Physiologists, we are told, since they came to the problems of alcohol "from the theoretical frame of reference of physiology," have rarely made "longitudinal studies, which are prerequisite to the understanding of the process of addiction."

The following statement of attitude may be accepted as the editor's rather than that of the clinician authors. "On the whole, physiology, experimental psychology and clinical medicine have produced basic data, and psychiatry has furnished the necessary insight and working hypotheses, sufficient to warrant application of the existing knowledge to the investigation of the essential and complex problems of the origins of inebriety and addiction, their prevention and treatment." And this is the last the reader hears of prevention of alcohol addiction, of alcoholism or of abnormal drinking.

Part One, with two chapters by Karl Bowman and the editor on "Alcohol Addiction and its Treatment," and "Alcoholic Mental Disorders," and the related twenty pages of bibliography, is less effective or convincing as a source of facts and opinions of the past than are the four chapters of Part Two, perhaps because of the nature of the topics, but apparently more for the reason that the authors of chapters three to six express convictions based largely on direct personal knowledge of the current facts.

It is perhaps a merit in a reviewer to suppress his own views in giving the lessons of his predecessors, but something of definiteness could certainly have been said in regard to the etiology of alcohol addiction, even if its treatment remains the happy hunting ground of striking personalities and hopeful endeavorers. One gathers the impression that the etiology of alcohol addiction is clouded in a deepening obscurity.

Surely the clinical and time factors or criteria for "cure" of the alcohol addict are no more difficult to establish than are those for cancer or toxic hyperthyroidism, and yet we are left to flounder among tables of obviously non-comparable data in our efforts to discover any objective evidence of the results of various plans of treatment. One could wish the authors of Chapter I had expressed a bit of their own thoughts in the matter and spared us some of the confusion they reveal. We are told in substance only that more and better studies are needed and that effective psychotherapy must be made available to much larger numbers of addicts.

Chapter II is good, the topic lending itself to reasonably precise and accepted points of differential diagnosis and description. The field of alcoholic mental disorders has been tilled by men of acumen, imagination and wide experience and the gist of their facts and opinions is well presented.

Nowhere else than in Chapters III to IV of Part II can one find in medical literature in such convenient form, or so authoritatively expressed, the background, the present status and the immediate direction of further study of the topics dealt with.

Evidence, observation, critical discussion and conclusions are all admirably presented by Dr. Norman Jolliffe and his colleagues, the late Dr. Herman Wortis and Dr. Martin H. Stein, and by Dr. Giorgio Lolli. (III. Vitamin Deficiencies in Chronic Alcoholism, IV. Alcoholic Encephalopathics and Nutrition, V. Marchiafava's Disease, VI. Cirrhosis of the Liver.)

Here at least we are on a sound foundation, the meeting ground of clinician, pathologist and biochemist. Only in part of the last chapter on "Cirrhosis of the Liver" do we meet a rather inadequate and crude use of the statistics of morbidity and mortality. The usual techniques of correlation have not been used and there have been ignored some factors of tabulation, registration practice and incompleteness of reporting of deaths attributed to any form of alcoholism which certainly affect the validity of original data and the comparability of international death rates.

The undertaking of the three volumes is one of great difficulty, complex, little short of encyclopedic and beset by pitfalls in both fact and opinion. This first product of the Council's efforts shows courage and imagination. Volume II will deal largely with experimental material and the highly controversial matter of "germ damage." Volume III will deal with "the magnitude of the problem in terms of incidence, and will analyze the statistics presented in the literature."

Might the devotee of administrative medicine and public health enter a plea for a Volume IV to be devoted to evidence of changes in incidence of and mortality from acute and chronic alcoholism and in consumption of alcohol per capita, related directly or by inference to administrative measures of civil or military governments affecting the production and drinking of beverage alcohol, and some consideration of the actual cost to society of the burden of the alcoholic.

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OCEANOGRAPHY

Oceanography for Meteorologists. By H. U. SVERDRUP. xv + 246 pp. New York: Prentice-Hall, Inc. 1942. $3.50.

IN the solution of certain scientific problems and in carrying on of essential practical work, meteorologists connected with the present war have had an important share, as is evident from the repeated call of the United States Government for qualified persons in this field. A number of excellent meteorological texts have recently appeared to satisfy the needs of professionals and students alike. The book before us,

however, is of a different type because it is fundamentally on oceanography designed to aid the meteorologist in securing information bearing on problems of the atmosphere which physical oceanography can furnish. In this respect the volume fills a need not adequately met by any other work known to the reviewer.

Sea-surface elements and processes which affect chiefly the atmospheric conditions receive especial emphasis. Included among these are the physical properties of sea-water, surface-currents and the processes which maintain them. Adequate discussion is accorded salinity, temperature, pressure, eddy viscosity and conductivity of sea-water as well as the observations and instruments for their determination. The heat-régime of the oceans requires particular treatment, including the effect of radiation to and from the ocean, exchange of heat between the atmosphere and the sea, and evaporation from the sea, all related in a complicated way to meteorological factors and their variations thereby affecting world weather conditions. Nearly one half of the text is devoted to a consideration of oceanic circulation and its various aspects—the water masses (counterpart of air masses) and the great oceanic currents which influence so profoundly the climates of the earth.

As the author remarks, "The theoretical discussion of the dynamics of the ocean currents and the factual information from many ocean areas are as yet incomplete, and therefore it may be premature to generalize. Nevertheless, it has been attempted to overcome difficulties arising from differences in interpretation of incomplete data by placing emphasis on application of the equation of continuity in the description of the ocean circulation."

The necessity of further expeditions to obtain oceanographic data is thus emphasized. The voyages of the *Challenger, Meteor, Carnegie* and other vessels have greatly broadened our knowledge of the ocean, both physical and biological, but it is to be hoped that, at the conclusion of the present conflict, new expeditions may be sent out to gather data which will fill the gaps in our knowledge of the oceans and settle outstanding problems regarding their relations with the atmosphere.

The book is attractively printed and provided with good text-figures. Four folding charts on Goode's homolosine equal-area projection exhibit surface temperatures of the oceans in February and in August, surface salinity in northern summer and surface currents in February–March. No bibliographical references are given other than a list of eleven outstanding general works at the end of the preface.

To meteorologists interested in the interrelations of their specialty with oceanography the volume may be recommended without reserve. The unique experience of the author in oceanographical and meteorological research, both practical and theoretical, which has earned international recognition, has eminently qualified him to make this contribution to geophysics.

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ORGANIC CHEMISTRY

The Work Book of Fundamental Organic Chemistry. By ED. F. DEGERING and COLLABORATORS. 250 pp. New York: Barnes and Noble. 1942. $1.25.

THIS is intended for review work in organic chemistry and self-testing on the material of the given short summaries: also for self-testing on the material of a year course in organic chemistry. Each chapter contains (a) a review summary; (b) genetic charts in which the more important reactions of typical compounds are emphasized; (c) nomenclature, pronunciation and formula tables; (d) a composite review summary; (e) fill-in review questions, and (f) one or more objective tests. It is a compilation having distinct usefulness for students who desire to excel in organic chemistry, but it seems to this reviewer to be too comprehensive even for the excellent student. No purpose is served by burdening the memory of students with such a mass of detail in review material. I can imagine an excellent student getting 100 per cent. in each test, piece by piece, after reviewing a chapter, but I can not believe that the most learned teacher of organic chemistry could get more than 80 per cent. *in toto* without previous concentrated study for some time. But surely the purpose of a review book for students should be selection of material likely to be a minimum for certain specific purposes.

Fundamental Organic Chemistry. By ED. F. DEGERING and one hundred and six collaborators. Photo-offset. Planographed by J. S. Swift Co., Inc. Cincinnati, Ohio.

A TEXT-BOOK of 485 pages, of which 88 pages are devoted to a "kaleidoscopic survey" of organic chemistry with stress in relative electronegativity. The chapters in this first section of 88 pages are headed with figures, male and female, to represent positivity and negativity with respect to each other, the four valences of the carbon atoms which these figures represent being shown by their arms and legs. Thus methyl ethanoate is represented by a particularly hectic moment in a jitterbug contest of two drunken sailors and a dame, other compounds varying in "hectivity." The tables are very lightly printed. The electronic formulae are very confusing and are introduced too often. Photographs of Fisher-Hirschfelder models are scattered profusely throughout, together