

*questiones* of pathology and therapeutics, and as Dr. Frerichs is so well known and highly esteemed in this country on account of his physiological inquiries, we feel assured that an analysis of his pathological researches will be more welcome than any lengthened critique upon their results.

It is not easy to condense into smaller compass a work so crowded with facts as that before us; but, limiting ourselves to the observations and opinions of its author, and placing in the most prominent position those which have the greatest share of novelty, the probability of his receiving justice at our hands will be greater than if the attempt were made to weigh the merits of his treatise with those of others who have preceded him.

The first chapter contains an "historical retrospect," into which it is not necessary to enter, as the facts are more or less familiar to every student of pathology. It is interesting to observe the early date at which groups of symptoms were recognized as bearing more than an accidental relationship to each other, and it is still more so to perceive that the links connecting them were discovered only when inquiry proceeded upon the truly inductive method,—for we are conscious that there is in it the germ of a power which will eventually be great enough to grasp facts apparently more widely separated, and penetrating enough to perceive their bonds of union.

The anatomical changes in the kidney are divided into three forms, which may also be considered as stages of the process of disease. They are the following:—

- I. The stage of hyperhæmia, and of commencing exudation.
- II. The stage of exudation, and of its commencing transformation.
- III. The stage of degeneration—atrophy.

In the first of these, which is frequently attended by hæmorrhagic effusion from the glomeruli, from the capillary plexus surrounding the urinary tubuli, or from the veins upon the surface of the cortex, the epithelium of the tubuli is not essentially changed, although the canals themselves, especially those of the cortical substance, are commonly filled with coagulated fibrin. These coagula are sometimes perfectly simple, and present themselves in this condition as casts of the tubes in which they were formed, while at other times parts of the epithelial lining, or more or less changed blood-corpuscles, may be found imbedded in them. This condition is not often met with anatomically (20 times in 292 *post-mortem* examinations), and is then the accompaniment of an acute, violent illness. The disease when chronic is rarely fatal at so early a period.

In the second stage the process of exudation increases, while the