existed, and we do not just mean Franklin's—for instance, there was Godfrey's quadrant, a predecessor of the sextant, and Croghan's treasure trove of bones near the Ohio, one of the beginnings of paleontology. All these facts are mentioned in the book, but just as facts among many others. The emphasis is not always there.

The reader will thus occasionally have to do his own evaluation, and I believe that he will be richly rewarded for his efforts. I hope that a similar thorough labor of love and perseverance will one day be done for French Canadian science and for the science of New Spain—both necessary for a correct understanding of American mercantilist science as a whole.

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Techniques Générales du Laboratoire de Physique. vol. 1. J. Surugue. Centre National de la Recherche Scientifique, Paris, 1955. 671 pp. Illus. F. 2,400.

The graduate student embarking on a research career in experimental physics usually has had little experience in laboratory techniques and instrument design. Formal courses to fill this gap are not always available, and recourse to the literature is often the only means of obtaining the necessary information for the solution of experimental problems. The same need will confront the experienced researcher who leaves his field of specialty and borrows methods from related fields with which he is less familiar.

Although some textbooks on laboratory techniques are available, it is interesting to read a French treatise on this important subject, for the approach and techniques vary greatly from country to country. The volume here reviewed, which is published by the French equivalent of the U.S. National Science Foundation, consists of ten chapters written by different authors who are specialists in their respective fields. As might be expected, the chapters vary in clarity and approach, and no attempt seems to have been made to assure complete coverage of all the techniques used in physics. On the other hand, I noticed a great deal of valuable information not easily available elsewhere. I was particularly impressed with the first chapter, on general principles for the construction of scientific apparatus, in which precise theoretical discussions on the stability of mechanical systems and on deformation theory are mixed with practical advice on precision techniques for use of the lathe and milling machine. The next two chapters on glass blowing and vacuum techniques do not differ substantially from similar chapters in English texts, while the fourth chapter on production and measurement of high temperatures is very detailed—almost 100 pages—and contains many tables and theoretical discussions. The next three chapters deal with the general subject of optics, with emphasis on the properties of optical materials, the mounting of optical components, the alignment of optical systems, and other optical techniques not very familiar to the average experimenter. The treatment of light sources, filters, and photoelectric cells is complete and up to date, including discussion of lead selenide and lead telluride cells and of phototransistors. Chapter 8 gives a general description of recording techniques, while Chapter 9 deals with the regulation and rectification of electric currents. The last chapter gives an exhaustive treatment of electronic circuitry from a theoretical and experimental standpoint, but I regret the absence of any reference to transistors.

There are numerous subjects of interest to experimental physicists which are not treated by the authors of this volume, such as techniques of atomic and nuclear physics or calorimetry or low temperature physics. There are also important omissions within the areas covered. A more detailed index, and more liberal use of references would have improved the usefulness of the work even more. The work does not deal with fundamental principles and methods of measurement, systems of units of physical quantities, or theory of errors. Within its scope, however, it provides refreshingly clear and comprehensive information, and it is hoped its designation as volume 1 indicates the existence of plans for additional volumes that will handle the subjects omitted here with the same elegance, precision, and detail as is manifested in the treatment of the subjects of this volume.

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New Books

Annual Epidemiological and Vital Statistics, 1953. pt. 1, *Vital Statistics and Causes of Death;* pt. 2, *Cases of and Deaths from Notifiable Diseases.* World Health Organization, Geneva, 1956. 571 pp. $10.

United States Army in World War II. The Technical Services. The Medical Department: Hospitalization and Evacuation, Zone of Interior. Charles McKittrick Smith. Office of the Chief of Military History, Dept. of the Army, Washington, D.C., 1956 (order from Supt. of Documents, GPO, Washington 25), 503 pp. $4.

The Trickster. A study in American Indian mythology. Paul Radin. Philosophical Library, New York, 1956. 211 pp. $6.

Abacs or Nomograms. An introduction to their theory and construction illustrated by examples from engineering and physics. A. Giet. Trans. and revised by J. W. Head and D. H. Phippen. Iliffe, London; Philosophical Library, New York, 1956. 225 pp. $12.

Television Engineering, Principles and Practice. vol. II, *Video-Frequency Amplification.* BBC Engineering Training Manuals. S. W. Amos and D. C. Birkinshaw. Iliffe, London; Philosophical Library, New York, 1956. 270 pp. $15.

Facing the Atomic Future. E. W. Titterton. Macmillan, London, 1956 (order from St Martin's Press, New York). 379 pp. $5.

The Petroleum Refinery Engineer's Handbook. J. F. Strachan. Philosophical Library, New York, 1956. 168 pp. $15.

Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, *but to the publisher or agency sponsoring the publication.)*

Venereal Diseases. A survey of existing legislation. 44 pp. $0.70. *Expert Committee on Psychiatric Nursing, First Report.* WHO Tech. Rept. Ser., No. 105. 43 pp. $0.30. *Joint FAO/WHO Conference on Food Additives.* Geneva, 19–22 Sept. 1955. WHO Tech. Rept. Ser., 107. 14 pp. $0.30. *Expert Committee on Biological Standardization, Ninth Report.* WHO Tech. Rept. Ser., No. 108. 20 pp. $0.30. World Health Organization, Geneva, 1956.

Services Available to Industry in New Jersey. A list of representative sources of advice and assistance to New Jersey industry for aid in solving industrial problems. Ruth Bates Ahrens and Robert K. Bogardus. Bur. of Engineering Research Bull. No. 38. Rutgers University, New Brunswick, N.J., 1956. 94 pp.

British Association for the Advancement of Science, Annual Meeting. Sheffield, 29 Aug.–5 Sept. 1956. The Association, London, 1956. 103 pp.

The Strength to Meet Our National Need. A statement approved by representatives of the constituent member organizations of the American Council on Education on 20 Mar. 1956, for presentation to the President's Committee on Education beyond the High School, together with major addresses presented at the conference and other pertinent material. Charles G. Dobbins, Ed. American Council on Education, Washington, 1956. 125 pp. $1.50.

National Leadership Development Conference in Trade and Industrial Education, Conference Report. Fort Collins, Colo. 1–12 Aug. 1955. Circ. No. 477. U.S. Department of Health, Education, and Welfare, Office of Education, Washington, 1956. 118 pp.

Current Literature on Venereal Disease. An annotated bibliography (special issue). *First International Symposium on Venereal Diseases and the Treponematoses.* U.S. Department of Health, Education, and Welfare, Public Health Service, Washington, 1956. 164 pp.