

embarrassment, indigestion, biliousness, flatulence, dyspepsia. It is to the products secreted by these ferments, and to their penetration into the economy that we owe these symptoms, which are but the manifestations of a real poisoning. To prevent the latter, we have a double means at our disposal: destroy the microbes by intestinal antiseptics, and expel them from the digestive tube by purgatives. By the way, I shall here remark how much the interesting researches on putrid fermentations of the intestines, justify the traditional medication of our forefathers and the physicians ridiculed by Molière, were not altogether wrong after all, to give so much importance to the reiterated expulsion of atrabiliary humors upon which depended most of the evils that afflicted their clients.

And again, gentlemen, I could speak of the bacteria discovered by Hansen in leprosy; of that of erysipelas discovered by Cornil and Fehleisen; of Pasteur's staphylococcus in osteomyelitis; of Neisser's gonococcus in gonorrhœa, and of so many other microscopic malefactors started out of their dens by clever, patient observers. But I fear I have already long ago overreached the limits of your patience. I humbly beg pardon for the tedious task I may have imposed upon those among you who know all these things. But I conceived the idea of the present work, especially with regard to those who still hesitate to acknowledge the accuracy and importance of the doctrines I so enthusiastically support.

As far as I am concerned, I confess that I could not help being seduced by the hopes that the marvellous discoveries in bacteriology allow us to entertain for the future.

Bacteriology, in fact, has produced a revolution in the medical world. The veil which for so many centuries covered the arcanum of science, seems to be rent, owing to its oldness itself, and new horizons of inexpressible richness are laid open. A whole new world has sprung up before our eyes. We have scarcely passed its threshold, and surely there remains a great deal yet to be seen and learned. It is not sufficient to know that there exist microbes, and that they are the agents of most of our diseases; we must find the means of combating them, of destroying them, and of opposing their noxious action in the economy; since, after all, the physician's aim is to

cure or relieve those who suffer. Unfortunately, if so far we have succeeded in killing micro-organisms "in vitro," it is nevertheless true that the means at our disposal cannot generally reach them in diseases without destroying in the meantime the organism which is like their bulwark. We know the foe, we know where it lies, we possess against it powerful means of destruction; but squatted in the living cell, as within an entrenchment, it sets us at defiance, and slowly distils its poison. But, in this struggle, we must and we shall, I hope, some day become victors. Our anxiety, hereafter, must be to look for the action of each antiseptic upon each microbe, to determine the agents that act most energetically upon it, and to discover amongst these agents, those that are the most harmless to the human and animal being. Empirically we have already found out the special antiseptic power of certain therapeutical agents and their elective action against a given infection. Syphilis has been cured by mercury for several centuries, and if quinine so rapidly and so easily triumphs over malaria, is it not because it possesses a noxious action upon the infectious flagellum? The so remarkable efficacy of salicylic acid in rheumatism, is according to all probability explicable by an antiseptic action.

But until the day that we shall have discovered a specific for every disease, what I willingly call the philosopher's stone in pathology, we must not remain inactive, and if we cannot yet surely and directly act against the microbes, we must endeavor to modify the soil-object of their covetousness, if not already in their power, and try to render it unfavorable for their development and multiplication. By all the means put at our disposal, by hygiene and therapeutics, we must strive to provoke that particular activity of nutrition which secures the triumph of organism in the struggle with the infectious agents. All that accelerates nutrition contributes to render the organism refractory to the invasion of microbes and *vice versa*, bad hygienic conditions, great traumatism, impression of cold, mental depressions in bringing impediment to the essential phenomena of nutrition, hinder more or less the cellular metamorphosis, and assimilate the organism to the dead matter so eminently favorable to the development of microbes.