one of the largest collections of physical-training literature, and the files of the Bibliographica Medica, Concilium Bibliographicum, American Index Medicus, Surgeon General's Index of the United States Government, Poole's Periodical Index, etc. Also complete files of the technical periodicals on physical training which are not as a rule classified in Poole's Index.

This volume contains a classification of physical-training literature (pp. 9–16) which is an amplification of No. 613.71 of Dewey's 'Decimal Classification.' This classification has already passed through two editions; it is the result of many years of practical use and is invaluable for library classification of physical training literature.

The index (pp. 17–22) serves as a guide to the foregoing classification and to the bibliography, which fills the last 346 pages of the book.

The bibliography includes some 4,000 titles arranged under eight main heads and numerous subheads as follows:

I. *General Works.* (1) Philosophy, (2) compends, (3) cyclopedias, (4) periodicals, (5) societies and conferences, (6) normal education, (7) systems.

II. *The Subject of Training—Man.* (1) Physical, (2) mental, (3) spiritual, (4) social.

III. *The Exercises—Gymnastic.* (1) Medical, (2) calisthenics, (3) defensive, (4) heavy apparatus, (5) indoor games, (6) developing apparatus.

IV. *The Exercises—Athletic.* (1) Track athletics, (2) field athletics, (3) indoor athletics, (4) outdoor games, (5) outdoor recreations, (6) sporting.

V. *The Exercises—Aquatic.* (1) Boat and canoe building, (2) sailing or yachting, (3) rowing and paddling, (4) fishing, (5) ice sports, (6) snow sports.

VI. *The Organization.* (1) Scope, etc., (2) local organization, (3) salaried officials, (4) methods.

VII. *The Place.* (1) Gymnasium, (2) athletic field, (3) public playgrounds, (4) aquatic plant.

VIII. *History of Physical Training.* (1) Biography, (2) schools, (3) Young Men's Christian Associations, (4) other societies and clubs.

The bibliography includes practically all the literature printed in English up to January 1, 1905, as well as the titles of the most significant books, articles and pamphlets in German, French and other tongues.

The titles of books and articles which are considered most important by the author and his co-workers are indicated by an asterisk.

This book can hardly fail to receive immediate recognition from all workers in the field of physical training, and the more they use it, the more they will appreciate it.

GEO. L. MEYLAN.

The Polariscope in the Chemical Laboratory, an Introduction to Polarimetry and Related Methods. By GEORGE WILLIAM ROLFE, A.M. New York, The Macmillan Co. 1905.

This book differs from most books on polariscopic analysis by laying stress on the use of the polariscope in other industries besides the sugar industry. The author's experience as a technical chemist and his position as a teacher of polarimetric methods at the Massachusetts Institute of Technology qualify him to write understandingly on the subject he has chosen.

The contents of the book embrace a brief discussion of the fundamental principles underlying polariscopic analysis, a description of polariscopic apparatus and laboratory manipulation, a condensed account of sugar-house and refinery methods as well as of the starch industry, and an outline of the application of polarimetry to scientific research and to chemical analysis of sundry substances.

It appears to the reviewer that it would have been of decided advantage to the students of this book if the author had more strongly emphasized the methods of the International Commission, which methods are at the present time the standard methods of Europe and which no doubt will soon find general application in this country.

Concerning the alleged influence of temperature on the specific rotation of sucrose it is stated (p. 44): "Although these values for temperature correction seem well established

by careful investigation, they are disputed by some, and have not yet been applied in commercial testing."

Apparently the author is not familiar with the critical examination of the investigations above referred to, nor with the facts brought out in the recent trial of American sugar importers against the United States government. In that suit government officers in charge of the polarization of sugar imported into New York testified under oath that the application of the so-called corrections made to counteract the alleged influence of temperature on the specific rotation of sucrose, caused the polariscopic test in 30 per cent. or more of the foreign sugars imported in New York, to run over 100 per cent.—the excess amounting to as much as 0.3 or 0.4 of one per cent. In other words, *apparently,* fully one third of all sugar imported into New York is not only chemically pure, but more than chemically pure!

A defect noted in some parts of the book is the lack of logical arrangement of the topics discussed. There is no apparent reason why the notes applying to special instruments (pp. 68–86) should not have been incorporated with or placed in immediate sequence to pages 15–38, on which the author discusses polariscopes.

As the text stands, some thirty-seven pages of discussion on the accuracy of saccharimeter measurements and notes on apparatus and laboratory manipulations, intervene between the description of one type of half-shade saccharimeter—that of Peters, and that of another half-shade saccharimeter—that of Schmidt and Haensch.

It is also questionable whether the joint treatment of technological processes—in sugar-houses, refineries and glucose factories—and of analytical methods used in the control of those processes, is the most advantageous way of presenting the topics.

The book is written in good style, the descriptions of methods and manipulations are concise, yet sufficiently explicit. The tables given are those usually found in books of this description and the bibliography appended cites the more important works of reference. The make-up of the volume—paper, type and print—is entirely satisfactory.

F. G. Wiechmann.

SCIENTIFIC JOURNALS AND ARTICLES.

The first number of the *Journal of Abnormal Psychology,* edited by Dr. Morton Prince, of Tufts College Medical School, and published by the Old Corner Bookstore, Boston, contains the following articles:

Dr. Pierre Janet, Professor of Psychology, College of France: 'The Pathogenesis of Some Impulsions.'

Professor W. v. Bechterew, St. Petersburg: 'What is Hypnosis?'

Dr. James J. Putnam: "Recent Experiences in the Study and Treatment of Hysteria at the Massachusetts General Hospital, with Remarks on Freud's Methods of Treatment by 'Pyscho-Analysis.'"

Dr. Morton Prince: 'The Psychology of Sudden Religious Conversion.'

Dr. John Franklin Crowell, secretary of the Section of Social and Economic Science, American Association for the Advancement of Science, has become a member of the editorial staff of *The Wall Street Journal.*

SOCIETIES AND ACADEMIES.

THE SOCIETY OF GEOHYDROLOGISTS, WASHINGTON.

At the sixth regular meeting of the society, which was held on Wednesday, March 7, the following papers were presented:

Thermal Springs of the Simplon Tunnel: B. L. Johnson.

Tidal Fluctuations of Certain Wells in Japan: F. G. Clapp.

The seventh regular meeting was held March 21, the following paper being presented:

Occurrence of Water in Crystalline Rocks: M. L. Fuller.

The investigation, which formed a part of the work of the division of hydrology of the United States Geological Survey, was undertaken at the writer's request by Mr. E. E. Ellis for the purpose of securing definite information as to the probabilities of obtaining water supplies from granites and other crystalline rocks. The work included a study of the