interested in the preparation and pharmacological study of drugs which shall possess the power to destroy trypsanosomes and spirochetes without injuring the organs invaded by the parasites. I may mention that the general belief that malaria, syphilis, sleeping sickness and other affections caused by protozoa were not amenable to treatment by immune sera was a strong incentive to Ehrlich to pursue the work, and the fact that quinine and mercury were effective in the treatment of malaria and syphilis respectively augured well for the outcome.

The remarkable advance which has taken place in recent years concerning the pathogeny of syphilis has proved of great value to Ehrlich and his associate investigators. In 1904 a new era was inaugurated by Schaudinn and Hoffman's discovery of the spirocheta pallida. Shortly after, Metchnikoff and Roux demonstrated that syphilis could be communicated to apes, and later, Bartarelli found the rabbit was not immune to the spirochete. These discoveries made it possible to study the action of any drug on the spirochete in a rational manner. In this connection the work of Wassermann, Neisser and Bruck on the serum reaction of syphilitic patients should be mentioned as their test, which is now known as the Wassermann reaction, made it possible to determine whether or not a drug was effective in its action.

We shall now mention some of the reasons why Ehrlich experimented with arsenical compounds. First, it should be stated that arsenic is not a new remedy in the treatment of syphilis. Donovan's solution has been in use for many years, and, more recently, but prior to the reports of Ehrlich and Hata, attention was directed to the organic compounds of arsenic. Wolferstan Thomas, Koch and other investigators showed that atoxyl, which is the sodium salt of para-amidophenyl arsenic acid, was valuable in the treatment of a disease allied to syphilis, namely, sleeping sickness. Salmon, in 1907, called attention to the value of atoxyl in the treatment of syphilis.

The study of atoxyl may be said to be the first step in Ehrlich's research. He soon found that its toxic action prohibited its general use in the treatment of syphilis. Other preparations of arsenic were then prepared and experimented with, but, although many were less toxic than atoxyl, none came up to Ehrlich's ideal until the six hundred and sixth was produced. This compound is dioxy-para-diamido-arseno-benzol (Ehrlich-Hata's "606"). According to the experiments of Ehrlich this can be administered to a syphilitic animal in sufficient quantity to destroy the spirochetes without injuring the host. In other words, using Ehrlich's terminology it