

to be materially assisted by the operation of a physical law. From the moment that the chyle enters the cells at the termination of the villi, being in contact with a living tissue, its vitality commences, and it acquires new properties as it journeys on its way through the glands until its final arrival into the systemic circulation. In the embryo and very young animals where the development and growth are in energetic activity, a large quantity of white corpuscles are present in the circulation; but when growth either proceeds more slowly, development having become less energetic, or growth ceases, and assimilation only manifested, the amount of white corpuscles fall to their minimum quantity, and frequently elude detection. It certainly seems very strange, if these bodies are absolutely necessary parent cells—necessary to the preparation of fibrin—that we should not see them as abundantly present as the red corpuscle; and it is yet more singular that bodies so exactly like them should be formed outside the vessels, and formed, too, according to Mr. Carpenter, after the same plan as is the chyle corpuscle from a molecular base.

If the white corpuscle of the blood is an organism necessary for the preparation or elaboration of fibrin or nutritive blastema how is it that in perfect health there are so few of them compared to the mass of the blood? Why should the red corpuscles, whose office it is to convey death, be now more abundant than that which is to give life? Again, Mr. Simon has promulgated an opinion which, so far as I have yet been able to learn, has not been controverted, namely, that the blood-vessels are nourished by a supply from within by directly assimilating from the blood the blastema their requisite for their maintenance as the fluid washes past walls.

There is much evidence, says Mr. Hassall, to show that wherever nutrition is impeded, the colourless corpuscles accumulate in increased quantities in the vessels; and it is by this accumulation also, that we are enabled to account for the critical abscesses and discharges which characterise some affections, and to recognise the importance which ought to be attached to their occurrence. That the colourless corpuscles are really present in increased numbers in the blood, in disease, is attested by the evidence of numerous observers. Thus Gulliver, Davy, Ancell, and Mr. Seddall, have observed them in unusual quantities in inflammatory affections. Last of all, we find Dr. Bennett recognising them as abnormally present in conditions of the body in which a particular series of organs are in a morbid state.

The fact that white cell-growth abounds in glands, being much overlooked, great confusion has arisen, although there can be no doubt whatever that the colourless corpuscles of the spleen intestinal glands, and glands of the mesentery, perform peculiar offi-