

mortality has not fallen but rather risen, especially in Spain, where the consumption of alcohol since 1919 has been very considerable. Population statistics show that the death rate of married men is less affected by the alcohol curve than that of widowers, divorced persons and unmarried men, who are all more susceptible to the influence of alcohol. Moreover, the specific mortality of Jews, whose sobriety is proverbial, scarcely fell at all as the result of reduced consumption during the War, in contrast with that of the Christian population of the same region in Prussia and at Budapest. Dr. Bandel also pointed out that remarkable variations might be found in the male mortality due to various causes under the influence of alcohol consumption, especially in the case of suicides and deaths from accidents, pneumonia, tuberculosis and diseases of the digestive organs.

Recent Archaeological Exploration in Great Britain

THE month of August, as usual, has been fruitful in results of archaeological exploration on sites in various parts of Great Britain. Among the more important, Dr. R. E. Mortimer Wheeler's excavation of the great earthwork of Maiden Castle provides abundant material bearing on the Roman and pre-Roman occupation of the site. The discovery of four gold coins of the fourth century and a gold ring as treasure trove have necessitated an inquest in which the Prince of Wales, as owner of the land, is interested. It is anticipated that these objects will be handed eventually to the Dorchester Museum for custody. Evidence of a stone age settlement has been found, and it is expected that the excavation of the ditch now being undertaken will throw light on the origin of the work. Another hill-fort site will be available for the inspection of members of the British Association attending the Aberdeen meeting. This is the prehistoric fort on Finavon Hill on the main road from Aberdeen to Forfar at the entrance of Strathmore, which recently has been under excavation by Prof. Gordon Childe. On the hill-top are the remains of ramparts, still 12 ft. in height, but which, it is estimated, once stood nearly 20 ft. high by 20 ft. thick. The stone coping exhibits the curious character of vitrification, due apparently to exposure to intense heat, occasionally found in these Scottish forts. In the course of the excavation, pottery, flint implements, spindle-whorls, broken animal bones and a little iron were found; but there is nothing which would make it possible to assign a date to the fort with any certainty. It is, however, thought to be pre-Roman, rather than Roman, in dating. A brief account of the exploration of the fort appears in the *Times* of August 30.

MORE satisfactory, though still not very precise, evidence of dating has been obtained in the excavation of a hill fort at Breddin Hill Camp, Montgomeryshire, where of three phases of occupation, two are certainly pre-Roman, while the latest is characterised by the occurrence of fragments of late Romano-British wares, probably made on the hill, though whether after the Roman evacuation is still undecided.

In an account of this, the second, season's exploration in the *Times* of August 31, it is stated that, up to the present, work has concentrated on the main entrance to the camp, which is of a somewhat unusual type. It is an incurved entrance, but is complicated by the fact that a rampart leads down from it on either side of the road of approach. Near the gate, the stone walling had been reinforced by some form of timbering, the main posts resting in holes. There were no guard chambers. This gate was evidently pre-Roman and showed no signs of reconstruction. At the back of the incurve of the eastern rampart was a hut contemporary with it, and nearby was another and later hut, representing the second phase. This, the six post holes suggest, may have been circular in form. A potsherd of Early Iron Age type points to a pre-Roman dating. Trenches dug across two of the ancient field divisions revealed that here, as elsewhere in Britain, the cultivation terraces are the outcome of the methods of primitive agriculture on the hillside. When ploughing caused the soil to travel downhill, the low retaining walls were gradually heightened with stones.

Russian Studies of the Stratosphere

WE learn from an article by Prof. P. A. Molchanov in the *Moscow News* that the recent All-Union Conference for the Study of the Stratosphere decided to call an international conference, with the same objects, to meet in the U.S.S.R. in 1936, the date to be fixed in relation to the total solar eclipse. The Soviet conference of last spring was mainly devoted to a review of the present state of knowledge of the problems of the extra-tropospheric regions of the atmosphere, with some references to their relation to the meteorological processes of the troposphere. Molchanov dealt with exploration by *ballon sonde* and *radio sonde*, and with the role of the stratosphere as stabiliser in atmospheric processes. Andriev discussed acoustic methods of investigation, and attention was specially directed to the prominence of the warm sound-reflecting regions during the polar night, at heights believed to be of the order of 30 km., and therefore likely to be accessible to the *ballon sonde*. Andriev also laid stress on the existence of air masses of unequal densities in the stratosphere, and urged their closer study. Ionospheric problems were treated by Tverskoi, who discussed the sources of ionisation in the atmosphere, and Bontch-Bruewitch, who reviewed the results of experimental soundings of the ionosphere (*NATURE*, Feb. 3, 1934, p. 175). Special enthusiasm was shown in the section of the conference dealing with cosmic rays, Joffe, Skobeltzyn and Eigenson being among the speakers. Detailed discussion of the 'stratostat' and the stratospheric aeroplane occupied the technical section. The conference, under the presidency of Vavilov, passed resolutions dealing with the world conference, as already mentioned, and with the special need of co-operation among Soviet, American and Canadian scientific workers in polar atmospheric researches.