the nature and office of the blood corpuscles, and states very clearly the various ideas entertained by each, and also argues the point of their connexion or relationship to the functions of secretion and nutrition; concluding by giving in his own adhesion to the doctrine which assigns to the white corpuscles an association with nutrition. Before quoting the opinion of Donné, Addison, and others, it may be desirable to revert to the views which have been alluded to for the purpose of pointing out the difficulties which surround the question "of the value and office of the white corpuscles" —views which certainly appear to show that these bodies have as little to do with secretion as they have with nutrition. It certainly seems somewhat singular that all Physiologists should assign to cells the performance of distinct and peculiar functions: and yet not include these bodies, and the opinion seems to be with Mr. C., who first stated the law, and illustrated it by example of "ciliated epithelium" being a non-secreting epithelium until it had lost its ciliæ: and the cells of muscular fibre being non-productive, their own force being that of motion, the myolema being alone the productive structure. If, then, we review the opinions that have been previously stated, we cannot help being struck at the anomalous functions which dissolve on the white corpuscles, which, if they be cells constructed according to the plan of other cells, and under the influence of similar laws, manifest a singular exception.

"If," says Mr. Carpenter, "the general principle be correct, that no cell can be produced save from a germ prepared by a pre-existing cell, it *is obvious that such germs* must be contained in the *liquor sanguinis*, and must escape from the blood-vessels which pour it forth." All that is requisite for their perfect performance is that the fluid should be in contact with the living tissues. All observers agree in the close similarity which exists between the chyle corpuscles and the white: and Messrs. Lane and Gulliver actually described them when circulating in increased numbers as pus corpuscles circulating in the blood; and Mr. Carpenter, tracing the origin of pus and tubercle corpuscles from the molecular base of the blood, declares "that there is no apriori objection to the belief that pus corpuscles and tubercular matter are abnormal forms of the same elements as those which would otherwise produce a well-formed layer of exudation cells."

From the researches of Ascherson it has been shown that, in obedience to a physical law, oil and albumen, when brought into contact, form themselves into minute globules of a granular structure; and Mr. Gulliver has proved that the white appearance of the chyle is due to a molecular base present in it after digestion of food, and which is not always all formed into chyle corpuscles, since sometimes it passes into the circulation, imparting a milky colour to the serum. The process of assimilation may thus be said