

HEALTH OF ROYAL AIR FORCE

REPORT FOR 1936

In the report on the Health of the Royal Air Force¹ for 1936 an increased sickness incidence of 48 per 1,000 of strength over that for 1935 is recorded; this was largely accounted for by increases in the incidence of German measles and influenza. Invalidings from the Service rose from 4.8 per 1,000 in 1935, which was the lowest figure yet recorded, to 5.5 per 1,000 in 1936. These figures compare with average incidences of 6.2 and 9.9 per 1,000 for the periods 1928-35 and 1921-7. Venereal disease again showed a reduction from 9.5 per 1,000 in 1935 to 9 per 1,000 in 1936; this is the lowest incidence since the inception of these reports in 1921. Of the officers of the general duties branch liable for flying duties as pilots 97 per cent. were fit for full flying duties; this is the highest figure yet recorded. Among apprentices there were decreases in all diseases as well as in the incidence of injuries. As in previous years, pneumonia was one of the chief causes of death from disease, as distinct from deaths from injury.

Special Investigations

In all cases of jaundice in the Royal Air Force arising in the United Kingdom in 1936 special notes were made with a view to determining the causes. In none was there any history of recent employment in aeroplane doping. Two of the thirty-three cases were instances of Weil's disease traced to swimming in infected water, one at Dublin and the other at Henlow. One jaundice was the sequel of intravenous arsenical injections, but the majority appeared to be of the so-called infective catarrhal type. One officer contracted kala-azar while in the Aden Protectorate; this disease had not previously been recorded in Aden, and search was made to ascertain its local distribution there. A portable electrolytic water-sterilizing unit, delivering 250 gallons of purified water per hour, was constructed for transportation by aeroplane or motor car. The whole apparatus weighed about 150 lb., packed neatly in two 2-ft.-cube cases, and could be assembled in ten to fifteen minutes, including the time taken to prepare the brine and ammonia solutions. The apparatus proved very efficient, producing a clarified and purified water fit for drinking.

The twelve members of the flying-boat cruise from Malta to West Africa in December, 1936, were protected against yellow fever by inoculation, the serum and virus being prepared at the Wellcome Bureau of Scientific Research, London, and forwarded to Malta by air. The inoculations produced little or no reaction other than slight headache. Additional precautions taken were pressure spraying of aircraft twice daily with "pyrocide 20" and half an hour before departure from any port of call, and the enforced use of mosquito nets by all members of the flight. No medical officer was carried. There was no case of illness. Among the physiological problems affecting the airman particularly attention was given to the avoidance of fatigue, in the interests of efficiency, with special relation to posture, noise, and the purity of inspired air; the risks to airmen of breathing air contaminated even to a very small extent with exhaust or other harmful gases, and the protection of workers in special testing chambers from this risk; the defence of the Royal Air Force against war gas, and the instruction of medical officers and airmen in the principles of self-protection and the care of the gassed, design of buildings, appliances and clothing; the design of flying head-gear, including the masks required for breathing oxygen at great heights and the use of other chemical substances in addition to or in place of oxygen for this purpose; the physiological problems of very high flying, of other work at ultra-low pressures and in great cold, and of the high speed of modern service aircraft; the design of special instruments for the examination of flying candidates and personnel, with particular attention to the predetermination of the ability to learn to become a service pilot; and the mechanical forces en-

countered by the human body in flight, its reaction thereto and protection therefrom.

Improvements in Hygienic Conditions

New types of barrack blocks were built with well-appointed lavatory annexes having slipper, foot, and shower baths and an adequate supply of hot water. Dish-washing machines, either of the revolving brush or of the turbulent type, thermostatically controlled to ensure hygienic washing, were installed in annexes to airmen's dining halls in most barracks of permanent construction. Observations are being made on the comparative value of these two types of machine. Many clothing improvements were introduced, open-neck tunics replacing stiff upright collar types. The drivers of motor petrol tankers were supplied with leather gloves as a protection against petrol dermatitis. Topees lined with aluminium fabric, as an additional protection against heat, were issued on an experimental basis to certain units in the Sudan. A pool system to deal with the bulk disinfection of geographical groups of stations as an economy measure was introduced in some places.

TREATMENT OF YOUNG OFFENDERS

The country first realized in 1908 that delinquency in children was a social problem that needed a constructive solution. In that year, thanks largely to the pioneer efforts of Clarke-Hall, the Children Act, 1908, was passed and set up juvenile courts. The Prevention of Crime Act introduced Borstal training, and the Probation Act of the previous year had given magistrates wide powers of controlling and supervising children outside prisons. Since that time the Home Office, in co-operation with many enthusiastic voluntary agencies, has made great strides in its provision, not only for the optimistic treatment of child offenders, but also for the prevention of juvenile crime. The Children and Young Persons Act, 1933, improved the juvenile courts by providing that they should be conducted by specially qualified magistrates in informal surroundings and empowering them to deal with children requiring special care and protection by placing them in the charge of a "fit person."

The Home Office recently issued its fifth report on the work of the Children's Branch.¹ The report is the first since 1928, and is the work of Mr. J. F. Henderson and Mr. Arthur H. Norris. It shows evidence on every page of the enlightened enthusiasm of these two workers. The reproach is often levelled at the Civil Service that its members are hidebound bureaucrats. The heads of the Children's Branch have shown themselves to be as true pioneers as any of their colleagues outside. The reproach of official obstructiveness cannot be levelled at their Department, which is as ready to initiate reform as it is to encourage the enterprise of voluntary bodies.

Juvenile Courts

The 1933 Act laid down that the justices of every petty sessional division should elect a panel of their number specially qualified to sit in juvenile courts, and that the court should consist of not more than three members, one of whom should, if practicable, be a woman. It was soon found that in a number of divisions no woman justice was eligible. The Lord Chancellor therefore appointed to the peace commission a number of women, and also men, thought to be specially suitable for juvenile courts. In 1936 the Home Secretary issued a circular containing advice on the principles which should be followed in electing the new panels when the three-year appointments made in 1933 expired. The returns showed that fewer men justices and more women justices were elected, and the number of panels containing no woman fell from 212 to sixty-six, these being nearly all in districts where the volume of work is small. An effort is being made to reduce the average age of justices, and

¹ London: H.M. Stationery Office, 1938. (2s.)

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