chick was killed and the brain tested for virus; it was negative in a dilution of 1:10—presumably the virus had disappeared.

It appears, therefore, that rabies virus does not infect the allantois with regularity but regularly finds its way into the brain of the chick embryo. The development of the embryo is apparently not affected by the presence of the virus and may proceed in the same manner as the uninfected controls. Whether the virus can be adapted to the chick and its virulence for it enhanced by passage is a subject for further investigation.

10149 P

Activation of Renin by Blood Colloids.

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The purpose of these experiments was to learn something of the nature of the pressor action of renin. Renin was prepared from pig's kidneys in such concentration that an amount containing less than 2 mg of nitrogen produced a sharp, sustained rise (30 mm Hg. or more) of blood pressure in an unanesthetized dog. Its vasoconstrictor action was studied on perfused dogs' tails (40 experiments), so eliminating all factors causing vasoconstriction other than peripheral ones.

It was found that undialyzed renin (0.2 cc) caused moderate vasoconstriction, contrariwise dialyzed renin (1 cc) was inactive. Normal heparinized dog's whole blood (dilution of 1 to 3 parts Ringer's solution) was inactive but if dialyzed renin (1 cc) were mixed with dog's blood (1 cc 1:3 dilution) marked vasoconstriction occurred. The undialyzed renin could be potentiated by addition of dog's blood.

Heparinized plasma in doses of 0.5 cc was vaso-inactive but strongly activated dialyzed renin just as whole blood had done. But protein-free ultrafiltrate of plasma no longer exhibited activating capacity while the colloid residue on resuspension was active.

The vasoconstrictor action of undialyzed renin appears to be due in part to non-protein materials contained in it, for the protein-free fluid obtained by boiling the renin produced vasoconstriction, but it was not potentiated by blood as was renin. Dialysis removes these

substances. Boiled dialyzed renin with added plasma or protein-free filtrate of boiled plasma was vaso-inactive.

These results suggest that renin is an enzyme-like substance which is activated by a kinase-like material contained in the protein fraction of plasma and whole blood.

10150 P

Iodine in Samples Containing Little Organic Matter Other Than Urea.*

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In the combustion of samples for iodine analysis, if very little organic matter is present this may be broken up by alkaline fusion and the decomposition products burned by a micro-Kjeldahl technic in the micro still (Fig. 4[1]).

Two hundred cc of water or 5 cc of urine plus 1 pellet NaOH is evaporated to dryness in a nickel crucible and 2 mg rare earth oxide added. Dry samples, such as seaweed or thyroid gland. are chosen small enough to contain about 0.2 γ of iodine and are fused with NaOH in a nickel crucible. A urine sample may require 1 g NaOH for fusion and a water residue about the same. Heating is continued until bubbles of NH_3 cease to be given off. Water is added to dissolve the fusion and 5 mg sodium azide added to destroy nitrite and reduce iodate. The samples are then transferred to the micro still and analyzed by the McClendon-Bratton method.[1]

TABLE I.

	Iodine in sample	I_2 added	Total	Difference	% error
200 cc Minneapolis tap water	0.43 γ	0.54	0.98 γ	0.55 γ	2
200 cc LaGrange deep well water	0.59	0.55	1.13	0.54	2
2.5 cc urine	0.975	—	—	—	—
5 cc urine	1.95	0.5	2.44	0.49	2

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[1] McClendon, J. F., and Bratton, A. C., *J. Biol. Chem.*, 1938, **123**, 699.