

**Disease and the Advancement of Basic Science.** Edited by DR HENRY K. BEECHER. London. Harvard University Press, 1960. Pp. vii + 416.

This is a volume which has developed out of the Lowell Lectures of 1958. Its thesis is that some kinds of fundamental advances in science can only be made by the study of disease. The twenty-one professorial contributors discuss this point from the vantage of their own specialized knowledge and the result is a wide-ranging production which provides a wealth of information and enlightenment for the medical reader. Dr Beecher in his preface points out that it is quite possible to think of man in one sense as a closed system, a black box. The characteristics of the normal body are studied and then, just as the physicist after studying his black box puts a perturbation on it, disease affecting the human body provides a stress and its effects are there for study. Nature presents bolder experiments than one would ever dare to perform.

The contributions include the contribution of clinical medicine to biochemical genetics, deformities as cues to understanding development of form, advances in nutrition and biochemistry which were stimulated by the study of disease, comments on the contribution of viruses to biology, and advances in basic science which have arisen in the psychiatric clinic—to list only a few of the varied contributions. The chapter on “The two Roads—Surgery and Science” by the Moseley Professor of Surgery at Harvard University must have been equally as pleasant to hear as it is to read. “By their diseases ye shall know them—the endocrines” is a lucid account of the advancement of the physiology of the endocrines by the study of their diseases. Professor William B. Castle’s account of advances in physiology derived from the study of anaemia in man deserves to be printed separately and become one of the classical monographs. Professor Joseph C. Aub, in his description of the understanding of cancer requiring understanding normal cell growth, shows very clearly the extreme difficulty of finding true differences between normal and neoplastic growth.

Dr Beecher is Henry Isaiah Dorr Professor of Research in Anaesthesia at Harvard University. He has edited a remarkable book as the first event in the celebration of the 150th anniversary of the founding of the Massachusetts General Hospital. He has striven to show clearly that, as Sir William Bragg said, “There is not one science of chemistry, another of electricity, another of medicine, and so on; there are not even distinct sciences of peace and war. There is only one natural world and there is only one knowledge of it”.