

a bright yellow. The skeletal muscles were all very rigid and of a dull red color. Seventy-two hours after death, when the body was removed for burial, rigor mortis was still very marked. A chemical examination showed that the blood everywhere contained neutral chromates of sodium and potassium. By far the largest quantity was obtained from the veins of the portal system. The blood in the heart and great vessels also contained a very considerable amount, and chromates could be readily detected in the blood of the brain. The liver, as one would expect, contained a larger quantity of the poison than any other organ; its tissue was readily stained of a yellow color by lead acetate, and of a red color by silver nitrate. The kidney also gave these reactions, but not so readily as the liver. On suspending a portion of the kidney for a few minutes in a dilute solution of lead acetate, the cortex was found to be most deeply stained by the chrome yellow, though all parts of the organ became decidedly tinted. The mucous membrane of the stomach was of a green color, from the presence of reduced oxide of chromium. The blood was found to be profoundly altered in color and consistence, and to have lost its characteristic alkaline reaction, being quite neutral to litmus. It remained undecomposed and homogeneous in loosely corked bottles for nearly two weeks after the autopsy. On spectroscopic examination, the absorption bands produced by the blood were found to be identical with those produced by that form of hæmoglobin called methæmoglobin by Hoppe-Seyler—that is, the blood presented a three-banded absorption-spectrum in dilute solution, one band being in the red, near the line C in the solar spectrum and between C and D (wave length 632), the two others lying close together between D and E; the last two formed one black band in more concentrated solutions of the blood. The identity was further confirmed by the action of strong reducing agents. The methæmoglobin could be reduced to hæmoglobin by ammonium sulphide, and again oxidised to oxyhæmoglobin on shaking with air. There being no urine in the bladder, the question of the excretion of the poison by the kidneys could not be determined.

Dr. MacNiven of Glasgow (*Lancet*, 1883, p. 496) made an