

The Mound-builders of Dunstable.

AT a meeting of the Royal Anthropological Institute, held on November 8, Dr. W. H. R. Rivers, president, in the chair, Prof. G. Elliot Smith and Capt. Guy Crowden read a paper on "The Mound Builders of Dunstable." After describing the results of excavations on one of the Five Knolls on Dunstable Downs, in which the remains of three cremated bodies were interred, probably in the Bronze age, the authors directed attention to the association of the tumuli with cultivation terraces, huts, and ancient roads, and suggested that the presence of flint suitable for implement making was the determining cause of the settlement of the people who built the huts and made the cultivation terraces on the Dunstable Downs. The convergence of the main roadways at this spot is also to be explained by the transport of the most valuable economic product of the Neolithic—and even also of the Bronze—age to places where such material could not be obtained locally. Attention was directed to the geographical distribution of cultivation terraces in Britain, and their remarkable association in so many places with the edge of the chalk; and the attempt was made to correlate these facts with the observations of Mr. W. J. Perry as to the causal relationship between the distribution of the megalithic monuments of Wiltshire, etc., and the flint-bearing edge of the same chalk zone further south. The plea was made for the fuller investigation of the relationship existing between ancient monuments and geological formations that produced substances valued by man in ancient times, and also for the investigation of the effects of the admixture of cultures revealed in the round barrows in different parts of the country.

The discussion which followed the reading of the paper dealt mainly with the question of terrace cultivation. The authors in the course of their paper had suggested that the employment of terrace cultivation on this site was due to a conservative instinct which continued to employ a traditional system of cultivation, originating elsewhere, and not necessitated by the conditions of the present site. Mr. Peake, however, suggested that terrace cultivation was a natural consequence of ploughing or hoeing on the side of a hill; these operations, in course of years, would be bound to produce terraces such as those known on the Downs as "shepherds' steps." Col. Hodson, on the other hand, pointed out that in Assam, also an area in which megalithic monuments occurred, terrace cultivation was practised by the Nagas, and the terraces, so far from being the result of the method of cultivation,

were built up of set purpose when land was brought under cultivation. Mr. Mills also stated that the Sema Nagas, when urged by the administration to follow the terrace system, had stated that they were unable to do so, as they did not know the sacrifices for terrace cultivation. Mr. Strong said that in China terrace cultivation had been brought about by climatic changes. Owing to deforestation the climate had changed, and it had been necessary to introduce terraces with shale retaining walls.

Mr. Peake, in the course of his remarks, also dealt with the question of the roads which meet at or near Dunstable. He pointed out that the Icknield Way followed the junction of the chalk and the greensand, and suggested that while its course was determined by the position of the springs which were found at that junction, the course of Watling Street was determined by purely geographical conditions, and depended upon the position of the Dunstable gap. The site of the Dunstable settlement had been determined by the roads rather than *vice versa*. As regards the origin of megalithic buildings, he had begun to think we must look further east than Egypt, possibly in the Persian Gulf. A note recently published by Prof. Sayce in *Man* showed that the people of Akkad were interested in a tin-land at a very early date. It was possible, therefore, that the megalithic people were not Armenoids. The second stream of broad-headed invaders of this country were the "Beaker-folk," the centre of distribution of whose culture appeared to be Bohemia, or possibly Southern Russia, but it showed no trace of Ægean influence. He did not regard the authors' correlation of chalk and megaliths as convincing if the distribution in this country were taken as a whole. Mr. Crawford had suggested a more reasonable explanation of early settlement in pointing out that it depended upon the distribution of grassland and forest area. Chalk and limestone gave grassland areas, and were, therefore, the earliest to be peopled. Mr. Garfitt pointed out that the stone circles of Derbyshire did not comply with conditions suggested by the authors.

Prof. Elliot Smith replied briefly to his critics. He maintained that the position of the roads was determined by the occurrence of *suitable* flint, which was not found at any and every point; he failed to understand how a people such as the Elamites, who used brick and built no megalithic monuments, could have been responsible for the diffusion of the megalith; and pointed out that the Derbyshire stone circles were associated with copper.

Norwegian Meteorology.

(1) A PUBLICATION entitled "Nedbøriakttagelser i Norge," recently received from the Norwegian Meteorological Institute, contains information relative to precipitation at about five hundred Norwegian stations over periods of from 10 to 40 years ending 1915. The tables give mean and extreme monthly and annual values, as well as frequencies of occurrence of the various types of precipitation, while the charts show the geographical distribution of some of the tabulated elements. It will be seen that the days on which precipitation of 1/10 mm. or more is measured have a frequency of from 50 to 60 per cent. (per annum) in the western coastal regions, falling to 30-40 per cent. in the more easterly districts of the south and inland districts of the north. Great variability occurs,

however, over comparatively small areas. Whereas Osland (Bergen) reports 1 mm. or more on an average of 197 days in the year, Ulstad, which is also in South Norway, but further east, records this amount on only 54 days.

The introduction to "Nedbøriakttagelser i Norge" is devoted mainly to a discussion of wind screens for rain gauges. The results of experiments show a general increase in the amount of precipitation measured when screens are in use, especially in winter.

(2) "Om veir og vind i Trondhjem." In this paper, which runs to about seventy pages, M. K. Håkonson Hansen summarises and discusses meteorological observations at Trondhjem during 30½ years (1885-1915), and presents numerous tables of mean and extreme values, including, among other things, an