

season is expected to show a reduction in South Africa, Australia, and New Zealand, and although there may be slight increases in South America, the United States, and Great Britain, the aggregate production of these countries will probably be about 7 per cent less than last year. The increase in prices reflects not only this reduced production but also a real increase in consumption in all the world's textile centres. Along with this, unemployment in the woollen and worsted trades in Great Britain is down to 8 per cent, a half of what it was a year ago. The report gives details of wool trade and manufacture in many countries, mentioning some interesting developments. For example, "Active steps are being taken, with Japanese co-operation, to encourage sheep-raising and wool production in Manchuria with the object of securing for Japan an alternative source of supply" (most of her wool at present coming from Australia). Recovery in the mohair industry is also reported; the development of Empire trade may be seen in the imports into Great Britain, almost all of which now come from the Union of South Africa although in 1928 half came from Turkey. Turkey's best customer is now the Soviet Union.

Preservation of an Old English Village

WEST WYCOMBE is a seventeenth century English village which has recently come into the possession of the Royal Society of Arts and been reconditioned in such a way that its ancient beauty has been preserved and at the same time the amenities of present-day life have been introduced (Weir, W. and Hill, J. B. "Account of the Reconditioning of West Wycombe—Buckinghamshire." *J. Roy. Soc. Arts*, 81, 893-910; 1933). In 1929, when the transfer was made, the local sanitary authority had already served notice of repair on some fifty cottages. The work of restoration has been carried out under the supervision of one of the authors, and the whole village is now let to tenants on agreement. Most of the property has been thoroughly reconditioned, inside and out, and the remaining twenty cottages have been partly reconditioned. Main water supply, main drainage, electric light in some cases, fenced gardens and wash-houses have been provided, and the interiors of many houses have been altered to give larger and better arranged rooms, with more conveniently placed doors and better lighting. The final result is a beautiful group of model cottages, showing what can be done for the preservation of old property as an alternative to its demolition. The series of photographs taken before and after reconditioning afford striking proof of the success of the experiment, and the brief accounts of the work carried out on different houses illustrate the diverse ways in which difficult problems were approached. The Royal Society of Arts is to be congratulated on the preservation of this old English village, together with the improvement in housing conditions that has been effected.

The Exceptional Summer of 1933

At the meeting of the Royal Meteorological Society held on December 20, Dr. J. Glasspoole read

a paper entitled "The Exceptional Summer of 1933". The sunshine recorded over the British Isles exceeded the average in each of the four months June-September, the mean excesses being 21, 17, 35 and 33 hours respectively. During this period many places in the south-east of England registered more than 1,000 hours of bright sunshine, nearly 200 hours more than usual. The total sunshine during these four months fell short, however, of that recorded during June-September, 1911. The mean temperature over the country generally exceeded the usual amount in each month February-October. July 1921 was as warm as July 1933 and these two Julys rank as the warmest on record. The mean temperature of August 1933 fell short of that of the Augusts of 1911 and 1899. The highest shade temperature recorded at Greenwich Observatory since 1841, namely, 100° F., occurred on August 9, 1911, while August 1899 is the warmest calendar month on record for the British Isles as a whole. The outstanding feature of the summer of 1933 was the warmth of June-September. The total rainfall over the British Isles during the six summer months April-September was 13·8 in., which is less than that of any summer since 1870, except 1870 with 12·4 in., 1921 with 13·1 in. and 1887 with 13·7 in. Rainfall was abundant in February and many reservoirs were overflowing at the beginning of April. Afterwards the slightly deficient rainfall of each month April-July, culminating in an unusually dry August, together with the loss by evaporation, resulted in a steady lowering of the level of the water in most reservoirs.

Statistics of Unemployment

At the Royal Statistical Society's meeting on December 19, Mr. J. A. Dale read a paper on the "Interpretation of the Statistics of Unemployment". He suggested that there is a certain popular misunderstanding of the figures, in that it is generally supposed that 2½ million unemployed are permanently out of work. The statistics which are most frequently quoted in public discussions do not, and from their nature cannot, disclose the way in which the actual personnel which they represent is constantly changing. It is a fact, however, that, although the total number of the unemployed may be about 2½ million, the number of different persons unemployed in the course of a year is nearly six million, and a large part of the six million consists of persons whose unemployment is intermittent. Among those are to be included not only the 'temporarily stopped' workers and those whose employment is 'casual' but also many of the so-called 'wholly unemployed'. But there nevertheless remains a group whose unemployment is persistent and prolonged. Mr. Dale estimates that this 'hard core', represented by persons who have been unemployed for eight or nine months, number at most a million during the past year, the remaining five million being less unfortunate. There are many more in proportion suffering from prolonged unemployment in the depressed areas; about 100,000 of them were last employed in the coal mines, and the shipbuilding and iron and steel

centres contain more than their proportionate share. There is a preponderance among them of older and unskilled men. Mr. Dale directed attention to local contrasts in the quality of unemployment. In a depressed coal-mining town the registered unemployment was recently 3,700, or 47 per cent, while in a comparatively prosperous place of the same size it was 1,400, or 11·3 per cent; but the number of men who had been out of work for more than a year was 2,500 in the coal-mining town and only 117 in the other district. Cotton and coal are the industries in which short time is most common.

The Indian Statistical Institute

"A SCHEME for the Organisation of Statistical Researches in India," which was submitted for consideration to the Government of Bengal in August last, is largely concerned with a report on statistical researches which have been carried out since 1923. Prof. P. C. Mahalanobis, of the Presidency College, Calcutta, has been actively engaged during the past ten years in preparing reports for various Government departments, building up a laboratory for the application of modern statistical methods to a variety of problems and encouraging such studies in other ways. His labours in this direction have been receiving growing recognition and a plea is made for official support of the small institution which was created by individual initiative. The Indian Statistical Institute was founded in December 1931, for the purpose of promoting "the study of statistics both pure and applied and allied subjects", and the first part of *Sankhya: The Indian Journal of Statistics*, edited by Prof. Mahalanobis, was issued last June. This part contains original researches dealing with the theory of statistics and applications to particular economic, medical, anthropometric and psychological problems. There is obviously an enormous scope for useful work of this kind in India, and it is to be hoped that those who have proved themselves willing and capable of prosecuting it will receive all possible encouragement.

The Christmas World-Wide Broadcasts

FOR the second time, the Christmas Day programmes of all the British Broadcasting stations included a special hour, during which greetings were exchanged with various parts of the British Isles and the Empire, and terminating with a personal message from His Majesty the King delivered from his home at Sandringham. In addition, and for the first time, the special arrangements included a broadcast transmission of the chimes of the bells from the Church of the Nativity, Bethlehem, on Christmas Eve, December 24. A brief description of the technical arrangements by means of which these programmes were effected was given in the issue of the *Wireless World* for December 8. The communication with the different parts of the Empire took place through the Post Office beam transmitting stations at Rugby, the various circuits being operated from the switchboards in the Faraday Building, London, which was connected by a special line to the control room at Broadcasting House. The suggestion for a broadcast

of the bells of Bethlehem actually came from the National Broadcasting Company of America last year, but the idea could not then be put into practice. This year, however, thanks to the co-operation of the Colonial Office and the High Commissioner for Palestine, the chimes were relayed by overhead line to Cairo and thence to the Post Office beam station at Abu Zabal, which transmitted the signals direct to the Post Office receiving station at Baldoek, England.

These special Christmas programmes were not only broadcast through all stations of the B.B.C. including the Empire station at Daventry; they were also sent direct over the normal Post Office radio telephone routes to the Colonies and Dominions for local re-broadcasting; finally, and by no means least, arrangements were made for the signals and messages to be picked up by the American trans-Atlantic telephony station at Houlton, Maine. This last station was connected to the New York radio terminal switch-board and to the control rooms of the American National Broadcasting Company and the Columbia Broadcasting System, which together operate two great networks of several hundred stations scattered over the United States of America. It was a fitting conclusion to such Christmas programmes that His Majesty the King should broadcast his message from his study to the largest audience ever within the reach of one voice.

Opening of Radio City, New York

AN illustrated description of Radio City, the new headquarters of the National Broadcasting Company of America, in a seventy-story building at Rockefeller Centre, New York, appears in *World Radio* of December 8. This company operates, from the main control desk at Radio City, a network of 85 broadcasting stations stretching right across the United States. The new central building has provision for thirty-five studios, of which sixteen have been put into operation since the opening of Radio City on November 15. The main studio is 78 ft. × 132 ft., and it extends vertically through three stories of the building. A massed orchestra of four hundred instrumentalists were comfortably accommodated in the auditorium studio during the special programmes broadcast in the week following the inauguration. In view of developments in television, the most interesting of the new arrangements is perhaps the so-called 'clover-leaf' group of four studios on the ninth floor. These are built around a circular central control room, the floor of which can turn mechanically so as to face any one of the studios. This device enables four complete scenes to be prepared simultaneously and independently, and should considerably facilitate 'scene-shifting' in television programmes. All the studios have floors, walls and ceilings separated and insulated from the main building. As the provision of windows was impracticable, a large air-conditioning plant has been installed and it is claimed that this completely changes the air in the building every eight minutes. In addition to attention to the acoustical properties of the studios, technical improvements have been