

**LECTURES ON TROPICAL
DISEASES: BEING THE LANE
LECTURES FOR 1905 DELIVERED AT
COOPER MEDICAL COLLEGE, SAN
FRANCISCO, U.S.A. AUGUST 1905**

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The Lane Lectures
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COOPER MEDICAL COLLEGE,
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BY

SIR PATRICK MANSON

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LECTURES
ON
TROPICAL DISEASES.

I.

PRINCIPLES DETERMINING THE GEOGRAPHICAL DISTRIBUTION OF TROPICAL DISEASES—EPIPHYTIC DISEASE: ANKYLOSTOMIASIS.

My first duty is to thank the authorities of this College for the honour they have done me in selecting me as Lecturer on this occasion. It is no small honour, and it is one, I need hardly assure you, I highly appreciate.

While thanking you I would congratulate you, not on your choice of lecturer, but on your choice of subject. Considering the time and the place there could be no more appropriate theme than Tropical Medicine.

During the last few years tropical pathology has advanced by leaps and bounds, and probably at a greater rate than any other department of medicine. I was going to say every month—this may be exaggeration—but certainly every year brings with it some notable discovery, some new fact, some new disease, some fresh light on an old disease, or, it may be, some revolutionising idea pregnant with possibilities.

Thirty years ago tropical pathology as a distinct department of medicine could hardly be said to exist;

but within that short space of time how many important discoveries have been made! To mention but a few, I might point to the germ causes of leprosy, of cholera, of Mediterranean fever, of chyluria, of tropical splenomegaly, of tropical sore, and, most important of all, of malaria; it may be also of dysentery, of liver abscess, of sleeping sickness. Many hitherto unknown animal parasites, some exercising pernicious effects on their human hosts, have been dragged to light; and helminthology, until recently an insignificant, if not a despised, branch of pathology, has acquired an importance no longer to be ignored. The protozoa, formerly hardly mentioned in our text books, thanks mainly to research in tropical pathology, are gradually usurping the premier place hitherto held by the bacteria. Lastly, an entirely new and, especially from the standpoint of preventive medicine, a most important departure was inaugurated when it was found that insects and their congeners are instrumental, and in many instances are necessary agents, in the diffusion of a considerable section of human and animal disease. When the mosquito made her bow on the stage of pathology, and more especially when Ross demonstrated her rôle in malaria, a new and most important era in the science of medicine was inaugurated.

Manifestly the present is an appropriate time in which to discuss tropical medicine. Equally appropriate for this discussion is the building and the city in which we are assembled. Whether ye will it or no, America is bound to expand. I cannot pretend to say precisely what form this expansion is to take, whether it is to be in the shape of conquest, of colonisation, or merely of moral, intellectual, and commercial assimilation, or, in other words, as civilisation; but certain it is that one

way or another, and in the not very distant future, American influences will dominate a large and increasing proportion of the earth's surface. Seeing, however, that the greater part of the temperate regions of the globe are already fully occupied by kindred races and kindred civilisations, the latent energies of American expansion must find their vent and opportunity in the tropics, as indeed has already happened, and more especially in those lands whose shores are washed by the Pacific. For these lands this port of San Francisco is the natural jumping-off and dumping place. It takes little prescience to foretell that ere many years have passed thousands will annually leave your shores for tropic countries, and thousands will return to them from tropic exile. San Francisco will become a yet greater commercial centre, and will stand in this respect to the west of the American Continent very much in the same relationship as London used to stand to the west of Europe. The San Francisco of to-day is but a village as compared to the vast metropolis of the Pacific which it is her destiny to become.

The expansion of America tropicwards will undoubtedly bring in its train great material prosperity to this city. With this prosperity will come trials, duties, responsibilities. Not the least important of these are those having reference to disease and to the preservation of health in tropical countries.

The establishment of those admirable and fruitful research laboratories in the Philippines, the splendidly successful efforts made in Cuba to banish yellow fever, and the elaborate sanitary arrangements devised for the Panama Canal route, show that the Washington authorities thoroughly appreciate this. Doubtless the selection