ethanol to produce depression, when injected in the form of 4 per cent. solution was about 80 mgs. by weight.

47 (1629)

The effect of prostatectomy on the behavior and learning of albino rats.

By D. I. MACHT and WM. BLOOM.

[*Pharmacological Laboratory, Johns Hopkins University, Baltimore, Md.*]

The prostate gland of the rat is proportionately to the size of the animal much larger than that of man. It can also be completely extirpated with comparative ease. These facts render rats especially suitable as subjects for the inquiry into the question of the internal secretion of that gland. In the present investigation an attempt was made to throw light on the relationship between prostatectomy and mental efficiency, the existence of which seems to be supported by some clinical evidence.

Two series of experiments were conducted on white rats in the circular maze. In the first series of experiments a number of rats were trained to solve the maze problem by finding the way to the center of the maze, by the shortest route, without any errors, and in the shortest period of time. They were then prostatectomized under ether anesthesia, allowed to recover, and their behavior was studied subsequently. Control experiments were made on other rats of the same series and same ages, which were also anesthetized and on which laparotomy was performed but without removal of the prostate.

In the second series of experiments, young adult male rats were prostatectomized without previous training in the maze, and control laparotomies were also made as before. The animals were allowed to recover and were kept in their cages for periods ranging from 5 to 9 weeks. Then they were trained in the maze and a comparison was made between the learning time of the prostatectomized and control rats.

An analysis of all the data obtained in the two series of experi-

ments revealed that the extirpation of the prostate exerted no influence either on the behavior or the rate of learning of the animals. Fuller data to appear in the *Journal of Urology*.

48 (1630)

A substance toxic to guinea pigs in the blood of infants with "intestinal intoxication."

By OSCAR M. SCHLOSS.

[*From the Department of Pediatrics, Cornell University, New York City.*]

Cases of so-called "intestinal intoxication" can be divided into two groups. In the first group there is a history of preceding nutritional disturbance with diarrhea of days or weeks duration. The onset of toxic symptoms is often gradual. The infants are greatly wasted and the tissues show signs of water loss. The blood concentration may be slightly increased but is often normal. The mental state is best described as somnolent. Pronounced nervous symptoms are absent.

In the second group the onset is usually sudden and preceding nutritional disturbances are slight or may not occur at all. Wasting is slight. Diarrhea is usually not severe and in many cases does not occur. One of the striking features of this group is the presence of pronounced nervous symptoms. Convulsions are common and the patient is in deep coma with marked involuntary movements and muscular twitchings. The blood of these infants is much concentrated. The clinical picture, the complete anuria and the high non-protein nitrogen of the blood in these cases strongly suggest a relationship to uremia. The work of Foster on uremia suggested the possibility that the blood of infants with this severe type of intoxication might show the presence of a toxic substance.

8 to 15 c.c. of blood serum or citrated plasma were dialyzed through collodion against from 50 to 100 c.c. of water for 12 to 24 hours. The dialysate was rapidly concentrated in a current of air at a temperature below 40° to a volume of 3 to 5 c.c. and injected into the peritoneal cavity of guinea pigs.