

Industrial Medicine

NITRO-DERIVATIVES AND TOXIC JAUNDICE

The handling of nitro-explosives has long been known to be a risk to the health of the operatives concerned unless careful regulations are obeyed, and a recent event would seem to imply that a stricter control of the provisions of the Factory Act is desirable now that the number of persons employed in such work has been so largely increased. That, at all events, was the view of a coroner's inquiry held this week by Mr. Luxmoore Drew into the circumstances of a female worker's death after employment in a munitions factory. It can be well understood that certain details as to the exact nature of the chemical explosive to which the illness and death of the operative were traced, according to the evidence given by the attending practitioner and official medical experts, cannot be disclosed. It suffices for the present to record that the illness was caused by the handling of a powder which contained a proportion of a nitro-hydrocarbon. The case in its medical details recalls the instances of poisoning by "dope," the varnish used in waterproofing aeroplanes, the toxic action being due in that case to the tetrachlorethane used as a solvent in the varnish which set up a fatal jaundice. Tetrachlorethane, however, is a more or less volatile fluid, whereas contact with a powder in the case just reported appears to have produced similar toxic effects. There would obviously be much less difficulty in the removal of a vapor from the neighborhood of the operative than the removal of scattered particles of a powder. The case was diagnosed by Dr. H. P. Potter, and post-mortem appearances were described by Dr. B. H. Spilsbury, and Dr. T. M. Legge, H.M. Inspector of Factories, and the conclusion was that heart failure had supervened owing to a general process of degeneracy having been set up in the liver, heart, and kidneys by contact with a nitro-derivative. It was a case of toxic jaundice, as it has occurred in poisoning by "dope," and the body showed the typical pigmentation. The jury expressed their appreciation of the clearness of the medical evidence, and returned a verdict of "Death from misadventure," adding a recommendation that there should be fewer persons engaged together in a unit of space and that the provisions of the Factory and Workshop Acts should be rigidly enforced in such workshops. It may be remembered that in the *London Gazette* of October 12th,