THE BRAIN

The Brain as an Organ. By FREDERIC WERTHAM, M.D., and FLORENCE WERTHAM, with introduction by Adolf Meyer, M.D. Published by the Macmillan Company, New York, 1934; 538 pages, 166 plates. Price, $7.50.

THIS is a thick and comprehensive book, but it is diffuse and confusing. The author preaches a sermon, but like many sermons it is too long, too repetitive and the reader is too conscious of the feelings of the preacher. Exhortation, timely though it may be, does not mix well with science. Even the title of the book carries a little reproof, as if really the reader ought to have known that the brain is an organ (but some of us unregenerates still prefer to consider the brain as an association of many organs). In the author's own words: "The brain as an object of histopathological study is also an organ of the body like any other, and not something unique, to be measured by entirely different standards. . . . To blend neuropathology more and more with a biologically oriented general pathology will be the task of the future—a task which we hope this book will further." This is from Chapter I, which is a good lecture. Just what connection this has with the next 114 pages is hard to see, for these are taken up with a summary of the methods of neuropathology. The last 370 pages comprise a discussion of cerebral lesions, under the chapter headings: "Alterations of the Individual Components of the Nervous Tissue," "Kinds of Lesions," "Distribution of Lesions," "The Extent of the Normal," "The Interpretation of Lesions," "Correlation of Lesions with Psychopathological Phenomena," "Comparative Histopathology," "Some Histopathological Syndromes that may be Associated with Mental Disorder," "Is There a Histopathology of Schizophrenia," and "Forensic Neurohistology." These are all interestingly written, and show the author's industrious reading in a brave attempt "to present correctly the whole range of the fundamental data of the histopathology of the brain." The best parts of the book are the chapters on "Kinds of Lesions," where it is emphasized that "the stage in which a lesion is examined deserves the center of interest," and the discussion of "Distribution of Lesions." At the end of the book are inserted 166 excellent illustrations. The index is meticulous to a fault, *e.g.,* referring the reader too often to unimportant and incidental remarks about a subject.

This is an arresting book, written with a missionary spirit and compelling attention from neurologists and psychiatrists, although one may disagree with many of the statements and wish that the scientific exposition had been separated from the expressions of opinion.

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SPECIAL ARTICLES

VIABILITY OF B. COLI EXPOSED TO ULTRA-VIOLET RADIATION IN AIR

WHEN a liquid suspension of microorganisms is atomized into the air, the infected droplets so produced will evaporate rapidly and there will be left adrift in the air infected nuclei that may remain suspended for protracted periods of time and be carried appreciable distances by air currents. Since, under the conditions of existence thus created, many microorganisms appear to retain their viability for a number of hours, the influence upon viability created by environmental factors, including physical and chemical agents, becomes of interest.[1]

During the past winter, a number of such factors and agents were submitted to experiment in a preliminary survey of their significance. The most interesting one studied was ultra-violet light, for which a few of the results of four types of tests are presented herewith. In all the tests reported a diluted broth culture of *B. coli* was atomized into a room of about 2,000 cubic feet capacity. Samples of air were then withdrawn from the room through a Wells centrifuge[2] and the number of *B. coli* in 10 cubic feet of air determined. A 500-watt quartz mercury-vapor electric lamp served as the source of ultra-violet light.

In the first type of test, one half of a diluted broth culture of *B. coli* was atomized into the darkened room; the other half into the room when lighted by the lamp. The test organism was recovered from 10 cubic feet of room air as shown in Table 1. The

TABLE 1

Elapsed minutes	0	30	60	90	120
B. coli recovered from					
darkened room	5,200	560	140	42	3
lighted room	0	0	0	0	0

reduction of organisms in the darkened room is characteristic of the normal disappearance of *B. coli* from

[1] *Amer. Jour. of Hygiene,* 20: 3, 611–627, November, 1934.

[2] *Amer. Jour. of Public Health,* XXIII: 1, January, 1933.