### "Round the Empire" Christmas Broadcast

For the fourth successive year, a radio broadcast tour of the Empire was conducted on Christmas Day by the British Broadcasting Corporation, with the assistance of the radio telephone services of the Post Office. The result was a great tribute to the technical skill and the organising ability of both administrations. On this occasion, the listener played the part of an eavesdropper on a series of almost private telephone conversations between individuals or families in various parts of the British Isles and other groups in Canada, India, South Africa, Australia and The longest communication link New Zealand. covered on this occasion was employed for an exchange of greetings between two children in the London studio and their grandfather at Wellington, New Zealand. The technically minded listener must tremble to think of the number of electrical circuits used in such a programme and of the possibilities of faults and breakdowns which do not seem to occur. The more mathematically minded may pause to consider whether the number of listeners on such an occasion may be truly termed an astronomical figure. The ordinary person may still have cause to wonder at the fact that when parts of England are covered with snow, Australians can thoroughly enjoy surfbathing on Christmas Day. Will this wonder be dispelled or increased when television, which is already poking its nose round the corner, transforms this Empire broadcast programme into a pictorial tour with a suitable running commentary ?

#### Winter Floods

THE remarkable persistence of heavy rainfall during the closing months of 1935 has been the cause of much material damage and inconvenience to the inhabitants of low-lying districts and notably in the case of the Thames Valley, where extensive flooding has occurred, and the river has attained heights occasioning serious concern to the authorities Up to the end of November, the aggregate rainfall of 13.96 inches for the three autumn months exceeded all previous records of the Thames Conservancy Board for more than fifty years. On the last day of December, the aggregate for four months was touching 17 inches and the flow over Teddington Weir was at the rate of 6,500 million gallons per twenty-four hours, a thousand million gallons more than in mid-November, as reported in NATURE of November 23 (p. 826), and two thousand million gallons in excess of the 'root figure' of 4,500 million gallons, when the river is flowing bank high. At Leehlade and Radcot, where thousands of acres are under a foot of water. the river reached its highest level since the great floods of 1929. At Reading the stream was in many places a quarter of a mile wide. Flooded areas of equally considerable extent have been reported from various parts of the south and east of Englandfrom Kent, Hampshire, Cambridgeshire, Nottinghamshire, Lincolnshire, Worcestershire and the East Midlands. The infliction of widespread havoc of this kind once more emphasises the importance of the survey undertaken by the Inland Water Survey

Committee of the Ministry of Health, the issue of the first annual report of which in the near future is awaited with much interest. Heavy rains and inundations are unfortunately not confined to Great Britain. From France, Switzerland and elsewhere come reports of gales and floods, and a recrudescence of the conditions described in NATURE of November 23. The Rivers Saône, Ardèche, Loire and Garonne are stated to be rising continuously, and in the Rhone Valley, Avignon is again threatened with submergence.

#### Newspaper Production as an Industry

A BROADSHEET recently issued by P.E.P. (Political and Economic Planning) gives a summary of elementary facts about the Press of Great Britain collected as a preliminary to a constructive investigation of the possibilities of improvements in the Press to meet modern needs. Including for this purpose the entire preparation and publication of newspapers and periodicals, although attention is concentrated mainly on the London daily newspapers, the survey emphasises the extent to which the Press has become an important industry, ranking in size with electricity supply and the manufacture of bricks and tiles and considerably above the brewing or the silk and rayon industry. In the decade 1921-32, its personnel in England and Wales rose from 56,488 to 79,558, and it is characterised by a high proportion of males to females, a low proportion of juvenile workers (less than 9 per cent) and an extremely high proportion of administrative staff (30 per cent), about one sixth of the total being professional workers, a figure four times the average for all industries. Unemployment is low, the net output in terms of money value very high and employment is largely concentrated in large units in a few of the great towns. The two most important points in a newspaper's finances are its advertisement revenue and the price of newsprint, cost of ink being negligible. Production costs (largely wages) come third and editorial services fourth, being equalled for the larger newspapers by the cost of physical distribution. Industrially, the Press is thus healthier and more flourishing than other British industries, but on industrial grounds as well as on the ground of social responsibilities, there is a case for considering whether the financial structure cannot be simplified and made sounder.

#### Noise

WE have received from the Anti-Noise League at 66 Victoria Street, S.W.1, a reprint of an article on "Noise" by Dr. L. E. C. Hughes, which originally appeared in the columns of the *Electrician*. The League is doing admirable work in sponsoring a considerable number of publications on the various aspects of noise. These will be found both interesting and of service to the largely increasing public which is concerned with the problem of noise, whether from mechanical transport, modern housing or other contributory cause. That the country has become noise conscious is reflected in the noise abatement activities of the Ministry of Transport, the Ministry of Health, the National Physical Laboratory, the

British Standards Institution and other bodies : and further restrictive legislation in various directions would appear to be not unlikely. The problem of the measurement of noise, or rather of its 'equivalent loudness', is finding generally accepted solution both in Great Britain and abroad. The standard of comparison is a reference tone of 1,000 cycles per second with a specified arbitrary 'zero' of intensity. If the reference tone is increased in successive decibel steps of energy above the zero, the resulting changes of loudness are expressed in numerically identical steps on a scale of phons. The equivalent loudnesses of other sounds and noises are evaluated by aural matching against the reference tone when suitably adjusted. Other features to which Dr. Hughes refers in his informative article are the abatement of both air-borne sounds and impact noises and vibrations in buildings, impulse noises, and commercially available noise-measuring instruments.

## Wonders of Tinplate

An interesting film dealing with tinplate and canning, produced in France under the title "Magie du Fer-Blanc", was shown for the first time in England on December 2 at the Polytechnic Extension, Little Tichfield Street, London, W.1. The display took place under the auspices of the International Tin Research and Development Council. and Sir John Campbell, chairman of the Internation Tin Committee, introduced to the audience M. Peissi. director of l'Office Technique pour l'Utilisation de l'Acier, by whom the film had been produced. Various phases in the production of tinplate, the fabrication of containers and the canning of food were depicted. At present the film has French subtitles, but we understand that it is probable that an English accompaniment will be arranged and the film exhibited publicly in Great Britain.

# Meat Inspection in South America

THE fourteenth Benjamin Ward Richardson lecture, founded in 1922 by the Model Abattoir Society (dissolved in 1935), was delivered in the rooms of the Royal Sanitary Institute, which has taken over the management of the Richardson Trust, on November 12, by Dr. M. T. Morgan of the Ministry of Health, on the system of health inspection of meat and meat products destined for export in the great abattoirs of South America. In accordance with instructions from his Department, Dr. Morgan recently visited the large factory abattoirs in the Argentine, Uruguay and Brazil which serve for the preparation of meat and meat products destined for export overseas and for local consumption. The products range from the finest quality chilled beef destined for the English market down to every variety of by-product from agricultural fertilisers to buttons for clothes. The finest quality meat is produced in the Argentine, and a slightly inferior quality in Uruguay. The system of inspection of meat and meat products is the same in all three countries, but is most highly developed in the Argentine, where it is a special branch of the State

service of inspection of livestock and is not attached to the public health service as in Great Britain. A most efficient inspection of the animals is made both before and after death. Whole carcasses or sides or portions or viscera are rejected on the slightest grounds of a suspicion that they are unhealthy or unsuitable for human consumption. In conclusion, Dr. Morgan states that in all three countries he was struck by the extraordinarily high standard of the service of inspection and the extreme cleanliness and efficiency in every department of the enormous factories.

# Britain in the Dark Ages

A MAP of Britain in the Dark Ages (A.D. 410 to 871) is the third of the period maps to be published by the Ordnance Survey. The south sheet covering England, Wales and part of southern Scotland has now appeared (Southampton : Ordnance Survey. Cloth mounted. 5s. Paper, flat and unmounted. 2s. 6d.). The scale is 1:1,000,000 and the map is contoured and layer coloured. No attempt has been made at the almost impossible task of restoring the ancient coast line, but the forest covering is shown, and is the same as that on the map of Roman Britain. The entries on the map have been derived from both archæological and historical sources, and an attempt has been made to represent both the Celtic and Saxon aspects of the period. Different characters are used for place names of the two origins. Latin names, constantly used in documents of the period, are also differentiated. Roman roads, with one exception are omitted, since their use was uncertain. Churches, crosses, battle-sites, villages and other dwellings, and burial places are shown, and in the introductory pamphlet that goes with the map there are small maps showing respectively place names ending in -ing and the distribution of cemeteries. There is a complete index of ancient names with modern equivalents. The map is a beautiful example of cartography and shows a wide range of historical research without any suggestion of crowding of names or symbols.

## The Present Age

WE have received the first two numbers of the Present Age, a new monthly journal edited and published by Dr. W. J. Stein, 144 Harborough Road, London, S.W.16 (2s. a month). The editor, in a covering circular, points out that modern life has created such a high degree of specialisation that it has become almost impossible to have cognisance of more than one sphere of knowledge or activity. The Present Age is designed to relate different fields of knowledge by the publication of articles apparently independent, but showing their true interrelationships. The January issue (1, No. 2) contains, among others, historical articles on "King Arthur", "Christmas through the Ages", and "Eurythmy in Ancient Greece", the last-named with four excellent plates of Nereids from figures in the Nereid Room of the British Museum. Science is represented by articles on "Alterations in the Earth's Surface", and "The