

### The Decline of Population

A DEBATE on the prospective decline of population took place in the House of Lords on June 21. Lord Samuel pointed out that whereas the number of live births per 1,000 women of child-bearing age was 129.8 in 1891, at the census of 1931 it had fallen to 64.3, that is, almost exactly half in the forty-year period. In the earlier period one out of every four married women between the ages of fifteen and forty-five years gave birth to a child in any particular year, while in 1931 this was only true of one in eight. Counterbalancing effects, the fall in the death-rate and the change from emigration to an inward movement of people, was far from equalling this decline in the birth-rate. He advocated family allowances as a means of diminishing the cause and desire for small families. Other measures suggested were housing estates for larger families and removal of the marriage bar in certain occupations such as bank clerks and women teachers. He advised the appointment of a Royal Commission to inquire into the whole question. Lord Snell said that the real problem is qualitative rather than quantitative and that the question of age proportion is most important. Lord Dawson of Penn said the prospective fall in population is too great even if we have regard to quality, as the country has failed to reproduce itself since 1925 and to-day 100 mothers only produce 76 girl babies or future mothers. Contraception is a specialized example of man's gradual control of natural sources and is spreading to all classes and creeds. It should be seen that parents willing to bear their quota of children should not be penalized. In tenement blocks there should be crèches, nursery schools and other necessities, and the health services should be linked up into a connected whole.

LORD STAMP said there is little popular apprehension on this subject because we are still living under the delusion of continual expansion. He pressed for a quinquennial census to provide the necessary information for a Commission. Boys between the ages of thirteen and eighteen years in England and Wales in 1938 numbered 2,100,000. In seven years this will fall to 1,787,000. The effect of this tendency is already being felt in schools. The Bishop of Norwich remarked that his predecessor a century ago had thirty-seven children while that Bishop's two brothers each had thirty-two children. Households of the better stock now have small families, for one reason, because of the necessity for domestic help in rearing a family. Lord Derwent said family allowances would be inadequate without propaganda, and that the birth-rates of France and Italy continue to decline. This is principally from uncertainty regarding the future. The Archbishop of York said that while the older men who have been out of work prefer to get back to work even if their wages amount to less than their relief, this is by no means true of the younger men. They should ensure in some way that a man in work always obtained more than a man without work. Lord Templemore put forward the view that some forecasts anticipate

an earlier decline of population than appears justified. For the first time since 1873, the birth-rate began to rise in 1934 and this has continued for the last five years. But too great value should not be placed on that. As regards family allowances, public opinion has not yet crystallized. The Population Statistics Act, 1938, would supply information which should throw light on the incidence of fertility in different sections of the population.

### Students and Military Training

THE adoption in Great Britain of the principle of conscription and the calling up for registration of youths between the ages of twenty and twenty-one years for a period of military service has raised the question of the position of university students. As regards those proceeding to universities after October next, Mr. E. Brown, Minister of Labour, stated in the House of Commons on June 22, that at a meeting held under the auspices of the Ministry between representatives of the Committee of Vice-Chancellors and Headmasters, together with representatives of the departments concerned, it was agreed unanimously to recommend that such boys should be given the option of postponing or anticipating their liability to undergo military training. Mr. Brown said he intended "to put this agreed conclusion into operation, subject to reviewing the position in twelve months' time in the light of experience, when I propose again to seek the advice and assistance of the representatives of the universities and the schools". He also agreed to bear in mind the further recommendation that those under the age of eighteen years on January 1 of the year in which they wish to take their training should not be allowed to anticipate their military service.

### Biological Expedition to Jamaica

A LARGE expedition is leaving the University of Cambridge for Jamaica this summer. It is financed by the Royal Society, the Royal Geographical Society, Mr. J. A. Steers, Gonville and Caius and St. Catharine's Colleges, Cambridge, and the Universities of Cambridge, Manchester and Sheffield. The members of the expedition are Dr. V. J. Chapman, the leader, university demonstrator in botany, Cambridge; Dr. H. Hamshaw Thomas, reader in plant morphology, Cambridge; Mr. J. A. Steers, lecturer in geography, Cambridge; Mr. J. S. Colman, lecturer in zoology in the University of Sheffield; Mr. W. R. Philipson, of the British Museum (botany); Mr. K. R. Sporne, of Downing College; Mr. J. Lofthouse and Mr. D. J. Crisp, both of St. Catharine's College. The main party is proposing to examine shore-line development in relation to the formation of coral reefs and cays and also to the salt ponds, and it is intended to make a comparison of the cays and the mode of their formation with similar structures in the Great Barrier Reef. This will be facilitated by the presence of two members of the Great Barrier Reef Expedition—Mr. Steers and Mr. Colman. Dr. Chapman will examine the botanical side of this problem, and is intending to devote particular

attention to the mangroves. A party consisting of Dr. Thomas, Mr. Philipson and Mr. Sporne is going to spend a month in the rain forest where each will carry out research on his own problems: Dr. Thomas working on the Pteridophyta, Mr. Philipson collecting, because he is one of those appointed to complete the late Dr. Rendle's "Flora of Jamaica", and Mr. Sporne investigating flower morphology. The whole expedition will return at the beginning of October with the exception of Mr. Philipson, who will stay on for a few more months.

#### Earthquake on the Gold Coast

EARTH tremors shook the whole district of the Gold Coast, Ashanti, Dahomey and Western Nigeria in West Africa from about 7.10 p.m. on June 22 to 4 a.m. on June 23. It is not yet clear whether there were several shocks of approximately equal dimensions from one or several closely situated epicentres, or whether there was one large earthquake with precursors and aftershocks. With the evidence available at the moment, the latter appears to be the most probable as the greatest impact of the earthquake was felt at Accra (5° 30' N., 0° 10' W.), Cape Coast (5° 5' N., 1° 0' W.), and Sekondi (4° 53' N., 1° 48' W.) at 7.15 p.m. on June 22. If the intensity of the shock was the same at each of these three places, as the immediately available evidence seems to indicate, then the epicentre was near 5° N., 1° W. and the focus rather below normal, or it was, say, 3.5° N., 1° W. in the Gulf of Guinea and depth of focus normal. Further evidence from the area, but more particularly the evidence of seismograms, will decide this. Many public buildings, banks, offices and native houses in the area have been damaged or destroyed, killing seventeen people at Accra, twenty-nine at Cape Coast and twenty at Sekondi, besides injuring several others. At Accra the electric lighting system was interrupted, but this was quickly remedied. An earthquake of these dimensions is an exceptionally rare occurrence, if not unknown, near Accra, and according to recent catalogues of epicentres there is no active epicentre anywhere near the present one. It is unfortunate that there are no seismographs situated nearer the probable epicentre than Algiers, Johannesburg, Cape Town and Nairobi, though the shock appears to have been sufficiently intense to have been registered at these, and by seismographs at even greater epicentral distances.

#### Entomological Control of Lantana

THE rapid spread of Lantana, a garden escape, in Northern Queensland has brought it amongst the serious weed pests for which the Council for Scientific and Industrial Research, Australia, is seeking methods of control. In 1935 studies of *Teleonemia lantanae* were commenced in Fiji, where this bug had been introduced from Mexico, its native home, by way of Hawaii. As it proved harmless to any Australian plants of economic importance, it was established under quarantine conditions in Canberra in 1936. The first liberations were made late in that year in

the Northern Rivers area of New South Wales, and afterwards near Atherton in Queensland, and at Rockhampton. Disappointment followed; the bugs seemed to have disappeared, until in April of this year they were reported in the Atherton district in enormous numbers over an area of some twenty-four acres. Leaves were falling from the Lantana bushes, flowers had been destroyed and in some instances up to two feet of the ends of branches had been killed as the result of the bug feeding on them. At Rockhampton also there are signs of establishment. Undue optimism is to be deprecated, and it is unlikely that similar success will be attained to that of *Cactoblastis* on prickly pear. It still remains to be seen whether *Teleonemia* can maintain itself in large numbers and whether continuous defoliation will destroy Lantana; nevertheless, the outlook is promising.

#### Exhibition of New Textile Fibres

AN exhibition of new textile fibres has been arranged at the Science Museum, South Kensington, and will be opened on July 3 for two months. To-day fibres possessing many of the properties of natural wool are manufactured from skimmed milk. The exhibit illustrating the stages in the manufacture of casein yarn includes several examples of fabrics, woven on worsted machinery. Another group of exhibits includes yarns and materials as produced by the viscose and cellulose acetate methods. These are generally termed rayon or 'artificial silk'. By modification of the spinning processes it is now possible to manufacture exceptionally strong yarns of this material, and some of the applications are illustrated by such articles as a section of a motor tyre showing the cord reinforcement, 'doped' aeroplane fabric, fine gauge hose, sail cloth, etc. An interesting American exhibit shows a new type of cellulose acetate rayon in which the fibre is characterized by an inherent stabilized crimp, producing a yarn the behaviour of which is comparable in some respects to that of wool. One of the most important textile discoveries of recent times has been that of nylon. This is a truly synthetic yarn and is the first textile fibre prepared wholly of raw materials from the mineral kingdom. Although derived from coal, air and water, nylon can be produced in filaments of exceptional strength or as fine as a spider's web, yet having elasticity and lustre. Another striking development is to be found in the use of glass fibres. Objects showing this class of fibre include woven and knitted fabrics made entirely of pure glass with a collection of articles indicating the commercial applications. An exhibit of interest from Tokyo shows fibre and yarn produced from seaweed. Jute, sisal, and hemp are each represented, with examples of the latest types of yarns and materials produced from these fibres.

#### British Museum (Natural History): Acquisitions

RECENT acquisitions in the Department of Zoology include a collection of Northern Rhodesian mounted heads and skulls of ungulates made chiefly at Mpika