THE STORY OF HEART DISEASE

By

TERENCE EAST,
M.A., D.M. (Oxon)

DAWSON

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The FitzPatrick Lectures for 1956 and 1957 given before The Royal College of Physicians of London

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To Zoë

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Preface

THERE is little to add to that which is said in the Lectures. The task has been a pleasant one, for these writings of our medical forefathers have a charm and vivid freshness that is lost to the literature of medicine today. I have made all the translations myself, except one from Russian, and looked into all the publications referred to, except for one or two which I could not consult; the paper of Fallot is inaccessible here.

To encroach upon the work of an historian is a rash deed for a clinician, but I believe that a sense of history must be innate in the clinician's mind, for he must be constantly tracing the course of events in his patients. One hopes, therefore, to be able to apply the same mental process to a study of the development of knowledge in a particular subject. I have selected as my theme cardiology, as the study of the diseases and disorders of the circulation has come to be known. It has always interested me to try and trace back to its original source some of the knowledge that has come down to us, and see how the first steps were taken; to see if one could gauge how the idea came to its discoverer and how the new knowledge spread and increased. At any rate, as Homer has put it, one "has known the minds of many men"—and sometimes one has seen their cities too—and these have been master-minds—the minds of the "old masters" of medicine. It has seemed to me important to give as much of their original words as possible, and show something of the writer as well.

In attempting such a task as this, it may soon become dull if one approaches it from a point of view that only gives a succession of dates and names; considering it only from the aspect of time. It seemed to me that it would be more interesting to select four topics and consider each one separately. The first is on diagnosis, the second concerns morbid anatomy, the third the coronary circulation, and the fourth therapeutics. This may

lead to some overlapping, but one should be able to cover most of the ground, and the theme remains intact.

In these Lectures, I have wandered far, led by interest and fancy in some very wide fields, but they are in a sense Elysian Fields, where one may meet the great ones of medical history. "So partly trifling, but with a degree of seriousness we linger around the memory of a world which has passed away," but—let us remember—

> "Their work continueth,
> Broad and deep continueth,
> Greater than their knowing."

Acknowledgments

I SHOULD like to thank Dr. Ashworth Underwood, Director of the Wellcome Historical Medical Museum, for some of the slides shown in the Lectures, and Mr. Payne, Assistant Librarian at the Royal College of Physicians, for finding some old books, and the Library Staff at the Royal Society of Medicine for getting up dozens of dusty old volumes from the basement.

Messrs. J. C. Eno have kindly allowed me to use the picture called "The Consultation". The illustrations in this book are mostly from my own library, except where indicated.

LECTURE I

I

Diagnosis

MR. PRESIDENT, Fellows of the College, ladies and gentlemen. I feel that it is a great honour to be asked to give the FitzPatrick Lectures this year and next. It is dutiful to remember that in 1901 these Lectures were founded to keep green the memory of a learned member of this College, and a graduate of Dublin, who was widely known for his culture and erudition. When I read the list of my predecessors, among them my sometime teachers, Sir Raymond Crawfurd and Sir Frederic Still, I cannot but feel a sense of unworthiness.

In my first lecture I propose to consider the subject of *diagnosis*. I venture to think that in the matter of diagnosis of the diseases and disorders of the heart and circulation one can achieve a very satisfactory degree of precision when one makes use of the various methods that are at our disposal today. But until Harvey in 1628 revealed the truth of the circulation of the blood it is clear that diagnosis could hardly achieve anything at all. But "*Truth, though it may be questioned for a vagrant, carrieth a passport along with it for its own vindication*"—as Thomas Fuller commented in his remarks on Harvey. We therefore owe it all to William Harvey who was inspired by the study of anatomy at Padua under Fabricius of Aquapendente—that pretty little hill town near Rome. I suppose the little *anatomy theatre* in the University of Padua is much the same as in Harvey's day, and also the courtyard, or *cloister*, where the coat of arms of Harvey (his stemma) is clearly to be seen, rather high up in the ceiling. There is also the great hall, a

most gorgeous room. Harvey may have received his degree here.

The *pulse* has been examined from the earliest times. In China, many centuries before our era, the Chinese pursued a vague mystical study of this phenomenon. In this, as in the inventions of *printing* and *gunpowder*, they did not go very far, although they were first in the field. Probably, if not certainly, in the *second* of these two subjects they were wise—but the *first* form of "gunpowder" is more subtle—and perhaps more dangerous. These elaborate and time-consuming procedures by which the examination of the pulse might occupy the physician an hour or more, were introduced into Europe in the middle of the seventeenth century, where finally they may have had some value in stimulating Sir John Floyer, of whom more later. Five centuries before Christ the pulse was studied in India, and there are apparently ill-understood references in some of the Egyptian papyri many centuries earlier. There is no evidence that Hippocrates ever paid attention to the pulse. About 300 B.C. Herophilus of Alexandria taught that the beat of the heart caused the pulse in the walls of the arteries. He defined the qualities of the pulse; attempted to count the rate by help of a water-clock, defined the size or volume, and appreciated the strength, and noted the rhythm. All of which are very much the things we teach our students to observe today.

The head of the rival school at Alexandria was Erasistratus. It has been said that "these schools fought with learned pertinacity to the very end"—Erasistratus taught that the arteries contained blood and not air—an observation that anyone engaged in the Siege of Troy should well have made—yet I do not think spurting arteries are mentioned in the *Iliad*, where blood flows freely enough. He thought, however, that this blood reached them through capillary vessels from the veins. But he was an astute clinician, as this story shows. Antiochus I had fallen in love with his stepmother Stratonice—and had really become ill. Erasistratus diagnosed the disorder by observing the patient's pulse change when the lady of his affections entered the room.