

from the employment of hæmatoxylin with cochineal, and from Biondi's reagent. The parasite, however, may be examined in fresh specimens, when it is seen to possess a capsule and a translucent nucleus whose form varies from time to time. After the parasite has attained a certain size, it is observed to assume a radiate appearance, the striae starting from the parasite itself, and not from its capsule. As regards the capsule itself, observations point to its being secreted by the invaded cell, leading recent workers to consider it as a protective act on the part of the cell. However, the relation existing between the capsule and the cell still awaits a more lucid explanation, inasmuch as the cell is frequently observed leading an existence outside, and perfectly independent of, its capsule.

The protoplasm of the organism may be homogeneous or granular. The nature of the granules, though not fully understood, are believed to be possibly due to the process of hardening under which the specimens have been treated. That they bear no relation to the process of reproduction seems conclusive, for neither do the granules possess any regularity of growth or development, nor have they been seen to burst the capsule or otherwise set themselves free.

Interesting results have also been obtained by these writers concerning the method of reproduction of the organism, in which they are enabled to refute the theories of falciform bodies found by Wickham, Sjöbring, Sawtschenko and others. The parasite is reproduced by fission, thus resulting in the formation of two organisms or a multiple of two. The nucleus first elongates, becoming oval, then divides into two exactly equal parts, which gradually separate from one another, though connected together for a long time by fine, thread-like filaments. The capsule has now a variable experience, though it generally divides contemporaneously with the nucleus, throwing out from opposite folds processes which form a septum between the divided halves of the nucleus. In one and the same cell may be seen several nuclei undergoing this process, which while thus reproducing numerous parasites in the same cell, yet allows to each its own capsule and an independent existence.

The article closes with a lengthy criticism of the theories