

tions and seeking answers, but it is implicit in Sir Ernest Simon's pamphlet that guidance from a national body would not only be welcomed, but is indeed essential if appropriate action is to be secured. Such questions as the order of magnitude of university expansion, whether this is to be secured by expanding existing universities or by developing university colleges to university status, clearly cannot be determined by individual universities alone, nor can the regional problems and those of the extent and size of the different schools or fields covered at individual universities be considered without some regard to national resources.

These are all questions which require answers before any increased resources can be wisely apportioned. If there is to be no undue delay, if false steps are to be avoided which might impede progress at a later date, it surely appears wise to use machinery the competence of which, even if in a more restricted field, has already won respect, than to establish an entirely fresh organization for which support must be won anew. While that machinery is dealing with the immediate problems, there should be time to consider those more fundamental questions as to the ultimate functions of a university, the balance between professional and vocational training and training in citizenship and in leadership, and the place of the university in the society which it serves. In the long run, the answers to these questions must determine the content, the scope and the length of university courses and the status of the staff. No one, however, who has studied the quinquennial reports of the University Grants Committee can doubt the capacity or vision of that Committee or that, reconstituted, it could become a centre of stimulus and creative thought in those great matters to which many minds are turning with fresh hope and zeal. It may well be hoped that these reports will do something to stimulate among university graduates generally the interest and thought that must precede any attempt to remedy the conspicuous weakness of most modern universities in Great Britain—the slight opportunity for their graduates to express their opinions on conditions of university life and study, and to participate actively in university affairs.

## A HISTORY OF EPIDEMIC DISEASES

### The Conquest of Epidemic Disease

A Chapter in the History of Ideas. By Charles-Edward Amory Winslow. Pp. xiii+411. (Princeton, N.J.: Princeton University Press; London: Oxford University Press, 1943.) 30s. net.

**T**HE epidemic diseases occupy much of the space in medical treatises of the Early and Middle Ages. The reason is not far to seek, for plagues and pestilences were common and the resultant decimation of populations at regular intervals was terrifying and impressive.

The conception of the causes of epidemic diseases has varied from age to age. Dr. Winslow has portrayed in this book the evolution of thought and

reasoning on epidemiology by giving extracts from the works of the principal participants in this long and unfinished study.

In the earliest times demons figured largely in the etiology of the diseases, and in the primitive races their influence is still largely credited. Out of this belief came the use of charms against disease, witchcraft and exorcism. Even in so-called civilized countries demonology and magic continue to this day to be widely practised, though often cloaked under other names. In 1929, at York in Pennsylvania, a man was murdered by another who wished to have a lock of his hair to use as a charm. The coroner in this case is quoted as saying, "At least half the 60,000 residents of the city of York believe in witchcraft and as for the county's rural population of 90,000, they not only believe in witchcraft, but guide the minutest details of their lives by it".

The next conception was that of the wrath of God, when disease was seen as a punishment for sin. In the Old Testament the propitiation of devils is forbidden. Under the heading of metaphysical medicine, the author illustrates such ideas as astrological influences, the doctrine of signatures, and repellency, or the sending away of disease by means of animate things.

It was not until the advent of Greek science that reasoning began to triumph over superstition. In the age of Hippocrates three major factors in epidemic disease were postulated. First, an epidemic constitution of the atmosphere; secondly, individual predisposition; and thirdly, certain diseases were recognized as contagious and association with the afflicted was known to be dangerous.

The reality of contagion was sharply brought to notice in the fourteenth century by the Great Plague, and the object lesson was reinforced by experience with leprosy and syphilis. It is interesting to note that the relation between plague and disease in rodents was described in early Hindu scriptures.

Hieronymus Fracastorius, as is his right, is given a chapter to himself in which are extracts from his poem on syphilis and from his more important work on contagion.

In the seventeenth century came the conception of animate contagion. Kircher postulated the theory of transmission of disease by living organisms. He was not the first in this field, but his ideas were more concrete than those of his more fanciful predecessors. Leeuwenhoek with his microscopes was also of this age.

After Sydenham and Mead comes Rush and his investigations of epidemics of yellow fever in the late eighteenth century in America. The nineteenth century filth theory of disease was the doctrine of miasms modernized. Sanitary and housing details of this age are described in horrid detail. The change from the miasmatic to the contagion theory of epidemic disease is illustrated by the works of Panum on measles, of Snow on cholera, and of Budd on typhoid fever.

Pasteur ushered in the modern age, and our knowledge of epidemic diseases was brought nearer to completion by an understanding of the carrier state and of insect hosts.

Dr. Winslow's scheme of unfolding this story through the medium of the words or works of the actors in the drama succeeds admirably in being at once easily readable and complete enough to serve as a useful book of reference. There is a full bibliography and index and the book is well bound and printed.

J. MARSHALL.