Table II shows what may be called the *Coagulation Equilibrium* test. This is performed by adding the antithrombin of the test case to its own plasma instead of to the plasma of a normal case. This tells us how delicately the coagulation is balanced. For example in Table II, which is the plasma of the same hemophilia case as in Table I, we see that the coagulation time is markedly delayed by the addition of its own antithrombin. This is not due to an excess of antithrombin, as we have seen from Table I, but simply means that the plasma is in a very stable condition and that a slight excess of antithrombin will prevent its coagulation. If this coagulation equilibrium-test turns out negatively and there is little delay, it serves at the same time as a test for antithrombin and we may deduce that this substance is not increased.

TABLE II.

EQUILIBRIUM TEST.

Control	3 Anti.	5 Anti.	
—	—	—	6 min.
+	+	+	10 "
+++	+	+	12 "
	+++	+	15 "
		++	35 "
		+++	43 "

24 (956)

Studies on the relationship between creatine and creatinine.

By **V. C. MYERS** and **M. S. FINE.**

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When muscle tissue is allowed to autolyze, creatine is transformed to creatinine at a constant rate. The velocity of this reaction increases with a rise in temperature, although practically negligible at 0° C. The rate of formation at body temperature is nearly sufficient to account for the daily elimination of creatinine. The velocity of the reaction is increased by acids but not reduced by Henderson's neutral phosphate mixture. Added creatine experiences the same fate as the creatine originally present, while

added creatinine inhibits the reaction, or if added in sufficient quantity causes it to proceed in the opposite direction. Pure solutions of creatine and creatinine experience the same transformations, although much more slowly. On the long standing of pure solutions there seems to be a slight loss in total creatinine (from both creatine and creatinine). This appears to be due in part to a transformation to urea. Whether or not these phenomena are vital factors in the formation of creatinine in the body, we are unprepared to say.

To obtain further light on this point, experiments have been conducted on nephrectomized animals. The creatine and creatinine content of the various body tissues have been determined several days after a double nephrectomy. In certain of these experiments creatine and creatinine have been injected. Somewhat similar deductions may be drawn from our experiments *in vivo* to those *in vitro;* although there are certain differences between the two types of experiments, the significances of which are not as yet entirely clear to us.

25 (957)

Statistics of pellagra in Spartanburg County.

By **J. F. SILER, P. E. GARRISON** and **W. J. MACNEAL.**

[*From the Robert M. Thompson Pellagra Commission of the New York Post-Graduate Medical School and Hospital.*]

Up to September 15, 1914, we have recorded about 1,165 cases of pellagra, which have been recognized in Spartanburg County, S. C., the large bulk of them since 1910. The population of this county in 1910 was 84,000. The comparative study of the distribution of that portion of these cases recorded up to the end of 1913, in respect to geographical location, race, age, sex and occupation, has shown the disease to be most prevalent in the larger centers of population and especially in the cotton-mill villages. Pellagra has been about three times as prevalent among the white population as in the negroes. It was very rare in children under the age of two, uncommon in the five years following puberty in both sexes, and only slightly prevalent in adult males under fifty