

recognition that its ultimate processes, whether produced by external agents or the result of modifications in the normal metabolism, are chemico-physical, we have reached a standpoint from which to approach the problems of prevention and cure in a rational way. Let me indicate briefly the directions in which the new science has transformed the old art. In the first place the discovery of the cause of many of the great scourges has changed not only its whole aspect, but, indeed, we may say the the very outlook of humanity. No longer is our highest aim to cure, but to prevent disease; and in its career of usefulness the profession has never before had a triumph such as we have witnessed in the abolition of many fearful scourges. Great as have been the Listerian victories in surgery they are but guerilla skirmishes, so to speak, in comparison with the Napoleonic campaigns which medicine is waging against the acute infections. These are glorious days for the race. Nothing has been seen like it on this old earth since the destroying angel stayed his hand on the threshing floor of Araunah the Jebusite. For seven years now, Cuba, once a pest house of the tropics, has been free from the scourge which has left an indelible mark in the history of the Englishman, Spaniard and American in the new world. To-day the canal zone of Panama, for years the graveyard of the white man, has a death rate lower than that in any city of the United States. In the Island of Porto Rico, where many thousands have died annually of tropical anæmia, the death rate has been cut in half by the work of Ashford and others. But above all, the problem of life in the tropics for the white man has been solved since malaria may now be prevented by very simple measures. These are some of the recent results of laboratory studies which have placed in our hands a power for good never before wielded by man.

Secondly a fuller knowledge of etiology has led to a return to methods which have for their object not as much the combating of the disease germ or of its products as the rendering of conditions in the body unfavourable for its propagation and action. How fruitful in practical results, for example, have been the new views on tuberculosis! Not that the discovery of the bacillus itself modified immediately our treatment of the disease, but as so often happens, a combination of circumstances was responsible for the happy revolution—the recognition of the wide-spread prevalence of the infection, the great frequency with which healed lesions were found, and the knowledge of the importance of the character of the tissue soil, led to the substitution of the open-air and dietetic treatment for the nauseous mixtures with which our patients were formerly drenched. We scarcely appreciate the radical change which has occurred in our views even within a few years. Contrast a recent work on tuberculosis with one published twenty-five years ago. In the latter the drug treatment takes up the larger share, while in the former it is reduced to a page or two. And it is not only in the acute infections that