although the writer apologizes for its being of rather an elementary type, it is nevertheless very well done and fully illustrated, occupying some fifty pages.

We think it is a pity that a similar chapter was not added on electro-encephalography. This subject is so much to the fore in modern work that we feel that both the student and the general practitioner would appreciate a chapter telling them what it all means.   G. W. T. H. FLEMING.

Mental Disease and Social Welfare. By HORATIO M. POLLOCK. New York : State Hospitals Press, 1941. Pp. 237. Price $2.

The sixteen chapters of this book are devoted to various social aspects of mental illness and most of them have previously been read or published elsewhere.

The most interesting chapter (written with the help of Dr. B. Malzberg), and one which has not previously been published, is that dealing with the expectation of mental disease, not only at birth, but at every age of life. The life table method of analysis is used and the data are segregated by sex and nativity. The statistics apply to the State of New York and show that approximately 4·5 per cent. of persons born may, under existing conditions, develop mental disease and become patients in the hospitals for mental disease.

An interesting fact mentioned in Chapter XII is that the results of metrazol treatment of dementia praecox raise grave doubts as to its use. Insulin is clearly superior.

In his review of thirty years of alcoholic mental disease the author asks four questions, and if the answers to these four questions are in the affirmative, then the drink habit should be encouraged; if not it should be strongly discouraged. The questions are :

(1) If the taxes paid by the liquor traffic are not largely from the earnings of the poor ?

(2) Does the drink habit make workers in all occupations more reliable and efficient ?

(3) Does the free use of alcohol promote health and gcod citizenship?

(4) Does alcohol lessen crime and accidents ?

The author has undoubtedly served a useful purpose in gathering together these reliable statistical studies so that laymen in particular can have easy access to them.   G. W. T. H. FLEMING.

Mathematical Biophysics. By NICHOLAS RASHEVSKY. Chicago, 1939. Pp. 340. Price 18s.

The book is divided into three parts, entitled : (1) Mathematical biophysics of vegetative growth, (2) Mathematical biophysics of excitation and conduction in peripheral nerves, (3) Mathematical biophysics ol the central nervous system. Over half of its pages are concerned with neurophysiology. We may state at once that the author is clearly an expert mathematician.

The first part of the book is much the most satisfactory. Here the author discusses the thermodynamic consequences of the hypothesis that a cell is a metabolizing entity, i.e. that it is continuously producing and absorbing chemical substances. A cell will set up gradients of the concentrations of substances, and these gradients will produce osmotic and other known effects. He shows that even so simple a hypothesis as this will explain adequately many known facts in cellular physiology. Thus, he shows that a cell, if most of the diffusion is outwards, must become unstable after exceeding a given size, and must then