

which must first of all be answered : What is medical science, and how far into the future do we propose to dip ? The first question may be answered by the statement that it is that body of knowledge obtained through observation and experiment concerning the origin, course, and termination of disease and the influences which modify it. This is pathology, but in a wider sense than that usually given the term. It includes, in addition to pathology in the narrower sense, the foundation sciences, biology, physiology, bacteriology, and physiological chemistry ; and whatever, therefore, advances these will in a great measure aid in the advancement of medical science. The latter must always be in advance of medical practice, for it will always excel our knowledge of how the controlling influences are to be used or best employed; but the distance between the two will always depend on the skill and intelligence of the profession as a whole in any one generation.

In regard to the other question, I may say that to discuss the condition of affairs which shall obtain when we shall have ceased to take an interest in them is a performance of simple intellectual amusement, and of no practical advantage to us ; and, as the average length of a practitioner's life ranges between thirty and forty years, a period of thirty-five years, reaching beyond the close of the first quarter of the next century, embraces for us the extent of the future which we may comprehend in the outlook.

How will medical science develop within that time ?

In this forecast I will not attempt to prophesy, for one may do something more substantial than that. We may rely on the progress of medical science during the last thirty-five years, on what human necessities demand, and on the tendencies of research at the present day to guide us in determining the development of some parts of the science at least ; and we have also as an influential factor in shaping its future the appreciation in which medical research is held to-day.

The by far greater part of our knowledge of disease has been established within the last thirty-five years, and if we examine the history of research for that period we will find that any considerable advance in our knowledge in that department has been the outcome of a greater advance in some one of the foundation sciences, physiology, and physiological chemistry in the earlier years specially, and bacteriology and pathology in the later years. I might illustrate what advances these sciences have made by reference to physiology alone. Were an expert physiologist of the date 1860 transported through time to 1870, he would find himself very unfamiliar with the subject in its new form ; and were he to reach 1880 in the same manner as he did 1870, it is extremely doubtful if he would consider it possible to put himself in that relation to his subject in which he was in 1860. It was possible then for him to be an accomplished physiologist,