

- 532 The First Clinical Observations on the Chronic Changes in Man Produced by Hydrocyanic Acid. D. Columba. Ber. 8 intern. Kongr. Unfallmed. u. Berufskrankh. 2, 1073 (1939); Zentr. Gewerbehyg. Unfallverhüt. 27, 26 (1940). (German). Chem. Absta. 35, 3320 (May 20, 1940).

In Italy, Spain and Palestine, approximately 35,000 persons use hydrocyanic acid in extermination of insects on fruit trees and rats on ships. Studies on 15 persons engaged in this work revealed 3 types of changes produced by chronic inhalation of the gas. The first is dilation of the lungs and bronchi, to compensate for air deficiency, with attempts by the heart to increase its volume, resulting in a slower rhythm followed by hypotension, also a change in the position of the diaphragm. The second includes various hematological changes with lymphocytosis accompanied by monocytosis through irritation of the lymphatic system. The third consists of changes connected with the carbohydrate metabolism, including hyperglycemia and a decrease in the basal metabolism. These changes probably result from a partial poisoning of the corresponding regulatory nerve centers. In order to avoid severe complications only perfectly healthy persons should work with hydrocyanic acid.

- 533 Cadmium Feeding. R.H. Wilson and others. Jour. of Pharm. & Exper. Therap. 71, 222-235 (March, 1941).

Bleaching of the incisor teeth of rats receiving cadmium was the most delicate criterion of poisoning thus far observed, marked bleaching occurring with concentrations of the metal too low to affect the growth or general appearance of the animals. It appears to be a direct action of the cadmium, although the possibility of stimulation of fluoride action has not been entirely ruled out. Concentrations of 0.0031% or more of cadmium in the diet resulted in decreased rates of growth. A severe anemia occurred in those rats eating diets containing as little as 0.0062% cadmium. The more severely poisoned rats had hearts which weighed nearly twice as much as normal, presumably due to the severe anemia.

NOVEMBER 1942

STANDARD