPORTS AND PROCEEDINGS.

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### I.—GEOLOGICAL SOCIETY OF LONDON.

1. *November 19, 1913.*—Dr. Aubrey Strahan, F.R.S., President, in the Chair.

No papers were read, but in response to the invitation issued on November 5 eighteen or more exhibits were made of implements and reputed implements of Palæolithic and earlier age, and of flints showing various types of fracture.

The President, in opening the proceedings, said that the subject which had come before the Society for consideration was partly of anthropological interest, but fell also within the limits of geology. For the exhibits included specimens of flints from strata ranging in age so far back as the base of the Crag; and the determination of the age of the strata was clearly a matter for geological investigation.

The specimens exhibited included some for which evidence of human workmanship was claimed with much confidence, but without having obtained universal acceptance. There were also shown series of flints illustrating the manifold forms of fracture which are attributable to natural causes. A comparison of these with the reputedly artificial forms could not fail to be instructive.

A large number of flints, for which a human origin was claimed, had been found lying on the surface or embedded in the soil. These were chiefly of anthropological interest.