

the extreme length characteristic of the Nordic skull, in which it exceeds any of the dolichocephalic Mediterranean skulls, is also a character of the British neolithic skull. He argues, therefore, that there is no evidence in skeletal remains for the early presence of a Mediterranean element in Neolithic Britain, but that this has been inferred on cultural evidence only. It will be noted that the important character of pigmentation does not enter into the argument; but as has been pointed out on more than one occasion, the argument from pigmentation in the classification of the prehistoric races of Europe rests solely on inference from modern distributions, until in the historic succession we come to the evidence reported in the classical writers.

Colonial Medical Reports

MAJOR P. GRANVILLE EDGE read a paper before the Royal Statistical Society on January 19 entitled "The Demography of British Colonial Possessions", in which some of the outstanding details to be found in Colonial medical reports were summarized. It was pointed out that the British Colonies comprise upwards of fifty distinct Governments, with territories exceeding an area of two million square miles, of which more than nine-tenths lies wholly within the tropics, inhabited by a bewildering medley of races, religions, languages and customs. The bulk of the people of British tropical Africa are native-born Africans, but in British Malaya the Chinese outnumber the indigenous Malays, and in the British West Indies no traces of the original Carib inhabitants survive, the present population being composed of descendants of African slaves, East Indians, Europeans and other inter-racial mixtures. The Colonial medical reports contain records of population, births, and deaths, so far as these are known, and in addition survey the records of sickness in the Colonies with the view of discovering and removing the predisposing causes of various diseases. The incidence in different parts of the world of such diseases as malaria, helminthiasis, venereal affections, dysentery, sleeping sickness and tuberculosis were discussed by Major Granville, and the difficulties connected therewith commented upon. The public health services, wherever located, may be regarded as fighting organizations engaged in combating insanitary conditions, in raising defences against the invasions of disease, and in attempting to stave off the approaches of death. Without these services detailed sanitary knowledge cannot be acquired, and without such knowledge commercial and other development of the Colonial Empire must be precarious and costly in the face of unrealized menaces to life and health.

Magnesium Alloys for Aircraft

As the standards of aircraft performance are raised, possible saving of weight is becoming of ever greater importance, so that more and more interest is being taken by aircraft constructors in metals lighter than aluminium. On January 14, Dr. C. H. Desch, superintendent of the Metallurgical Department of

the National Physical Laboratory, discussed, before the Royal Aeronautical Society, recent work on magnesium and other light alloys, much of which has been carried out at the National Physical Laboratory. Magnesium is too weak a metal to be used in the unalloyed state, and the metals which may be added to it to produce strong alloys are limited in number. In fact, taking all the factors into account, only aluminium and cadmium are suitable for alloying in comparatively large quantities, although calcium, cerium, nickel, cobalt and manganese have proved useful in small quantities. To those who have only known magnesium in the form of ribbon or powder for use in flashlights, it is rather surprising to find that magnesium alloys are remarkably easy to cast. This comes about, Dr. Desch said, from the fact that molten magnesium has very little power of dissolving gases, so that magnesium alloys do not suffer from porosity caused by the liberation of gases at the moment of freezing. It is necessary to use a suitable flux and a protective atmosphere during pouring. These conditions are now well understood, and no difficulties are experienced in the foundry. In annealing processes similar protection is necessary, and the special technique adopted has resulted in making a magnesium alloy foundry a remarkably clean and inoffensive place. Exhaustive search at the National Physical Laboratory for magnesium alloys capable of age-hardening has suggested that those containing silver are the most promising. The fact that silver is relatively costly is of little importance, since in the articles of the type produced the cost of manufacture is much greater than that of the material used.

Afforestation in the Lake District

AN interesting pamphlet has been issued by the Forestry Commissioners entitled "Afforestation in the Lake District" (London: H.M. Stationery Office, 1936). The pamphlet embodies the report by the Joint Informal Committee of the Forestry Commission and the Council for the Preservation of Rural England which was set up early in 1935. The Committee commenced its task with the recognition that large-scale afforestation and the preservation of areas of typical natural beauty are both necessary on national grounds, and that the land available for both purposes is limited. This does not entirely represent the actual position of affairs. For the public in some cases in the past have not only been against new afforestation work, but also have declaimed at old woods, such as are to be found in some of the enclosures in the New Forest, for example, being touched; in spite of the fact that it is evident that the old trees cannot last for ever. Towards the end of 1935, the Commissioners acquired an estate of 7,000 acres in the valley of the River Esk and the adjacent valley of Duddon, and prepared to plant. Objections were made by the public to the planting of conifers in the two valleys, especially in Upper Eskdale. It was agreed that some 440 acres of plantation land in Upper Eskdale should be omitted from the planting scheme, the Commissioners

undertaking to pay special attention to amenity in afforesting the remainder of the plantable ground. The total area of the estate which will be ultimately planted is less than 2,000 acres of the 7,000 acres purchased. It has become evident that afforestation in the Lake District offers considerable difficulties, as a countryside can be completely changed by stretches of woods, and especially coniferous woods. With this object in view, the Joint Committee has recommended that a central block of some three hundred square miles in extent should be excluded from afforestation work.

British Films and the Cinema

THE Committee appointed by the Board of Trade to consider the position of British films in view of the approaching expiry of the Cinematograph Films Act, 1927, has now issued its report (Cmd. 5320. London: H.M. Stationery Office. 9d. net). It finds that in some important respects the situation is still the same as in 1926. The much greater home market available for United States films, which is represented by some 11,500 picture-houses and a seating capacity of about 10,000,000, as against 4,300 cinemas in Britain and a seating capacity, including that of the Dominions, of less than 6,000,000, offers a security encouraging a flow of capital to the American industry which finds no parallel here. The United States accordingly occupies a commanding position, contributing all but 25 per cent of the films shown in Great Britain, and the Committee was unanimous in its decision that the quota system should be continued and the quotas, under certain conditions, increased. The detailed proposals of the report are accordingly designed to deal with admitted flaws in the present system rather than to modify its principles. A quality test is proposed to restrict the deplorable output of bad films made simply to satisfy quota requirements. An increase in the penalty for blind booking, which is to apply to renters and not to exhibitors, removal of restrictions on advance booking but prohibition of block booking, and the application of the quota system to short as well as to long films are among other recommendations of the Committee. It is suggested that long and short films should be judged by different standards, and stress is laid upon the value of the short film as an opportunity of experimenting with new ideas within reasonably safe financial limits. The ultimate aim of the measures proposed is to reach a quota of fifty per cent in the next ten years, and to give effect to its recommendations and administer the provisions of the new legislation required, the report recommends the constitution of a Film Commission of members entirely independent of any professional or financial interest in the industry.

Architectural Lighting

A PAPER by R. O. Sutherland published in *Light and Lighting* of December gives a history of the progress made in architectural lighting during the last ten years. He states that this kind of lighting

received great inspiration from the French Colonial Exhibition in 1925. As a result of the illumination shown at this festival, ornamental features in the form of tiles and richly decorated panels in moulded glass were popularized in buildings, especially those used for catering and entertainment purposes. The floral character of this lighting soon gave way to a more restrained treatment. Plain sheet opal glazing was largely substituted for moulded glass. This made it economical to have large areas of lighted panels. Once the idea of converting an architectural element into a lighting feature was established, it rapidly became a typical method of architectural lighting technique. A photograph of the lighting of the Egyptian Hall in the London Mansion House, and of the lighting in the library of the University of Cambridge, show how the architectural treatment is emphasized in a simple and dignified way by the illumination. To Londoners and visitors to London the lighting of some of the escalators on the underground railways is of interest. The barrel ceiling is lighted from standards placed at 8-foot intervals, each containing a 100-watt lamp in a suitable reflector. The illumination is ample for the needs of the traveller, and is sufficient for the vault sides to be used as advertisement space. In the lighting of the gallery of the Shakespeare Theatre at Stratford-on-Avon, the acoustic panels at the back of the auditorium are also utilized as light reflectors.

Timber for Wood-Turning

AN interesting, and, from the point of view of encouraging small local industries in the countryside, practical report has been issued by the Forestry Commission (H.M. Stationery Office, 1936), entitled "On the Demand for Timber in Wood-Turning in Great Britain". The investigation was carried out in 1935, when 438 firms were visited, all but 14.8 per cent being wood-turners. The information upon which the report is based comes therefore from 373 firms ranging from single-handed turners who have one room or a small shed fitted up as a workshop, to mass-production factories with a hundred or more automatic or semi-automatic machines. Some of these latter specialize in the production of a single commodity, such as heels for shoes, legs for chairs, bobbins for textile mills, rollers for mangles, the manufacture of tool handles, or bungs for beer-casks; others are general turners, fabricating a wide variety of products. The majority of the firms are turners only. The last census returned 56,930 persons, including pattern makers (the latter being chiefly of wood), as employed in the United Kingdom in wood-turning. It is difficult to obtain figures of the actual consumption of wood in this industry; but, from information supplied, approximately two hundred firms are using 6,000,000 cubic feet of timber in wood-turning annually, of which about 53 per cent is home-grown and 47 per cent imported.

Agricultural Meteorology

MR. J. W. HOPKINS has recently published a paper, entitled "Agricultural Meteorology: Some