and undergo stages of development in the blood. Laveran thinks that probably the hæmatozoon of paludism exists in the palustral modia in the state of a parasite on some animal or plant. Parasites resembling very closely the hæmatozoon have been demonstrated in the blood of birds, and it is possible that the hæmatozoon of paludism itself exists in the blood of certain animal species. Some claim to have found an ameeboid body in the air and water of malarial districts, and say that pigeons placed for two nights six feet above the ground in a district where these were found, presented crescentic bodies in their blood in nine days, and had these amorboid bodies in their nasal cavities in two days. If the parasites were present in the air in such form, it is hard to understand why attempts to cultivate them from the blood of palustral patients, by placing in air and water under favorable circumstances, should fail. Laveran is of opinion that these organisms exist in the palustral media in the body of some animals or plants. Mosquitoes are abundant in marshy districts, and it has been found that drainage of the ground, which suppresses malaria, also drives away mosquitoes. It is quite possible that these insects play a part in the propagation of malaria, as in filariosis. For a long time the origin of the filarize was unknown, but because of their size and the comparatively elevated group to which they belong they are more easily studied than the hæmatozoa of paludism. The filariæ of man undergo a phase of their development in the bodies of mosquitoes. These insects, by sucking the blood of patients suffering from filariosis, absorb embryonic filaria, which develop in their bodies, and when the mosquitoes die they fall into the water. The filariæ escape, and infection takes place through drinking the water. Findlay, of Havana, thinks that mosquitoes are the principal agents of dissemination of yellow fever Hammond is of the same opinion. We cannot yet make such a statement with regard to the spreading of malaria. It is the common opinion that air is the vehicle of the pathogenic organisms, and some dispute that water has anything to do with conveying the parasites, but the following facts seem to show water also plays a part :

1. In malarial districts it has been found that those drinking water from one source contracted

malaria, and that those who had been drinking water from an entirely different source escaped.

2. Palustral fevers have disappeared from malarial districts where the supply of good drinking water has been provided instead of stagnant water once used.

3. In some localities otherwise healthy people may contract fever whose drinking water comes from malarial localities, and the persons most exposed to the infection in such localities are those who drink most water.

4. Travellers passing through malarial districts often escape by drinking only water that has been boiled, while those who did not take this precaution suffered severely.

In opposition to the water theory it has been contended that the normal digestive secretions destroy the infusoria and amœba, but it must be remembered they do not possess this protective quality when abnormal from any cause, or when diluted by large quantities of water which are so often taken because of the excessive heat in malarial districts. If the form in which the parasite is found in the exterior world, and its method of penetrating the system are not thoroughly understood, at least the causes which favor its development and penetration into the blood are known.

A knowledge of the predisposing causes, such as condition of soil, temperature, altitude, winds, meteoric and telluric conditions, form a basis for prophylaxis.

PUERPERAL FEVER.*

BY G. GILBERT GORDON, B.A., M.D., Professor Sanitary Science, Trinity University.

MR. PRESIDENT AND GENTLEMEN,—I know of no charge entrusted to a physician which he should consider more sacred than the lives of a mother and her child put into his hands at the time when she is to bring forth her first-born.

I know of no illness which will give a physician more anxiety and care, nor a death which will give him, more pain than one from puerperal septicæma.

This disease is all the more terrible to us because it chooses out generally the young and the strong; it takes the woman who with her husband is beginning her life, her heart light and her hope high; and to us it is still more terrible if we can

* Read before Ontario Medical Association.