2 p.m. Dog in fairly good condition, drank 20 cc. milk and retained it.

3 p.m.	Blood drawn 165 cc.	Returned 200 cc.
to	Blood drawn 240 cc.	Returned 345 cc.
about	Blood drawn 150 cc.	Returned 90 cc.
6 p.m.	Blood drawn 130 cc.	Returned 230 cc.

Note. 50 cc. corpuscle mixture kept over till next day. Totals for day: Blood drawn 1705 cc. Returned 2210 cc. including corpuscles from 277 cc. blood of other animal.

Notes. Pulse was very irregular (bigeminal) at 9 a.m. At 6 p.m. pulse good 140. Drank 40 cc. milk. 10 p.m., pulse 122.

June 26, 9.30 a.m. Dog in fair condition. Pulse about 120.

10.40 to 11.05. Blood drawn 168 cc. Injected 50 cc corpuscle mixture from previous day and 126 cc. blood from normal dog.

11.15 to 11.45. Blood drawn 200 cc. Returned 215 cc.

11.50 to 12.40. Blood drawn 120 cc. Returned 150 cc. with 1 g. $NaHCO_3$.

12.50 to 1.05. Blood drawn 120 cc.

2 p.m. Injected 2 cc. pituitrin intramuscularily. Almost immediately dog died with expiratory scream. Post operative life 94½ hours. This experiment also was cut short by a mistake in procedure. The amount of pituitrin given was evidently an overdose under the circumstances. It is probable that the heart was unable to respond to the sudden increase[8] in vascular resistance. The clinical improvement effected by plasmaphaeresis gave hope of a considerably longer life even if all treatment had been discontinued at this point.

V. An examination of the above protocols bears out the statement made in an earlier part of this paper that it is possible to remove in a single day a volume of blood more than twice that ordinarily contained in the body at one time, with no apparent injury to the animal. Even in an animal whose kidneys have been removed two days previously this large amount of blood can be withdrawn not only without disadvantage but with actual benefit. In experiment 7, for example, 1705 cc. of blood were withdrawn in one day from an animal weighing 11 kg. which is more than twice the normal blood volume for an animal of this weight (7.5 per

[8] A similar phenomenon has been frequently observed in this laboratory in the anomalous and quickly fatal action of very minute doses of adrenalin on dogs under the influence of ether or chloroform, and Elliott has also called attention to this fact. Jour. of Physiol., vol. 32, p. 465, 1905.