Dr. George Dock, 600 S. Kingshighway, St. Louis.

No. 2.

McGILL UNIVERSITY

FACULTY OF MEDICINE.

EXAMINATION IN PHYSIOLOGY FOR THE MORRICE SCHOLAR-SHIP.

MARCH 10TH: -9 TO 12 A.M.

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- 1. Give a detailed account of the Epithelium of the Respiratory Tract, the Bladder and the Skin (drawings).
- 2. A minute description of (a) Glands of Stomach, (b) Intestinal villus (drawings).

II.

Proteids: (a) Composition, (b) Classification or relations, (c) Properties and distribution, (d) Tests. Whenever possible show how your statements may be put to proof.

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- 1. Show how an Arterial Schema may be constructed, and what points of the circulation may be illustrated by it.
- 2. (a) Indicate graphically the character of the sphygmographic tracings obtained from an Arterial Schema, and discuss them.
- (b) Compare these with the corresponding tracings from an artery. Explain the latter.
- 3. Compare Arterial and Venous Pressure, and state how the differences may be illustrated practically.
- 4. State what the effect would be on Blood Pressure of the following:
 (a) Dyspnœa, (b) Weak stimulation of vagus. (c) Strong stimulation of vagus, (d) Stimulation of Depressor (tracings). Which end of the divided nerve should be stimulated, and what the explanations of the effects?
- 5. Indicate the changes in the Respiration when both vagi are cut in a chloralized rabbit.
- Enumerate the principal properties of muscle and nerve, and state how they may be practically demonstrated.
- 7. What points have been experimentally ascertained regarding the reflexes of the spinal cord of frogs, and how?

N.B.—Any six of these seven to be answered.