

on a struggle for existence among a number of minute parasites, most if not all of which are harmless, and the same may be said of the bacteria which habitually infest the human intestines." Then why should not other species whose normal habitat is external to the body in swamps or elsewhere, when introduced into the intestines as they often must be in large numbers, give rise to special kinds of fermentation, and to the production of special products which are not harmless.

Now, I am of the opinion that the malarial germ often takes this route, and this is why we have diarrhoea and dysentery that can only be cured by clearing out the intestines and giving quinine. Other remedies such as ipecac, opium, etc., have had no curative action in my hands in the endemics of dysentery, undoubtedly malarial, that we sometimes have in the western district late in the season after a hot and dry summer and the well water very low.

This is one very strong proof that these germs or organisms are carried to the intestines and there undergo changes which make them dangerous.

Again, on the other hand I think it clearly demonstrated that the germ which produces this plasmodium as found in the red corpuscles of the blood is taken directly into the lungs through the air we breathe, and enters the circulation, causing those typical cases of intermittent pneumonia, and aggravating and often producing periodical attacks of asthma.

Now, I am not going further into the consideration of the origin and development of these organisms, as if I did I would only be giving you the opinion of others, as I have not investigated this part of my subject to such an extent as would warrant me in inflicting my views on you, and your time can be much better employed by looking into the works of Laveran, Councilman and Osler, which are well worthy of perusal.

Before considering the different types of malaria I would ask, why do we have malaria in winter when the temperature is very low, if it depends on vegetable decomposition due to heat and moisture as no doubt it does. I have seen no theory advanced to account for this, and shall give you my own as expressed in