

whom this progress was due, but the names of Laurent and Kekulé are the foremost. It could justly be said, as Lothar Meyer said in 1864, that already for a long period the controversy over the systematic arrangement of chemistry had ended. In consequence of this controversy, however, physiological chemistry had in general been overlooked, though Liebig was not one of those who neglected it. From 1830 till old age, though engaged in almost every controversy of the time, he labored to advance it. He had himself worked out excellent methods of determination, and had made investigations into the constitution of flesh; and his keen insight gave to his pupils correct methods of research for the accomplishment of decided results. The pregnant ideas of his writings prompted numerous valuable researches. His investigations of the relation of food to life-processes and to muscle-work are especially noteworthy. They have directly or indirectly led to researches of wide application to agriculture, medicine, and hygiene, and especially in the last ten years. Though the hypothesis *relating to the formation of fat within the organs from albuminous matters* has proved erroneous, the results of the work of this period in their practical worth remain uncontroverted.

Important advances were made in other directions. Ferments acting on diastase and starch were discovered in the saliva, and afterward in the pancreatic secretion. Schwann extracted pepsin from the mucous membrane of the dead stomach with dilute hydrochloric acid; and the action of this artificial digestive fluid on albumin was ascertained. C. Bernard subsequently discovered the emulsifying action of the pancreatic juice on fat, and the remarkable formation and changes of carbohydrates in the animal body, especially in the liver, as dependent on the method of feeding; and various other influences were recognized. The composition and conditions of secretion of the various digestive fluids