Experiments have also shown that a dog with as much as 69 per cent. of hemoglobin tied up with carbon mon-oxide which corresponds to the end of the second stage, can be resuscitated if proper treatment be instituted promptly.

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Intestinal excretion during diarrhea.

By **GEORGE B. WALLACE** and **HUGO SALOMON.**

[*From the Laboratory of the Von Noorden Clinic, Vienna.*]

Analyses were made of the fæces of a number of patients with diarrheas of different origin. During one period of observation the patients were on the Schmidt-Strassburger diet, during a second period the diet consisted of 250 grm. sugar daily. In those cases where there was present an ulcerative process in the intestine — tuberculosis, carcinoma — the amount of nitrogen in the fæces was markedly increased — being from 1.7 to 4. grm. daily on the sugar diet. In cases of severe catarrhal inflammation it was not over 1.5 grm.; in light catarrh it was within normal limits. The fat and carbohydrate elimination showed no such striking differences although it was highest where an ulcerative condition was present. Of the inorganic constituents the alkali excretion was fairly parallel to that of nitrogen. The other inorganic constituents were increased by the ulcerative processes but in some instances were increased equally where ulcerations were absent.

The most striking result of the analyses is the high nitrogen excretion which occurs in ulcerative processes in the intestine.

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The vascularity of the kidney as influenced by sensory impulses.

By **R. BURTON-OPITZ** and **DANIEL R. LUCAS.**

[*From the Physiological Laboratory, Columbia University.*]

Quantitative determinations of the blood-flow through the left kidney were made with the aid of the stromuhr of Burton-Opitz. On stimulation of the central end of the sciatic nerve, a slight de-

crease in the vascularity of this organ was observed. This decrease apparently followed a tonic contraction of the blood vessels and not a true constriction as is produced, for example, by stimulation of the corresponding splanchnicus major. It seemed to be merely a tonic reaction of the kidney against the high systemic blood pressure which follows stimulation of the sciatic.

Similarly, the application of cold compresses across the back in the region of the kidneys, reduced the blood-flow through this organ, while hot compresses increased the flow. As the temperature of the organ itself, or of the tissues in its immediate vicinity, was not changed by the compress, these variations in the vascularity of the kidney must have been produced reflexly.

Stimulation of the distal ends of the vagi, below the point where the cardiac branches are given off, did not change the blood flow. The vagus, therefore, appears to carry no efferent vasomotor impulses to the kidney.

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The influence of temperature on hemolysis in hypotonic solutions.

By **PAUL A. LEWIS.**

[*From the Antitoxin Laboratory of the Massachusetts State Board of Health.*]

Hemolysis in hypotonic solutions is progressively increased as the temperature is decreased from thirty seven degrees centigrade to five degrees centigrade. In order to bring out this fact, that modification of Hamburger's method for testing the resistance of erythrocytes, which was introduced by Theobald Smith, was used. The solutions were brought to the required temperature and then the corpuscles were added. The differences are present both at the points of beginning and complete hemolysis, but are only well marked at the intermediate points. This accounts for results obtained by Hamburger (1887 and 1903) who held that temperature within these limits was without influence.

The effect of temperature is the same whether sodium chloride or cane-sugar is used to give tonicity to the fluid. The corpuscles