

but vague in its inception, ere long assumes definite shape, and is grasped by the progressive few, only to languish in the congenial atmosphere of general indifference, until some more fortunate observers find the profession at large prepared for its acceptance.

From the period of Galen down through the history of medicine the infection of phthisis had been surmised at various times, until Villemin, Cohnheim and others showed that tubercle is inoculable, and, finally, the involved data were disentangled by Koch, in the separation and culture of micro-organisms, and the tubercular bacilli, wholly freed from complicating material, were categorically proved the cause, without which no tubercle is possible. Granting that "all germinal conceptions are the product of their age rather than of any individual mind," it assuredly fell upon this distinguished biologist to be the spokesman of his generation.

To me the germ-theory is a very fascinating explanation of the mystery that formerly enshrouded many of our fatal maladies. Furthermore, the brilliant results that have been achieved in surgery through the operations of Lister and his followers, upon this hypothesis, are most convincing proofs of the correctness of so wonderful a conception. And though we may never be able to do more than utilize our newly acquired facts in the avoidance of threatening trouble, yet who can foretell the good that will accrue to man therefrom, when he comes, as in time he must come, to an adequate realization of its importance. Nor need we relinquish the hope that industrious experimenters will some day discover the secret of bacterial warfare, so that innocuous germs can be marshalled to drive the disease-producing fungi from the field. Seeing that micro-biologists already have ascertained that many bacteria inhabit the animal tissues which are in no way injurious to them, and also have remarked the same struggle for existence in the realm of mi-

croscopic that obtains between plants and between animals in the macroscopic world and, moreover, that repeatedly benignant germs have succeeded in overpowering the pathogenic variety, and have caused their extinction, it is not a very improbable conjecture that, in the rear future, these allies of the human race may be separated, cultivated and impressed into our service to extirpate those hostile species.

That new ideas often should meet with stout opposition, solely on account of their novelty, seems to those convinced of their worth profoundly discouraging. But may not this be a fortunate circumstance, even though fraught with some delay? for in the end a rational mean is frequently the outcome of two irrational extremities. And in the workings of nature time apparently is of very little consequence.

The great mortality resulting from pulmonary tuberculosis is shorn of some of its terrors by the duration of the malady. Were the annual deaths from this affection to occur in the course of a few days, instead of a year, the public will require no urging to be convinced of the absolute need of strictly observing preventive measures. For tuberculosis is a preventable disease, and one of the unnecessary afflictions of the human race. And man, in reality, is his own worst enemy, because, in the blindness of his ignorance, or the culpability of his selfishness, he goes about spreading disease and death for himself and his fellow-man.

All forms of phthisis probably are due to the presence of tubercle, in varying proportions, and all tubercle is the outgrowth of a microscopic, disease-producing germ known as the bacillus tuberculosis. Without this parasitic plant, however depraved the constitution, there will be no tuberculosis, and also, fortunately, with this morbid agent there will be no phthisis, unless the vitality of the tissues is impaired.

These liliputians of the vegetable kingdom are dwellers in a shadowy land, in