Bibliographical Notice.

Lectures on Animal Chemistry. By William Odling, M.B., F.R.S.,
London: Longmans, Green & Co.

THE design of this valuable and interesting contribution to chemical literature, is to rob the term "Vital Force" of all that mystery and prestige with which it has been invested. As a first step towards this end, the constitution of the four primary typical compounds is succinctly explained, viz: Hydrochloric Acid, Water, Ammonia and Marsh Gas. Under these four types are arranged a great variety of organic compounds, which are comparable in their composition and properties through the medium of the simple types upon which they are formed. The next step is to show that the more complex bodies are formed by the continued agglomeration of less complex molecules, as kreatine, for example, from urea and sarcosine; sarcosine from glycolic acid and methylamine, and methylamine from wood-spirit and ammonia. The final terms in these series are of a comparatively simple nature, and admit of a ready classification under great groups: "Into bodies of similar constitution and similar properties that are susceptible of mutual metamorphosis, and into groups of bodies of dissimilar constitution and dissimilar properties that are susceptible of mutual metamorphosis," as the fatty alcohol, acid and aldehyd series. By burning off successive atoms of carbon and hydrogen, the chemist can transform the most complex organic substance into more and more simple ones, until at last he arrives at carbonic acid and water; and then, by reversing the process, and removing atom by atom of oxygen from carbonic acid and water, he can build up, stone upon stone, the edifice which he has taken down. The same conservation of force pervades the inorganic and organic. The sun's force, which removes from carbonic acid and water their oxygen and forms plant-tissue, is given out by the oxidation of animal tissue, a unit of heat or mechanical or chemical force being evolved for each unit of solar force absorbed. The supposition of a vital force is not more necessary to account for the formation of organic compounds in the animal body, than it is for their formation outside the body.

A. R. L.