North Pacific Ports, 1915. Published by the Terminal Publishing Co., Seattle and San Francisco. 422 pp., 5 x 7 ins., cloth. Price, \$2.50 net.

This publication, known as the Pacific Shipping Year Book, provides up-to-date and accurate information concerning pacific ports, charges on shipping and numerous other data of interest and value to everyone in the shipping business. Ports of Alaska, British Columbia, Puget Sound, Washington, Oregon and California are described, their wharves are enumerated, wharfage regulations, charges, storage conditions and elevating facilities, etc., are given in detail.

Field Engineering. By William H. Searles, C.E., and Howard C. Ives, C.E. Published by John Wiley & Sons, Inc., New York; Canadian selling agents, Renouf Publishing Co., Montreal. Seventeenth edition, 1915. Vol. 1, comprising text, 323 pp.; Vol. 2, comprising tables, 329 pp.; illustrated, 4 x 6½ ins., morocco. Price, \$3.00 net. (Vols. 1 and 2 can be obtained separately, price \$2.00 each.)

That this well-known handbook has reached the seventeenth edition speaks well for its value in engineering The new publication adds about 150 pages. Volume 1 contains a rearrangement of certain portions, the abridgement of some sections, and the extension of others. Some of the chapters have been entirely rewritten, while others, among which might be mentioned those on reversed curves, earthwork tables, earthwork diagrams, haul and the mass diagram, are nearly or entirely new. The chapter headings are now as follows: Reconnaissance; Preliminary Survey; Theory of Maximum Economy in Grades and Curves; Location; Simple Curves; Compound Curves; Reversed Curves; Turnouts and Crossings; The Spiral Curve; Levelling; Cross Sections; Calculation of Earthwork; Earthwork Tables; Earthwork Diagrams; Haul and the Mass Diagram; Construction; Track Laying; Topographical Sketching; Adjustment of Instruments.

In Volume 2 sixteen new tables have been added, while others have been slightly changed or extended. The volume comprises in the present edition 44 tables with some twenty pages of explanatory text. The authors claim for the new tables the high degree of accuracy which the users of earlier editions have found in the old.

## PUBLICATIONS RECEIVED.

Highway Engineering.—Announcement of graduate course at Columbia University, year 1915-16, outlining lectures, laboratory work, etc.

Climatic and Soil Conditions.—A report relating to the western section of the irrigation project of the Canadian Pacific Railway, Alberta, prepared by G. N. Houston and Dr. F. T. Shutt. Issued by the Irrigation Branch, Department of the Interior, Ottawa.

Selby Smelter Commission Report.—Bulletin 98 of the U.S. Bureau of Mines, containing the report of Messrs. J. A. Holmes, E. C. Franklin and R. A. Gould, and a number of other papers, relating to smelter-smoke problems. 527 pages; 6 x 9 ins.; illustrated.

Cooling Ponds for Condensing Engines.—Reprint of a paper by L. H. Parker, president, Spray Engineering Co., Boston, Mass., relating to the use of cooling ponds by manufacturers in order to prevent pollution of river water by waste products from industrial processes. 25 pages; illustrated.

Belt Slippage.—Report of a test of properties of wood-split and iron pulleys, prepared by Prof. H. W. Price of the University of Toronto, for the Dodge Manufacturing Co., Toronto, and issued by the latter. The report contains some very interesting curves of belt slips and windage losses.

Electro-Thermic Smelting of Iron Ores in Sweden.—By Alfred Stansfield, D.Sc. Published by the Mines Branch, Department of Mines, Canada. 85 pages; 6 x 9 ins.; illustrated. Prof. Stansfield visited the important Swedish works in 1914, and has here presented some new and valuable information concerning the electric smelting of iron ores. He also visited a new steel-making furnace in Sweden and an electric iron smelting plant in Norway, detailed accounts of which are presented. The book contains a review of electric iron smelting in Canada and presents an estimate of the cost of the industry.

## CATALOGUES RECEIVED.

Oil Engines.—An illustrated description of type "Y" horizontal oil engine, comprising 24 pages and issued by the Canadian Fairbanks-Morse Co., Limited.

Barometric Condensers.—An eight-page illustrated bulletin issued by the Mesta Machine Co., Pittsburgh, Pa., analyzing the economic value of the Mesta condenser.

Forms for Concrete Culverts.—An illustrated folder describing the Whalen form for concrete highway culverts. Issued by the Whalen Form Co., Syracuse, N.Y.

Cut-off Valves.—Twenty-four pages of illustrated descriptive matter published by the Lagonda Manufacturing Co., Springfield, Ohio, concerning the Lagonda automatic cut-off valves of different classes.

Finding and Stopping Waste in Modern Boiler Rooms.—A 68-page publication devoted to the use of Cochrane appliances for measuring and recording. Issued by the Harrison Safety Boiler Works, Philadelphia.

Oxy-Acetylene Welding and Cutting Apparatus.—An interesting new catalogue of the loose-leaf type issued by L'Air Liquide Society, Montreal, describing blow pipes, cutters, generators, pressure regulators, and welding supplies.

Switchboard Panels for Railway Service.—A useful 12-page bulletin issued by the Canadian General Electric Co., relating to 600 to 1,500-volt d.c. switchboard panels, single polarity for railway service, grounded negative operation.

Lubricators and Oil Pumps.—Bulletins 50 and 60 of the Richardson-Phœnix Co., Milwaukee, Wis., describing respectively various models of force-feed lubricators and of model "M" sight feed oil pump; well illustrated and containing interesting notes on manufacture and installation.

## BACK COPIES WANTED.

Five back copies are desired of the issue of *The Canadian Engineer* for August 21st, 1913. We shall be pleased to extend the subscription of any reader an additional 3 months for each of the first five copies of the above issue to reach the Toronto office.

We have a request for a copy of the issue for January 1st, 1914, also, and will similarly extend the subscription of the sender of the first copy bearing this date. Copies received after the order has been filled will be returned if accompanied by name and address.