

substance, have enumerated the various exudations and infiltrations without any reference to the question of tension of the capsule as an etiological factor. The analogies here he compares to those of intra-ocular tension in certain diseases of the eye—such as glaucoma, for instance. In an inflamed testicle there is not infrequently transient as well as permanent evidence of damage as the result of tension of the capsule. Puncture of this limiting membrane is frequently followed by instant relief of pain and structural damage further averted. By this line of treatment it is possible to abort the inflammatory process to such an extent as to leave a fairly useful organ. So it may be in the case of an inflamed kidney. Not all cases, however, would be benefited by the adoption of such treatment. In the acute variety of nephritis that sometimes follows in the wake of scarlet fever, and which is accompanied with blood in the urine, albumin, casts, and epithelium, the tendency is towards spontaneous recovery and complete restoration of the function of the kidney. These cases are not included in the list of those that would call for surgical relief. In a certain group of cases commencing in an acute manner like the preceding, but where convalescence is delayed and the signs of nephritis, as evidenced by the presence of albumin and casts in the urine, continue, it is justifiable to resort to operative procedure and relieve the tension by a slit or puncture in the capsule. There is another indication of tension in connection with renal inflammations and congestions which should not be ignored in determining what may be required to meet the emergencies so occasioned, and that is the general tension that is thrown upon the heart and general circulatory system. This form of tension sooner or later supervenes in this disease, although the explanation of it is not so universally understood. The excretion of urine may be likened unto the generation of steam for motor purposes. To secure the production of steam, a circulatory apparatus is required, and a boiler made up of a number of tubes, by means of which water can be quickly heated and steam formed. Should some of these tubes become damaged or blocked up so as to render them useless, the temporary loss is compensated for by a rapid circulation of the water that remains. So it may be said to be with the kidneys. When the uriniferous tubes become damaged and cannot fulfil their function longer, they are blocked, and increased circulatory force and pressure is excited. A certain amount of blood is forced through the kidney in each twenty-four hours in order to remove certain effete and unnecessary ingredients from the system. The force necessary to accomplish this will be relative to the amount of resistance offered.