

spirit has been exhibited in some quarters, and there seems to have been a reluctance to place the best interests of observational science above local considerations. New Zealand offers the advantage of a relatively high southern latitude, but it seems improbable that the astronomical observing conditions can surpass those of the Orange Free State and Transvaal, which have received extremely favourable reports from experienced observers who have worked there. Nevertheless, the claims of New Zealand should not be allowed to pass by without some examination. Mr. Crust points out that in Central Otago there is a treeless area at an elevation reaching 3,000 ft. where the rainfall is less than 15 inches a year, while the number of clear nights may be so high as 276 a year.

Psychological Aspects of Unemployment

Character and Personality, 1, No. 2, contains an article on an "Unemployed Village" by Paul Lazarsfeld. It is a summary of an investigation into the psychological aspects of unemployment carried out in Austria. The village selected was one of 1,500 inhabitants who were originally employed by a large textile factory which had been closed down for three years. The investigators took particular care in collecting their material, and proceeded by establishing personal contact through the organisation of sewing, gymnastic and ambulance classes. In addition, there were reports and observations of communal officials, co-operative shops and police denunciations. The conclusion they formed was, that concurrent with the extraordinarily low economic standard of the population, there had been a narrowing of psychological wants which had enabled the greater proportion of the people to carry on in a state of resignation. This was characterised by a general state of apathy which covered even politics—once their chief interest. No one concerned himself with the news of the day, or troubled to debate at meetings. The books borrowed from the library decreased by fifty per cent. Time had ceased to have significance or economic value. In Austria, unemployment benefit decreases according to duration of unemployment. This is of interest in connexion with the classification of people into three classes: Unbroken, Resigned, Broken, which ranking corresponded to the average monthly income of the group. The health of the children graded in three classes was also found to correlate with the percentage still at work in the family from which they came. These facts of immense sociological as well as psychological importance deserve wide publicity.

The Hoover Dam

CONSTRUCTION work on the Hoover Dam on the Colorado River is progressing satisfactorily. This dam will be the largest in the world and will hold up more water than any other artificial reservoir. A description of it is given in *Engineering* of September 1. The Colorado River forms, for some distance, the boundary between the States of Arizona and Nevada and farther down it separates the former from California. The Boulder Canyon project is a

Federal Government undertaking and as the Colorado watershed extends into Utah, Wyoming, Colorado and Mexico, seven States are affected. The water impounded in the dam will be used both for the production of power at the site and for irrigation purposes for lands at a lower level. The Imperial Valley in Southern California suffers from water shortage, from floods and from the silt they bring down. The great reservoir will enable the flow to be controlled and the avoidance of floods will prevent silt being carried down in troublesome quantities. It is estimated that silt is being deposited at present at the rate of 22 million cubic yards annually, the cost of clearing the canals amounting to more than a million dollars. The reservoir will cover an area of 145,000 acres and will have a capacity of 30,500,000 acre-feet. The scheme includes the construction of a new canal 80 miles long to the Imperial Valley. Unlike the present canal, none of it will be in Mexican territory. The hydro-electric power developed will be 620,000 horse power. The City of Los Angeles and the Southern California Edison Co. jointly will operate the power plant and distribute the energy in definite proportions to the city and various States and companies.

A Giant Electric Clock

ELECTRIC clocks have proved a great boon to many householders in the neighbourhood of electric mains. Their time-keeping qualities are far superior to those of ordinary clocks and as they need no compensating devices and require absolutely no attention, they are much more economical. They are beginning to be used widely for advertising purposes. In Paris a giant public clock has been erected on the Eiffel Tower. It is about half-way up the tower and has two dials each 20 metres in diameter. Although it shows the time in the usual way, it is not fitted with movable hands. Radial rows of electric lamps are provided and these are switched on one after the other and thus indicate the time. The markings of the dials at the five minute intervals are composed of illuminated circles made of green and red lamps. It is thus quite easy to distinguish the position of the main 'numerals'. At the quarter hour intervals the minute hand position is marked by sixty radial rows of red lamps which start at the centre and run to the edge of the dial. The hours and half-hour intervals are indicated in a similar way by 24 rows of blue-white lamps. In addition to the indication of the time given by the 'hands', a powerful light shines for two seconds at each quarter of an hour. The initiative for the erection of this novel clock is due to M. André Citroën. It also serves as a conspicuous advertisement; big vertical 'Citroën' inscriptions appear on the sides of the tower not occupied by the dials. They light up each time the minute hand of the clock reaches a five minute mark.

Fresh Fruit Supplies in Great Britain for 1932

FRESH fruit from the various parts of the British Empire formed a larger proportion of the total imports into Great Britain than ever before, according to the report issued by the Empire Marketing Board