

sphere of the manufacturing area of the city was much improved as a consequence of such action. He believed that the majority of manufacturers were desirous of preventing smoke if only they were told how it could be done. The real cause of the trouble was the country's splendid supply of soft coal.

Dr. A. S. M. MACGREGOR, medical officer of health for Glasgow, described the powers of local authorities in efforts to reduce the smoke nuisance. In administering the law for the control of industrial smoke emission it was necessary to set up standards on which to work. In Glasgow, by resolution of the corporation, the standard adopted for prosecution was two minutes or over of dense smoke in any observation not exceeding sixty minutes. In England and Wales, of the 191 local authorities possessing by-laws, the standard in 111 was a two-minute period in the half-hour, and in the remaining eighty a three-minute period of black smoke. In most large industrial areas the local authorities arranged for the measurement of impurities in and deposited from the air to be made by means of smoke gauges or air filters. These local observations were valuable for many reasons; they enabled the rate of progress of smoke abatement to be judged from year to year, while the statistical and pictorial evidence of pollution were useful material for propaganda. It was, moreover, important for each area to know for practical purposes, with the aid of consistent records, just what its problem was.

Dr. R. VEITCH CLARK, medical officer of health, Manchester, pointed out the value of large administrative areas for this purpose, such as the area of Sheffield, Rotherham, and district, embracing 133 square miles. The administration of smoke law should not remain in the hands of individual local authorities, but should be vested in joint statutory boards covering wide areas. Through the regional Smoke Abatement Advisory Committee in South-East Lancashire observations had been made, with the result that it was found that in areas where, for various reasons, control of smoke was not practicable, there was 3½ times as much smoke as where control could be exercised. The smaller local authorities were unable, for financial reasons, to administer the smoke law, when the appointment of the necessary official would involve an undue burden on the rates, but such administration was easily possible, with a negligible burden on any authority, when it was spread over a wide area. He added that observations carried out in Manchester for more than five years showed that the average daylight incidence there—ordinary daylight, not sunlight—was only 55 per cent. of what it was eight miles from the centre of the city.

#### The Domestic Smoke Problem

On the domestic smoke problem Dr. MARGARET FISHENDEN had some interesting things to say. Smoke abatement enthusiasts had asserted that coal grates should be abolished by law; this was not feasible except over a long period of years. Forty million tons of raw coal were burned annually in domestic grates, and to replace this by gas and coke gasworks capacity would have to be trebled—not a thing that could be done in a year or so. The extended use of gas, coke, and electricity should be given every encouragement, but in the meantime something must be done to reduce smoke emission from coal grates. Among the natural smokeless fuels (anthracites) and the manufactured smokeless fuels (cokes) a smokeless substitute could always be found at little extra cost, sometimes at lower cost. Even where bituminous coal was used, smoke emission could be cut down by care in lighting the fire and in adding coal.

An exhibition was arranged concurrently with the conference, of which some notice appeared in our issue of October 10th (p. 725).

At the society's dinner on October 16th a presentation was made to the president, Dr. H. A. DES VOEUX, in recognition of his long-continued efforts for smoke abatement.

## THE LONDON MEDICAL EXHIBITION

The London Medical Exhibition, which was arranged from Monday to Friday of this week in the new hall of the Royal Horticultural Society at Westminster, attracted about one hundred and twenty firms, who displayed a wide range of products for the service of the medical profession. About two-thirds of the exhibitors were represented at the exhibition held in connexion with the recent Annual Meeting of the British Medical Association at Oxford, and to give any extended review would be only to repeat what was written on that occasion. The exhibition as a whole presented a very pleasing appearance.

#### Some Exhibits in Brief

Although there were many stands devoted to surgical instruments and appliances, it was drug products which seemed to dominate the exhibition. Immediately on entering, the visitor was confronted with six large stands, one at the top of each of the aisles, bearing the names of Burroughs Wellcome, Parke Davis, British Drug Houses, Allen and Hanburys, Boots, and the American firm of Eli Lilly. Burroughs Wellcome, among their latest introductions, showed a viper venom haemostatic, also a preparation consisting of the vitamin-containing fraction of rice polishings, for the treatment of vitamin B<sub>1</sub> deficiency; Parke Davis had a new arsenical compound for intravenous injection in the treatment of syphilis; Allen and Hanburys showed magnesium-synergized aspirin tablets, and British Drug Houses the active haematopoietic principle of liver in sterile solution for routine treatment. We mention these stands merely because they happened to be the first seen, but there were fifty or sixty others on which the products of the chemical and pharmaceutical laboratory were shown.

Among instruments was a micro-dynamometer galvanometer, which was claimed to be of value in the localization of septic foci. Short-wave diathermy machines, producing wave-lengths of from six to fifteen metres, were exhibited; also a portable x-ray outfit, in which the tube and transformer were contained in a single casing ten inches long. The roll of motor casualties perhaps accounts for the ingenuity which still exercises itself over the artificial limb. Thus there were shown a model of limb for above-knee amputation, fitted with a special knee mechanism, enabling the patient to walk with a natural knee-swinging action, a below-knee artificial leg, having a socket entirely unaffected by heat or moisture, and an exceptionally light steel-arm crutch, especially suitable for ladies. More than one stand showed improvements in syringe mechanism. In one device, with the cartridge type of syringe, the cartridges were automatically ejected into a convenient position for removal. At one stand as many as twenty different applicators for applying heat into body cavities were on view.

The spas were rather more technical in their exhibits than usual, Harrogate showing capillary photographs to illustrate the peripheral circulation in rheumatic conditions, and Buxton giving illustrations of a deep-pool bath for manipulative exercise and massage under water. Half a dozen bookstalls added to the interest of the exhibition.

A wireless base, with which thirty lonely stations in Kimberley will be in touch, was recently opened at Wyndham, Western Australia, as part of the Australian Aerial Medical Services. Dr. Allan Vickers, in a paper on the Australian Aerial Medical Services read before the Section of Medical Sociology at the Annual Meeting of the British Medical Association at Melbourne last year (*Supplement*, February 1st, 1936), referred to the early establishment of this base at Wyndham on the lines of the one already so successfully operating at Cloncurry, Queensland. The cost of the Wyndham base has been largely defrayed by members of the Victoria Section of the A.A.M.S.