

6 (149)

**Experimental and clinical observations upon direct transfusion of blood.**

By **G. W. CRILE.**

[*From the Laboratory of Surgical Physiology, Western Reserve University Medical College.*]

By means of end to end anastomosis by suture, blood was transfused in 74 dogs. Blood was transfused, retransfused and reversely transfused over a period of a month in the same dogs. There were no aglutins or hemolysins produced, no hemoglobi-nuria, and no nephritis. Blood was found physiologically inter-changeable. Every degree of hemorrhage, even to cessation of the arterial stream was successfully treated.

In six clinical cases of hemorrhage treated by transfusion of blood the results were the same as in the laboratory. The hemor-rhage factor was eliminated.

7 (150)

**On the normal peristaltic movements of the ureter.**

By **D. R. LUCAS** (by invitation).

[*From the Laboratory of Biological Chemistry of Columbia Uni-versity, at the College of Physicians and Surgeons, and from the Rockefeller Institute for Medical Research.*]

Our present knowledge of the peristalsis of the ureter is based essentially upon the observations of Engelmann described by him about 35 years ago. He studied the peristaltic movements by simple inspection of the ureter in dogs, cats and rabbits. Accord-ing to Engelmann, the contractions of the ureter in rabbits occur at intervals of 10 to 20 seconds. There were practically no other studies of the subject until a few years ago when Fagge investigated the effect of stimulation of the hypogastric nerves upon the ureter and obtained graphic records of the peristaltic movements. He makes the surprising statement that the ureter in many cases was found to be motionless or to present slight contractions or groups of contractions recurring every 30 to 60 seconds.