

fically against the then prevailing humoral pathology by insisting that the blood itself is not the proper and original cause of dyscrasia, as taught even by Rokitansky, but that instead these dyscrasie have their origin rather in a disturbed metabolism, the toxic products of which are merely carried in the blood. His laborious study of many phases of blood changes comprises the basis of our present accurate conception of the pathology of the circulatory medium. His study of inflammation, in the description of which he insisted that disturbed function should be added to heat, pain, redness and swelling, as one of the cardinal indicia of the phenomena, gave an accurate conception of the actual changes. His elaborate investigations of the nervous system resulted in the promulgation of doctrines whose parentage in the works of Brown and Haller is recognizable. His work on tumors, a distinct application of the cellular doctrine, stands to-day as the fundamental classic of the subject. His investigation of tuberculosis resulted first in his classification of the disease into neoplastic and inflammatory forms, but latterly he recognized the bacilliary forms. It would be impossible, however, as I have before stated, to give even an accurate *resumé* of this extensive philosophy, the application of which to the entire phenomena of disease must stand as his crowning achievement. It is interesting to hear him recount, as he did in a lecture delivered in London during the last years of his life, the general summarization of his work in the statement that "the law of continuity of animal development is, therefore, identical with the law of heredity, and this I was now able to apply to the whole field of pathological new formation." And it was especially interesting, in view of the ideas against which he had to contend, to hear him add with pardonable exultation: "I blocked forever the last loophole of the opponents, the doctrine of specific pathological cells from which types and ancestors were not forthcoming in normal life." The doctrines which he had thus established, and to which he thus alluded, became early in their history the actuating principles of the "Berlin School," which sooner or later embraced the names of Leyden, Von Rechlinghausen, Cohnheim, Waldeyer, Hoppe-Seyler, Kuhne, Rindfleisch, Klebbs, Liebrich Frederic, in Germany; Felix Simon, in England, and conspicuously, W. H. Welch in the United States. The principles taught by this school are, by common consent, those upon which modern surgery and rational therapy alike are placed.

The position that must be accorded to this doctrine in the light of further revelation of fundamental law cannot be foretold. Nothing could be further from the purpose of Virchow himself, than the assumption that his doctrine was the all-truth.