work, consisting of distinctive permanent marks at suitable intervals and engraved with precise position, height and other relevant data to serve as a local starting point for surveys of all kinds.

Agricultural Policy in Jamaica

THE report of the Agricultural Policy Committee of Jamaica appointed in May 1944 has now been published (Kingston, Jamaica : Dept. of Agriculture. 1*s*.). The terms of reference were wide, including the definition of a policy for the utilization of land resources, a policy for agricultural development, proposals for co-operation between producers and the Government, and the co-ordination of all Government services concerned with rural development. Jamaica is entirely dependent on the land for sustenance, and there are no manufactures based on imports of raw material. The total available land is inadequate for the needs of the present population, quite apart from the fact that much of the land has been misused and that the capital essential for large-scale rehabilitation is lacking. In its report, the Committee shows the urgency of the situation and puts forward a number of specific proposals to remedy it. Among the recommendations made is the establishment of a land authority for the purpose of bringing all land into proper use, and the suggestion that relief employment should be directed into productive channels, such as improvement in water supplies, soil conservation or afforestation. Emphasis is also laid on the need for progressive policies on questions of housing and education. As regards economics, colonial preference and long-term guarantees as to markets and prices are considered essential for the future prosperity of Jamaica, while to promote a general increase in efficiency, practical proposals are brought forward for improving organisation and co-ordination of Government departments.

Field Tests of Paludrine

SOME preliminary results of the effects of paludrine, the new synthetic antimalarial drug (see *Nature*, **156**, 596 ; 1945 ; and **157**, 128 ; 1946), are reported in the *Lancet* (Feb. 23, p. 278). Brigadier Hamilton Fairley and his colleagues in Australia have fully confirmed the results of studies made in England, and their work indicates that small daily doses of paludrine effectively suppress both benign tertian and malignant tertian malaria. Benign tertian malaria, however, developed in some subjects who were receiving daily doses of paludrine for three weeks after the last bites of the infected mosquitoes. A single dose of paludrine given weekly for an indefinite time after the primary attack of malaria has been controlled will prevent relapses of benign tertian malaria until it is eradicated. The fact that paludrine is an effective clinical cure of attacks of benign tertian, malignant tertian and quartan malaria was also confirmed. Paludrine did not, however, prevent the production of gametocytes of either *Plasmodium vivax* (benign tertian malaria) or *P. falciparum* (malignant tertian malaria), the structure and number of which were not materially altered by it. Nevertheless, the gametocytes did not mature when they were taken in by mosquitoes from subjects who were receiving paludrine, although, a week after the drug was discontinued, the gametocytes could infect mosquitoes. In addition to this, when mosquitoes were allowed to feed on a subject who was taking paludrine and then were allowed to complete their meal upon a subject who was harbouring gametocytes but was not taking paludrine, the mosquitoes did not become infected. This suggests, the *Lancet* says, that paludrine acts upon the early stages of development of the malarial parasites in the mosquito. This action on the developmental stages in the mosquito did not occur when the mosquito had been infected some days before the meal of blood taken from the subject who was receiving paludrine. One interesting result obtained was the observation that 200 c.c. of blood taken from subjects known to be infected with benign tertian malaria did not infect volunteers while the donors were taking paludrine. Quinine and mepacrine will not prevent infection in similar circumstances. A re-examination of the toxicity of paludrine has shown that, within the wide range of effective dosage, its toxicity is negligible. The volunteers from the Australian Forces who allowed themselves to be experimentally infected and so made possible the work at the Australian Army Medical Research Institute at Cairns, Queensland, deserve our deepest gratitude.

Medical Use of Sulphonamides

THE second edition of the Medical Research Council's War Memorandum No. 10, entitled "The Medical Use of Sulphonamides" (H.M. Stationery Office, 1945. 1*s*. 3*d*. net), by various authors and edited by F. Hawking and F. H. K. Green, incorporates the advances made since the first edition was published in 1943 in our knowledge of the uses of sulphonamides, and includes sections on the use of three of the many sulphonamides which have been introduced since the first edition of the memorandum was printed. These are sulphamerazine, phthalylsulphathiazole (also called sulfathalidine ; see also *Lancet*, 544, April 22, 1944) and marfanil (also called sulphabenzamine, which was used extensively by the German army and is now being manufactured by R. F. Reed, Ltd., Barking, Essex ; see also *Nature*, **153**, 707 ; 1944 and **154**, 795 ; 1944). Reference to a few additional members of the sulphonamide group of drugs is made under the headings of the infections for which they have been recommended. A section dealing with the relationships between penicillin and sulphonamide treatment is a useful addition to the memorandum. The spheres of action of these two forms of treatment overlap, and the notes given in this memorandum indicate the conditions which should be treated with sulphonamides and those for which penicillin, if it is available, should be used. The authors of the memorandum think that, when more penicillin can be obtained, it will replace sulphonamide more frequently, because it is usually more effective against infections which are also susceptible to sulphonamides. The memorandum states, for example, that penicillin has revolutionized the treatment of gonorrhœa, so that the instructions given for the sulphonamide treatment of this infection apply only when penicillin cannot be obtained or when the response to it has been unfavourable. A valuable minor feature of the memorandum is its list of the synonyms of the various sulphonamides.

A Star Atlas for 20°–40° N.

A STAR atlas, which has now run into the fourth edition, has been prepared by Dr. H. E. Hurst, M. R. Madwar and A. H. Samaha, and published by R. Schindler, Cairo. It contains six maps which enable readers to identify the stars visible in Egypt, North