at the present time is to give repeated injections of the drug. As it has been shown that other protozoa, namely, trypanosomes, may acquire an immunity to arsenical compounds, it becomes of great practical importance to know whether spirochetes are capable of developing a similar immunity. M. ROTHERMUNDT and J. DALE (*Deutsch. med. Woch.*, 1911, xxxvii, 1790) have undertaken an experimental study of this question in connection with chicken spirillosis. It seemed impracticable to study the *Spirocheta pallida* itself in experimental animals, because of the long intervals of time required to transfer the infection from one animal to another. Atoxyl and salvarsan were the preparations used. Rothermundt and Dale found that passage of the organisms through twenty chickens within a period of two months, the animals being constantly under arsenical treatment, led to no appreciable immunity to the drug on the part of the spirochetes. They therefore believe that there is little cause to fear the development of arsenic immunity on the part of the *Spirocheta pallida* in patients subjected to repeated injections of salvarsan.

The Babinski Phenomenon in Uremia.—II. CURSCHMANN (*Münch. med. Woch.*, 1911, lviii, 2054) publishes further observations upon Babinski's plantar reflex as a sign of impending uremia. Illustrative cases are described in some detail. Curschmann's experience with the test leads him to conclude that in nephritics considerable valuable information may be gained by constantly testing for the Babinski phenomenon. In threatened uremia the Babinski reflex may become positive before there is any mental disturbance or before the appearance of the preuremic increase of the tendon reflexes.

Salvarsan in Kala-azar.—A. CHRISTOMANOS (*Deutsch. med. Woch.*, 1911, xxxvii, 1705) has tried salvarsan intravenously in the treatment of kala-azar. He used it in doses of 0.007 to 0.01 grams per kilo. of body weight. There was no discernible effect on the course of the disease and no noticeable decrease in the number of parasites. The staining reactions of the organisms were also unaffected. The drug is therefore probably without value in the treatment of kala-azar.

Adrenalin and Asthma.—II. JANUSCHKE and L. POLLAK (*Arch. f. exp. Path. u. Pharm.*, 1911, lxvi, 205) have made an experimental and clinical study of the effect of adrenalin upon the bronchial musculature. It has been observed previously that adrenalin was useful in the treatment of bronchial asthma, and the present investigation was made to determine the cause of the favorable action. The experiments were performed upon dogs and cats. To produce spasm of the bronchioles, muscarin was employed. Januschke and Pollak found that intravenous injections of adrenalin caused an increase of the respiratory excursions of the lungs. The increase, however, was less noticeable in normal animals than in those suffering from "muscarin asthma." The antagonism observed between muscarin and adrenalin made it clear, furthermore, that bronchial spasm, and not embarrassment of the pulmonary circulation, was the chief factor in the production of muscarin asthma, since it was shown that the spasm was relaxed by adrenalin. Asthma produced by the injection of peptone was also relieved by adrenalin, but