

I have said that the first terminates with Human Anatomy and Physiology; it begins with Biology (including Botany and Zoology), Chemistry and Physics. These have long held a place in medical education, but it is important to note that a change of view as to their function therein has taken place within comparatively recent times. Fifty years ago Botany and Chemistry were taught as an essential introduction to the *Materia Medica*, the chief constituents of which are furnished by the Vegetable and Mineral Kingdoms. They were therefore useful in recognizing the raw materials of the Pharmacopœia, while Chemistry had its further use as an introduction to the preparation of drugs from the raw materials. But the division of labour between the pharmacist and the physician has now advanced so far that it seems useless to burden the student's memory—if only for a very short time—with the characteristics of raw materials which he is never destined to meet with in after life, or that he should be asked to memorize the method, let us say, of preparing morphia from opium, an operation which he is certain never to be called upon to put in practice.

Zoology never enjoyed the same reputation as an introduction to the *Materia Medica*, the drugs derived from the Animal Kingdom being—except, as we are told, in the Chinese Pharmacopœia—few and little used. And yet I have seen a medical Zoology for the use of medical students with an admirable treatise on the anatomy of the beaver—which still furnishes Castoreum—and elaborate accounts of the natural history of the Spanish fly and the cochineal insect, which still have their uses in the Pharmacopœia. It was, perhaps, rather with the view that the physician was also expected to be something of a naturalist that Zoology was formerly associated with Botany as an introduction to medical studies, as well as with the view that the systematic study of plants and animals developed and sharpened these mental faculties to be afterwards employed in the diagnosis of disease. And a fortunate thing it has been for the history of Biology that it has been so associated with the study of medicine. For what does it not owe to generations of physicians who have given their leisure to