[328] 4. It should afford an indication of the absolute work accomplished as well as the relation of this to the normal standard under all conditions; that is, it should indicate correctly the degree of functional injury, thus carrying prognostic significance.

5. Where less than the minimal amount of liver capable of carrying on function is left free from disease or injury, corresponding lowering of function should be indicated.

6. Where all liver cells are diffusely involved, lowered function should be indicated, but where certain cells are injured while others take on, through compensatory activity, additional function, the total functional capacity alone should be indicated.

7. It should be applicable with as simple technic as possible, so as to be available for general use in all forms of liver injury.

8. It should be applicable without injury of any kind (local or general) to the patient and without placing the liver under any additional strain.

9. The method itself should be mathematically accurate.

10. Its results should be easy of interpretation.

11. Its results should not be subject to influence from involvement of any other organs or systems, except in so far as the liver function is secondarily affected; that is, the test should be specific for liver changes.

The Tests of Liver Function.

Numerous tests have been employed in the effort to determine the functional capacity of the liver in disease. They are mostly based upon the physiological functions of the liver and attempt quantitatively or qualitatively to determine its capacity along such lines.

The Carbohydrate Tests.

The discovery of the glycogenic function of the liver in 1857 by Claude Bernard immediately stimulated extensive work in carbohydrate metabolism by physiologists, pathologists and clinicians. During the course of a rather heated