and dogs. The part played by alcohol is further demonstrated because these disturbances can be corrected by taking more alcohol. The abstinence syndrome reveals that a pharmacologic substance, alcohol, assumes the role of a dietary requirement. Such a viewpoint places delirium tremens in the category of a withdrawal syndrome." Himwich therefore thinks of alcoholism as much more akin to opium. He likewise believes that these findings indicate that the presently generally accepted idea of immediate and complete withdrawal of alcohol is undesirable and may even throw the patient into delirium tremens. He agrees that this concept is not generally accepted, but wishes to advocate it again. Whether or not one agrees with him, it is worth while having this question brought up again and reevaluated. He concludes: "The physiologic factor is regarded as structural and active when the cells of the body and particularly those of the brain appear to function better in the presence of alcohol than in its absence."

Chapter 3, "Views on the etiology of alcoholism—II, The psychodynamic view," is by Franz Alexander, clinical professor of psychiatry, University of Illinois. Alexander's approach is primarily the orthodox psychoanalytic viewpoint, quoting heavily from Knight. He emphasizes the disinhibiting effect of alcohol which reduces repressions and permits a freer expression of ego-alien, mostly infantile cravings. He mentions oral dependent needs, latent homosexuality, repressed or inhibited heterosexual and hostile impulses, as the most important of these.

Chapter 4, "Views on the etiology of alcoholism—III, The behavioristic view," is by Edward Joseph Shoben, Jr., associate professor of education, Teachers College, Columbia University. He holds that alcoholism can best be studied as maladaptive behavioral adjustment. He agrees to the apparently universal viewpoint of the participants that alcohol reduces anxiety. He questions whether drinking releases lower functions and suggests that it rather releases impulses that have been inhibited by anxiety. He believes that important material can be obtained by studying the availability and first drinking experiences of the alcoholic in learning how alcohol has been chosen as a defense against anxiety.

Chapter 5, "Views on the etiology of alcoholism—IV, The Sociologic View," is by August B. Hollingshead, professor of sociology at Yale. He points out that sociologists have shown little interest in the etiology of alcoholism but have studied mostly the use and abuse of alcohol in particular cultures. Although he feels that there is evidence of varying use of alcohol with different cultures, he does not believe that such studies have shown what is the specific factor operating in a given situation that led to alcoholism in an individual. He also criticizes the sociological studies for seeking etiology factors in social and cultural situations and largely overlooking the individual.

Chapter 6, "The natural history of alcoholism—I, Its onset and course," is by Arnold Z. Pfeffer, assistant clinical professor of psychiatry, New York University School of Medicine. This chapter is a rather orthodox medical and psychiatric discussion of alcoholism.

Chapter 7, "The natural history of alcoholism—II, Its psychopathologic manifestations," is by S. Mouchly Small, professor of psychiatry, University of Buffalo School of Medicine. Here we get a fairly textbooklike description of the different types of alcoholic mental disorders.

Chapter 8, "Evaluation of the treatment of alcoholism," is by Hugo Muench, professor of biostatics, School of Public Health, Harvard University. Muench points out that up to 50 different treatments are listed for alcoholism and that medical schools commonly teach that the more and more varied the treatment for a disease, the less likely that any one of them has any particular value. He goes on to a discussion of simple statistical criteria for dealing with such a study. There is further discussion of the meaning of "effects of treatment" and a plan for setting up a life-table study.

There are many interesting discussions of these papers by other members of the conference. On the whole, it can be said that this book is somewhat unique and different from any of the recent small books on alcoholism that have come out, that it emphasizes that alcoholism is a medical problem, and that it presents a great deal of interesting material by a number of extremely well-qualified persons. The book is recommended for anyone who wishes to keep up to date on the whole problem of alcoholism.

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Handbuch der Physik. vol. 47, *Geophysics.* I. S. Flügge, Ed. J. Bartels, Group Ed. Springer-Verlag, Berlin, 1956. 659 pp. DM. 118.

Fifty years ago, a student could become familiar with all major results of physics of the atmosphere, the ocean, and the earth's interior within a year; today, no geophysicist has detailed knowledge of more than a few fields of geophysics. The greatest progress in geophysics has been made since the preceding edition of this handbook appeared about 1930. The present volume is actually a completely new book. In the preceding edition, geophysical chapters were inserted with corresponding chapters of physics—for example, the one on seismic waves in the volume on mechanics of elastic bodies. Now, there are two volumes devoted entirely to geophysics. The first of them, volume 47, covers only problems of the solid earth and is entirely written by new authors. Several of its chapters deal practically entirely with findings unknown in 1930 or discuss new conclusions from rediscussion of older observations.

The volume contains the following major topics: H. Spencer-Jones, rotation of the earth including discussion of the unit of time and of changes in the length of the day (23 pp.); J. Coulomb, theory and types of seismographs (in French, 51 pp.); K. E. Bullen, propagation of seismic waves through the earth, earthquake energy, elastic constants and density in the earth (43 pp.); M. Ewing and F. Press, surface waves and guided waves; the latter were practically unknown 20 years ago but begin to form a separate field of seismology (21 pp.); J. Coulomb, microseisms (in French, 13 pp.); M. Ewing and F. Press, fundamental problems of refraction and reflection methods of seismic prospecting (16 pp.); H. Baule and E. Mueller, methods to determine in the laboratory elastic and nonelastic properties and wave velocities in rocks and effects of temperature and pressure (in German, 32 pp.); G. D. Garland, absolute and relative determination of gravity, reduction of gravity observations, gravity anomalies and their interpretation (44 pp); M. Ewing and F. Press, structure of the crust on the basis of seismic and gravity measurements (12 pp.); A. E. Scheidegger, forces in the crust, which can be deduced from surface features, faulting, folding, distribution of continents and oceans, without "fantastic postulates" (30 pp.); J. T. Wilson, R. D. Russel, and R. M. Farquhar, radioactive decay, isotopes, radioactivity of rocks, age of minerals, duration of geologic periods, and age of the earth (76 pp.); J. A. Jacobs, the earth's interior, deduced from seismological data, expected effects of temperature, pressure, magnetic and electric properties (42 pp.); L. Cagniard, electric currents in the earth and electric prospecting (in French, 63 pp.); S. K. Runcorn, magnetization of rocks and paleomagnetism (28 pp.); S. K. Runcorn, the earth's magnetic field and its variations (36 pp.); K. Jung, figure of the earth, potential theory of the gravitational field, the geoid, gravity in the earth's interior, polar movement; extensive equations and tables (in German, 105 pp.). The book is highly recommended to everybody interested in geophysical problems.

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