Federated Malay States

ANNUAL REPORT OF THE INSTITUTE OF MEDICAL RESEARCH FOR THE YEAR 1937

THE Director of the Institute (Dr. A. Neave Kingsbury) pays a tribute to the services of the late Mr. R. W. Blair, who had been connected with the Institute since 1912. His successor as Chief Chemist is Mr. Shelton, F.I.C.

The Chemical Division is mainly concerned with work connected with public health and police investigations. Of the 7436 samples analysed, 5091 were for the Medical and Health Services, 1317 for the Police, 1001 from other Government Departments and 27 from private persons. The Health Officers submitted 875 samples of milk of which 15·3 per cent. were watered and 1·7 per cent. contained less than the statutory 3·25 per cent. of fat. Twenty-eight samples complied with the legal standards, but were shown by their freezing-points to contain considerable amounts of added water.

REMOVAL OF BACTERIA WITH ALUMINIUM HYDROXIDE.—The results of many analyses have demonstrated that the precipitation of aluminium hydroxide in water can be a most efficient means of removing bacteria, especially if followed by mechanical filtration. Water thus treated does not readily develop algal growth in open reservoirs. Special treatment of the water is necessary to ensure the optimal *p*H for the aluminium hydroxide precipitation.

LEAD IN CANNED FOOD, ETC.—Fifty samples of canned products were examined. Of these, 27 were contained in crudely made tins in which the contents were exposed to a considerable surface of solder. Some of the tins showed evidence of having been previously used; with such there is a possibility of toxins from the original contents being present if cleaning before refilling has been inadequate. Seven samples of canned food contained lead equivalent to 5 or more parts of Pb per million.

The interiors of copper or brass cooking pots are usually tinned, but sometimes solder is substituted. There is a danger in the habitual storage of water overnight, either in these vessels or in soldered cans or in stoneware jars that may have lead glaze, for water in Malaya tends to be plumbosolvent.

In 29 cases of suspected lead poisoning the average lead-content of the urine was 0·3 p.p.m., but 1 p.p.m. was found in each of two samples from a Chinese.

In seven samples of canned peas copper (equivalent to 80 or more p.p.m. of Cu) had been added to improve the colour.

MOTOR ACCIDENT: ALCOHOL IN VISCERA.—In a case in which a pedestrian had been killed by a motor car, a sufficient quantity of alcohol was recovered from the viscera to indicate that the victim was intoxicated.

CAMPHOR IN STOMACH WASH.—Camphor in small doses is sometimes used by labourers to reinforce the intoxicating power of stout and thus to achieve inebriation at a reduced cost.

DECIPHERING AN OBLITERATED DOCUMENT.—Some figures on a promissory note, written apparently with iron-gall ink, had been obliterated with ink of a similar character, but it was possible by means of infra-red photographs to reveal the original writing.