adoption of the 40-hour week are less convincing and make partisan reading. The whole question is discussed too much apart from the fundamental problems of distribution and social economics to which reference was made in our leading article.

## Science and the State in Germany

THE publication in the Times of July 24, 25, 27, and 28, of extracts from Herr Hitler's book on the eve of its publication in an abbreviated translation, and the simultaneous account by the Times correspondent on July 27 of a Bill approved by the German Government for the compulsory sterilisation of those "considered in the light of medical science as it is understood to-day to be by heredity unfit" give a more illuminating view of the real significance of the Nazi movement than has yet appeared. That the Nazi leader stands self-revealed as ill-balanced, fanatical and otherwise abnormal is immaterial. What is supremely significant is that he has come into power on a wave of popular discontent with present-day social, political and economic conditions which is sufficiently intense to submit to previously unheard of restrictions for which a 'scientific' backing is advanced. Unfortunately, not all the Nazi measures can be supported by argument as sound scientifically as that upon which the sterilisation of the unfit is advocated. Herr Hitler's views of 'Aryans' and Jews and their qualities and character, to accord with which the German race of the future is to be moulded, belong to a 'science' which would be out of date even if it had not failed to justify itself when submitted to the test of scientific analysis. The German people, however, are not alone as victims of the world crisis, and if, as events seem to portend, the world is moving towards a solution of its difficulties through the application of scientific method to its problems by means of a more highly organised form of government than is possible in a pure democracy, it cannot be too widely appreciated outside scientific circles that the science which will provide the solution of our difficulties is not reactionary and does not exclude eminence in any field, whatever its racial origin-in short, it is not the 'science' of Herr Hitler.

# Ross Institute and the London School of Hygiene and Tropical Medicine

PROPOSALS for the amalgamation of the Ross Institute and Hospital for Tropical Diseases with the London School of Hygiene and Tropical Medicine have recently been issued. Argument in favour of amalgamation centres around the promotion of work for the good of the Empire and the prevention of overlapping of the activities of the two bodies. As a result of the amalgamation, a permanent memorial to Sir Ronald Ross will be established in the School in the form of a department to be called the Ross Institute of Tropical Hygiene. Laboratory accommodation will be provided for Sir Aldo Castellani, at present director of tropical medicine and dermatology at the Ross Institute. He will also be appointed to the staff of the School with the title of director. Sir Malcolm Watson, at present director of tropical hygiene and principal of the Department of Malaria Control at the Ross Institute, will be appointed director of tropical hygiene at the School. The India branch of the Ross Institute will become an intrinsic part of the amalgamated body, and Dr. G. C. Ramsay will continue as principal of the India branch. Major Lockwood Stevens, organising secretary of the Ross Institute, will join the School in a similar capacity.

## Imperial Standard Measures

THE statutory decennial comparisons of the Imperial standards of length and mass with their Parliamentary copies became due in 1932. On the last occasion, in 1922, they were carried out at the Standards Department of the Board of Trade under the supervision of Mr. J. E. Sears, Jr., the superintendent of the Metrology Department of the Laboratory, who was at that time acting also as deputy warden of the standards. By a subsequent agreement between the Board of Trade and the Department of Scientific and Industrial Research, it was arranged that the National Physical Laboratory should in future undertake the whole of these comparisons on behalf of the Board. The present series of comparisons is accordingly being carried out at the Laboratory. The primary object of the comparisons is the verification of the Parliamentary copies of the Imperial Standard Pound and Yard, any one of which could be used to replace the corresponding Imperial standard should it suffer loss or destruction. There are for each standard five Parliamentary copies; one is immured in Westminster Palace, and one each of the others is in the custody of the Royal Society, the Mint, Greenwich Observatory and the Standards Department.

In addition to this work, a redetermination of the relationship between the pound and the kilogram will shortly be made, following the scheme which was adopted for the first time in 1922-23. The International Bureau of Weights and Measures, Sèvres, has been invited to undertake a share of the comparisons in this part of the programme. Finally, the principal reference standard pounds at the National Physical Laboratory, together with an auxiliary standard pound belonging to the Board of Trade, will be verified by comparison with one or more of the Parliamentary copies of the pound; a corresponding verification of kilogram standards from the Laboratory and the Board of Trade will also be made. The weighings are being made on a new balance which has recently been constructed at the Laboratory for precision weighings of the highest accuracy. This balance is contained in an inner vault, and all its controls are operated from outside, so that the observer does not enter the vault during any one series of weighings. The indications of the balance are recorded optically on a scale placed some seven metres away.

# Empire Cotton Growing Corporation

THE director of the Empire Cotton Growing Corporation, Sir James Currie, stated at the meeting of

the Administration Council on July 26 that it has been decided to ask all the experiment stations in the Union of South Africa and in Southern and Northern Rhodesia to co-operate in a common plan of campaign for an intensive attack on the problems of insect pest control. A first step is to be the recording of the activities throughout the whole season of the different insects that damage cotton crops. A reliable technique for this has been worked out at the Barberton Station. It was also announced that it is intended to hold a conference of workers on cotton-growing problems in London next summer, similar to that which was held at the Shirley Institute in 1930. Mr. H. Niblett, one of the members of the Oversea Mechanical Transport Directing Committee, gave a short description of the work of that Committee. In 1927 the Corporation suggested to the Colonial Office Conference that the problem of motor transport in the cotton fields is so important that the investigations should be extended and the work financed by the Empire governments concerned. The Oversea Mechanical Transport Council and Directing Committee were appointed as a result, and are now testing two motor transport units, each consisting of an 8-wheeled tractor and two 8-wheeled trailers capable of handling a useful load of 15 tons. The report of the Executive Council has recently been published (Empire Cotton Growing Corporation, Millbank House, 2 Wood Street, Millbank, London, S.W.1.)

### Improvement of Farm Crops

At the annual general meeting of fellows of the National Institute of Agricultural Botany at Cambridge on July 27 the chairman of the Council, Mr. E. W. K. Slade, presented the John Snell Memorial medal to Dr. Kenneth M. Smith, entomologist of the Potato Virus Research Station, in recognition of his valuable research work on the virus diseases of the potato. Mr. Slade afterwards described some parts of the work of the Institute which particularly appeal to him as a practical grower. Crop improvement work is impossible until agriculturists know the material they are dealing with. Thanks to the Potato and Cereal Synonym Committees farmers are unlikely in future to be misled by a fine new name into buying an old variety which they have already given up. Mr. Slade welcomes the active co-operation which the Institute is receiving from the seed trade; by doing away with fictitious names, and putting on the market pure seed of improved varieties, each under a single name, merchants contribute greatly to the general welfare. The principal part of the Institute's task is to find out which of the new varieties that come to it are best in yield and quality and in which districts they should be grown. This is work which farmers cannot do for themselves. Many crops are being studied and a feature of this season is the inauguration of widespread trials of mangolds and swedes with the help of the seed trade. Mr. Slade finally referred to the assistance given by the Official Seed Testing Station in the scheme for the registration of wild white clover seed.

AN International Congress for Scientific Management is to be held in London in 1935 and the Prince of Wales has consented to be its patron. The subjects for discussion include the introduction of management principles and practice in undertakings of various sizes, methods of controlling production by the comparison of actual results with forecasts, examples of the application of scientific management in problems of distribution, standardisation in agricultural development, methods of selection and training for higher administrative positions, and scientific management in the home. A meeting of the organising council of the Congress, under the chairmanship of Sir George Beharrel, was held recently at the offices of the Federation of British Industries and it was announced that a representative executive committee is being formed. It will be recalled that early in the year a manifesto on "The Management Factor in Industry" was issued over the signatures of many well-known men of science and others (NATURE, January 14, p. 52), in which the field surveyed was similar to that of the forthcoming Congress.

### Birds within Cities

SINCE Gilbert White's recording of the housemartins nesting in Fleet Street and the Strand, ornithologists have never failed to interest themselves in birds about cities. A day-to-day census of the birds of the Liverpool Cathedral Wild Birds' Sanctuary, established in 1927 in an old quarry, now a cemetery, in the heart of Liverpool slums and five miles from the nearest trace of open country, has recently been completed by Mr. Eric Hardy. Thirty species are recorded : house-sparrow, starling, robin, blue tit, hedge-sparrow, song thrush, blackbird, wren, greenfinch, domestic pigeon, great tit, missel-thrush, chaffinch, rook, linnet, redwing, herring-gull, common gull, kestrel, jackdaw, cole-tit, yellow-hammer, goldcrest, chiffchaff, willow-wren and whitethroat, the first twelve of which nest. The goldcrest is now a regular spring passage migrant since the establishment of food tables, etc., though the first specimen was recorded in March, 1931 (Proc. Liverpool Nat. Field Club, 1931, p. 41), while the willow-warbler soon established itself as a regular passage migrant, spring and autumn (Liverpool Review, Annual Report, February, 1933).

FOR London, Mr. A. H. Macpherson recorded a list of 126 species, of which 21 breed regularly, 8 have been known to breed during the present century, the remainder being visitors, 20 of which are regular and 77 occasional, in an area extending  $2\frac{1}{2}$  miles due north and south of Charing Cross and 4 miles east and west. In *British Birds*, March, 1933, Mr. Macpherson added the puffin, from Finsbury Gardens 1932, the brambling from specimens seen in Kensington Gardens, April 1932, the pied flycatcher in the grounds of the Natural History Museum, April 26, the green woodpecker in St. James's Park, August to November, and the scaup on the Serpentine in February, 1932. The eighteenth