

be merely clothing in my own language facts with which you are all familiar, and in the advancement of which many of you have taken an important part. I further found that standing on the high pedestal on which you have placed me, I was, to a certain extent, placed above criticism, and therefore could not fairly deal with polemics.

It finally occurred to me that I might find some devious path or unbeaten track in the vast field of medicine which I might pursue with some measure of success. I intuitively turned my attention to the circulation, the ramifications of which pervade the whole field, and as writers hitherto on this subject have almost invariably traced the circulation from the centre to the periphery, it occurred to me that we might get a fresh view if we turned our attention in the opposite direction. There are numerous treatises on diseases of the heart and aorta, but until recent years a careful study of the peripheral circulation has been largely left to physiologists and pathologists. The experimental work of Cohnheim will ever remain a landmark in the pathology of the circulation, while to the school of Ludwig physiologists are no less indebted. To physiology medicine owes much, and all great advances are being prosecuted along physiological lines. If there have been any apparent divorce between the scientific basis and the practical application of our art, it is not due to any too rapid advance of physiology, but to physicians being too slow to fructify the field which has been tilled by physiologists. I have previously asserted that diseases of the heart most frequently arise from causes acting on the periphery, and hence there is here no room for specialism. The man who only studies the circulation with the aid of a stethoscope is a positive danger to society. I can, therefore, with an easy conscience and a sense of much satisfaction, devote some attention to that periphery.

The capillaries through which the interchange of nutritive pabulum and gases takes place between the blood and tissues, play a most important rôle in the animal economy. Yet they have received very inadequate attention from clinicians. Perhaps it has been thought that their structure and position could be so briefly described that any circumlocution in their description was unnecessary. But however simple their structure, and however apparent their functions, they constitute a vast filter bed for conveying nutritive material and oxygen to the tissues and for removing waste products therefrom. A careful study of how these changes take place, and how the functions of these little tubes are carried on, has always seemed to me a matter of as much importance as even the action of the heart itself. These little vessels are of extreme tenuity and delicacy, consisting of a single layer of endothelium, yet they are much stronger than most people imagine, and are capable of standing considerable internal pressure; they vary from about 0.5 to 1 millimetre in length, and from 7 to 13 micro-millimetres in diameter.