The effect on cholesterol was extremely variable, there being in some cases an increase, in some a decrease.

Summary. Feeding sodium dehydrocholate to dogs with biliary fistulæ resulted in an increase in volume of bile excreted in a 24-hour period. Associated with the increase in bile volume there was an increase in the chloride excretion and in 4 of 5 dogs an increase in the cholate excretion. There was no significant change in 24-hour excretion of cholesterol.

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Experimental Catatonia in a Chimpanzee.*

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Experimental catatonia, as defined by de Jong and Baruk,[1] consists of the following phenomena, which may be considered as an analogue of the syndrome of human catatonia: (a) After administration of an average dose of bulbocapnine or of other drugs having similar effect there occurs: (i) *Catalepsy, i. e.,* the tendency to retain for abnormally long periods of time postures imposed passively or assumed by the animals themselves. (ii) *Negativism, i. e.,* passive or active resistance against change of position, especially position in space. (iii) *Autonomic phenomena, i. e.,* polypnoea, salivation, etc. (b) After administration of a larger dose, hyperkinesia and abnormal postures are present. (c) After administration of a still larger dose epileptoid seizures may occur and lead ultimately to death.

Hitherto bulbocapnine had not been administered to an animal as closely related to human beings as a chimpanzee. Doctor John F. Fulton, to whom I am greatly indebted, gave me the opportunity to use 2 of his chimpanzees for this purpose. Two animals were injected (intramuscularly) with a dose of 10-15 mg per kg of body weight, 20 mg per kg being the average dose for the common macaque. The first animal, Chimpanzee "Ronald" (decorticated on one side one

* I am indebted to Doctor H. G. Barbour for providing me with the bulbocapnine used in this experiment.

1 de Jong, H., and Baruk, H., *La catatonie expérimentale par la bulbocapnine,* Masson et Cie, Paris, 1930.

month previously), weighing 16.1 kg, after administration of 170 mg of bulbocapnine phosphate showed no symptoms other than a slight decrease of motor activity during a period of about 5 min; there was also bowing of the head and some salivation.

The second animal, however, showed symptoms of experimental catatonia completely identical with those known in other animals after administration of average doses of bulbocapnine. The following protocol gives the results of the experiment:

Expt. 1. Conspicuous cataleptic response of chimpanzee to bulbocapnine. Prompt recovery. ["Jiggs"]

The subject of the experiment was an unoperated male chimpanzee aged about 4 years and weighing 12.6 kg.

At 2:18, February 2, 1939, it received an injection (I.M.) of 140 mg bulbocapnine phosphate. Signs of action of the drug proceeded as follows:

2:25 p.m. Drowsiness.

2:28 p.m. The animal lay down and salivated profusely, and on being touched with a stick did not move away.

3:00 p.m. Marked negativism with strong resistance to change of position in space. Catalepsy was easily demonstrated in the following way: the animal was placed with the forelegs on one chair and with the hind legs on another. The chimpanzee remained in this position when the experimenter increased the distance between the 2 chairs, the animal became stretched out and offered no resistance to the manoeuver. The state just described continued without essential change until 3:25 p.m.

3:25 p.m. The animal came out of the catatonic state, and when touched with a stick walked away.

3:30 p.m. Reinjection with 70 mg bulbocapnine phosphate.

3:33 p.m. Some decrease of motor initiative and bowing of head. Animal sat down in a remarkable posture, crossing the hind legs, and assumed a posture reminding one of a Buddha.

4:00 p.m. Coming out of the above described state, the chimpanzee walked around. Reinjection (I.M.) with 80 mg bulbocapnine phosphate with reappearance of catalepsy and negativism for a period of about one-half hour.

Summary. We have described the effect of intramuscular injection of 10-50 mg bulbocapnine phosphate per kg in chimpanzees. One of the animals showed symptoms of experimental catatonia identical with those known to follow the administration of an average dose of this drug in other animals.