The book, within its limit of 350 pages, covers practically the whole subject of strength of materials, and status of beams and determinate trusses. The first and second chapters treat of stresses and deformations in materials. The third chapter deals with coplaner forces, the laws of equilibrium and their application, and the fourth and fifth chapters with the methods of determining the stresses in trusses. The sixth, seventh and eighth chapters form a fairly complete treatise on the beams, covering the stresses in beams and girders, the deflection of beams, the bending moments and shears in simple beams, and in restrained and continuous beams. The question of live loads with maximum moments, and shears, for simple and continuous beams is also discussed. The ninth chapter is devoted to columns and the tenth, eleventh and twelfth to roof and bridge trusses with stationary loads. Chapter thirteen covers railroad bridges with moving loads, and fourteen treats of horizontal loads on bridges, lateral bracing and portals. Each of the above subjects is more completely covered than one would expect to find in a book of this size.

The order in which the different subjects are taken up and discussed is not that usually followed in text books, but it is logical. It may, however, require a little harder application on the part of the student to follow the work.

One feature that commends itself is the author's method of analyzing a stress condition in some simple structure or shape, and solving it by ordinary mathematics before going into the higher mathamatical analysis of it. This is well illustrated in his discussion of the moment of resistance of the beam where he shows how to find the moment of resistance of a rectangular beam by elementary mathematics and statics. The result is that the student gets a much clearer conception of the meaning of the more complete mathematical analysis which follows. Too often in text books the discussion of a problem begins and ends with the mathematical analysis.

PUBLICATIONS RECEIVED.

Annual Report, 1916, of the Canada Iron Foundries, Limited, Montreal.

American Waterworks Association.—Proceedings of the 36th year of the American Waterworks Association, Baltimore, Md.

Handbook on Wood Preservation.—Published by the American Wood Preservers' Association, Mount Royal Station, Baltimore, Md.

Public Road Mileage and Revenues in the New England States, 1914.—Bulletin No. 388 of the United States Department of Agriculture, Washington, D.C.

Mineral Production.—A general summary of the mineral production of Canada during the calendar year 1915. Issued by the Department of Mines, Ottawa.

Dominion Water Power Branch.—Annual report, 1914-1915, of the Water Power Branch, Department of the Interior, Ottawa. J. B. Challies, C.E., superintendent.

Subsidence Resulting from Mining.—By L. E. Young and H. H. Stoek, being Bulletin No. 91 of the Engineering Experiment Station, University of Illinois, Urbana, Illinois.

Operating Details of Gas Producers.—By R. H. Fernald. Bulletin 109 issued by the Bureau of Mines, Department of the Interior, Washington, D.C. Van H. Manning, director.

American Society for Testing Materials.—Proceedings of the 19th annual meeting of the society held at Atlantic City, N.J., June 27-30, 1916. Part 1 contains committee reports and tentative standards, and Part 2 technical papers.

Department of Trade and Commerce.—Canada year book, 1915. Valuable reference volume. Special articles on "Local Government of Canada," "Economic Geology Flora and Fauna of Canada." Section 8 devoted to statistics of railways, canals, telegraphs, telephones, etc. Price, $1.00.

International Marine Diary, 1917.—The object of this useful volume is to supply the commercial world in concise form, data relative to the development of Great Britain's trade with foreign countries. Sterling conversion tables, the shipping, banking, postal, cable, and financial facilities of each country listed are given. Price, five shillings and ninepence. Published by Syren and Shipping, 91 Leadenhall Street, London, E.C.

CATALOGUES RECEIVED.

Wedge Optical Pyrometer.—An 11-page illustrated pamphlet issued by Barnes & Morris, London, Eng.

Holt Roof Vent and Leader Connections.—Illustrated booklet containing 19 pages, issued by The Barrett Company, New York.

American Drilling Machines.—Catalogue No. 145 of The American Well Works, Aurora, Ill., contains 112 pages, and is well illustrated.

London Concrete Block Machine.—A 40-page illustrated booklet issued by The London Concrete Machinery Co., Limited, London, Ont.

Gun-crete for Protection.—Bulletin No. 5 of the Cement-Gun Construction Co., Chicago, Ill., describing, with illustrations, their Gun-crete work on various buildings.

Buda Electric Storage Battery Trucks.—Illustrated folder issued by The Buda Company, Chicago, Ill., through their agents, the Federal Engineering Co., 92 Sherbourne Street, Toronto.

Lubrication.—A 12-page illustrated leaflet published by The Texas Co., New York, containing articles on flash and fire tests, the Universal Unaflow engine, lubrication of sugarhouse machinery, etc.

Sun Oils.—Volumes 1, 2 and 3 of a series of pamphlets issued by the Sun Co., 1428 South Penn Square, Philadelphia, Pa., descriptive of the early days and later developments of the oil business.

Lubrication.—A 16-page illustrated pamphlet published by The Texas Co., 17 Battery Place, New York City, describing steam cylinder lubrication, modern apparatus for the scientific lubrication of machinery, etc.

American Standard Types of Centrifugals.—Catalogue No. 132 of The American Well Works, Aurora, Ill., describing their standard types of American centrifugal pumps. Contains 104 pages and is well illustrated.

Spraco Equipment.—Bulletin No. 250, issued by the Spray Engineering Co., 93 Federal Street, Boston, Mass., which illustrates and describes their "Spraco" equipment for washing and cooling the ventilating air for steam turbine-driven generators.

American Deep Well Pumps.—Illustrated catalogue No. 130, issued by The American Well Works, Aurora, Ill. This catalogue, comprising 63 pages, contains two sections. Section 1 describes American deep well power heads, and Section 2, American deep well steam pumping engines.