

time, a review for those of a maturer clinical experience who may desire to seek the physiological interpretation of diseased conditions.

In attempting to fulfil these requirements, it has been deemed essential to go back to the fundamentals of the subject, and to explain as simply as possible the physical and physicochemical principles upon which so huge a part of physiological knowledge depends. Physiology may be considered as an application of the known laws and facts of physics and chemistry to explain the functions of living matter, and it is only after the extent to which this application can be made has been appreciated, that the knowledge may be used to serve as the foundation upon which a superstructure of clinical knowledge can be built.

In order that the volume might be maintained of reasonable size, it has been necessary to select certain parts of the subject for particular emphasis, the basis of selection being the degree to which our knowledge clearly shows the value of the application of physiological methods both of observation and of thought in the study of diseased conditions. This has not been done to the extent of omitting the apparently less essential parts, for these have been treated in sufficient detail to link the others together so as to preserve a logical continuity, and show the bearing of one field of knowledge on another. There are however certain parts of the science, particularly the physiology of nerve and muscle, of the special senses, and of reproduction, for which application in the general fields of medicine and surgery is limited, and these parts have been omitted entirely. It has been judged that this perhaps somewhat arbitrary selection is justified on the ground that the ordinary text in physiology covers these subjects sufficiently, except for the specialist, for whom on the other hand, no adequate review would have been possible within the limits of such a volume as this. With reference to biochemistry, no attempt is made to review the properties or describe the characteristic tests of the various chemical ingredients of the body tissues and fluids. This is already sufficiently done in the textbooks on biochemistry, and in the numerous manuals on clinical methods. Biochemical knowledge is treated rather from the physiologist's standpoint, as an integral part of his subject, particular attention, nevertheless, being paid to the far-reaching applications of this latest department of medical science, in the elucidation of many obscure problems of clinical medicine, such as those of diabetes, nephritis, acidosis, goiter and myxedema. To make the volume of value to those who may not have had time or opportunity to familiarize themselves with the technical methods of the physiologist and biochemist as used in the modern clinic, a certain amount of space is devoted to a brief description of the methods that appear at present to be receiving most attention, and to be of greatest value.