

*vacuo* the substance was obtained as a snow-white, amorphous, granular powder, easily soluble in water, from which it was not thrown down by boiling, sodic sulphate, sodic chloride, magnesic sulphate, plumbic acetate, or by dilute sulphuric acid even when heated. It is precipitated by carbonic acid or other reagents that throw down albuminous bodies. With Million's reagent a red color was produced, as well as the biuret and xanthoprotein reactions. The plane of polarized light was rotated to the left. From these various reactions the writers conclude that this substance is closely related to serum albumen, though the ultimate organic analysis showed a composition closely allied to pepton, with the following percentages: C. 45.35, H. 7.13, N. 16.33, S. 1.39, O. 29.80. This body in a pure state was very poisonous, two and a half milligrams for each kilogram of body weight of the animal experimented with proving fatal, though sometimes only after weeks or months. (This confirms earlier observations by Roux and Yersin.) Very small quantities injected subcutaneously caused abscess and necrosis, and later wasting of the body. The authors believe that this "toxalbumen" is produced from the albumen of the infected part in the ordinary diphtheritic process, and in this connection recall the "ichthyotoxium" which A. and N. Mosso obtained from the serum of the murex, and the poisonous albuminoids obtained from plants by Kobert and Stillmark. Further experiments were frequently hindered by the fact that cultures lost their virulence and stopped producing the poisonous substances. In cultures that had lost their virulence an albuminoid body was found that could be distinguished from the other by its dark-brown color and non-toxic properties.

It will be seen from the foregoing that great progress has been made in isolating the peculiar toxic substances produced by micro-organisms. It appears now as though it would soon be necessary to admit, as suggested by Vaughan, before the pathogenic character of micro-organism can be said to have been established, that its peculiar toxic product shall have been isolated and studied.—*Jour. Amer. Med. Association.*