

ENGINEER'S LIBRARY

A MONTHLY INDEX.

Commencing with this issue we are opening a new department in this section of our paper—a Monthly Index.

This month the index is very incomplete—but from month to month it will grow. We do not purpose indexing articles that appear in our own journal, but purpose giving a list of the more important articles appearing in the leading technical publications of Canada and the United States. This section will be of interest from month to month, and will be of great value to those engineers who find it necessary on short notice to gather literature on particular subjects.

For the present we will confine our list of subjects to a few of the more important ones, increasing the size of the index as the section becomes more popular.

THE CANADIAN ENGINEER'S MONTHLY INDEX OF CIVIL ENGINEERING LITERATURE.

The purpose of this monthly index is: To inform engineers and contractors of the literature published on those subjects in which they are especially interested, the character of the article and the journal in which it appeared. **We do not index in this section articles that appear in The Canadian Engineer.**

Periodicals containing articles indexed, should be ordered direct from the publishers.

LIST OF PERIODICALS INDEXED.

- Canadian Society of Civil Engineers Proceedings.**—(Can. Soc. C. E. Proc.), Montreal, Can., m., 4 x 7 in., 50 cents.
- Canadian Cement and Concrete Review.**—(Can. Cem. and Con. Rev.), Toronto, Ont., m., 9 x 14, 15 cents.
- Contractor.**—(Contr.), Chicago, Ill., bi-w.; 7 x 10 in., 20 cents.
- Engineering—Contracting.**—(Eng.-Cont.) Chicago, Ill., w.; 9 x 12 in., 10 cents.
- Engineering News.**—(Eng. News), New York, N.Y., w.; 10 x 14 in., 15 cents.
- Engineering Magazine.**—(Eng. Mag.), New York, N.Y., 7 x 10 in., 25 cents.
- Machinery.**—(Mach.), New York, N.Y., m., 7 x 11 in., 20 cents.
- Municipal Journal and Engineer.**—(Mun. Jl. and Eng.), w., New York, N.Y., 9 x 12, 10 cents.
- Municipal Engineering Magazine.**—(Mun. Eng. Mag.), Indianapolis, Ill., m., 7 x 10 in., 25 cents.
- Power and Engineer.**—(Pow. and Eng.), New York, N.Y., w.; 9 x 12 in., 5 cents.
- Railway Age Gazette.**—(R. R. Age Gaz.), New York, w.; 8 x 11 in., 15 cents.
- Surveyor, The.**—(Sur.), London, Eng., w.; 6 x 11, 10 cents.

BRIDGES, CULVERTS AND FOUNDATIONS.

Cost of Several Culverts in Missouri.—Con. Sept. 1st, 1909, pp. 1.

This article gives the cost per cubic yard for material, labor, etc.

Monroe St. Bridge, Spokane.—Eng. News. Sept. 2nd, 1909, pp. 2.

Description of a concrete bridge with a 281-ft. arch. Dimensioned illustrations.

Bridges of New York City.—Eng. Mag., Sept., 1909, pp. 16.

An illustrated article by T. Kennard Thomson, Consulting Engineer of New York.

MISCELLANEOUS.

Calculation of Pillar Cranes.—Mac., Sept., 1909, pp. 3.

An article by Charles A. Schranz, in which he deals with the stresses in the boom, tie-bars, tie-rods and on the foundation.

Design of Members Subjected to Combined Stresses.—Eng. News. Sept. 2, 1909, pp. 2.

Article by E. L. Hancock, Assistant Professor of Applied Mechanics, Purdue University.

SEWERS, SEWAGE AND WATERWORKS.

Water Purification Plant of Toledo.—Mun. Jl. and Eng., Sept. 1st, 1909, pp. 8.

A description of a filtration method. Sanitary significance of bacteria in the air of drains and sewers.—Eng. News, Sept. 2nd, 1909, pp. 3.

The New Pittsburg Filters.—Mun. Eng. Mag., Sept., 1909, pp. 6.

A description of the largest individual sand filtration plant in the United States.

RAILWAYS.

Train Resistance.—R. R. Age Gaz., Sept. 3, 1909, pp. 2.

The second division of a series by F. J. Cole, Consulting Engineer for the American Locomotive Works. Illustrated.

Uniform Cassification.—R. R. Age Gaz., Sept. 3, 1909, pp. 2.

The first of a series by Samuel O. Dunn.

Electric Power or Steam Railways.—Eng. Mag., Sept., 1909, pp. 13.

CONCRETE AND REINFORCED CONCRETE.

Placing Concrete on Unusual Bridge Structures.—Con. Sept. 1st, 1909, pp. 2.

Reinforced-Concrete Dome at Los Angeles, Cal.—Eng. News, Sept. 2, 1909, pp. 2. Illustrated.

Sidewalk and Curb Design and Construction.—Mun. Eng. Mag., Sept., 1909, pp. 8.

Illustrated with dimensioned drawings.

BOOK REVIEWS.

Books reviewed in these columns may be secured from the Book Department, Canadian Engineer, 62 Church Street, Toronto.

Azimuth, by George L. Hosmer; published by John Wiley & Sons, New York. Size, 4½ x 7; 73 pages; bound in pocket-book form. Price, \$1.

The author of this little work is George L. Hosmer, Assistant Professor of Civil Engineering, Massachusetts Institute of Technology. The object of the work, as stated in the preface, is to serve as a handbook for practical use in the field, rather than as a text-book for instruction in theory; so that the book contains very little theory and no derivations of formulae, while explicit directions are given for taking observations with the engineer's transit, together with forms of record and illustrative examples.

The methods treated are the following:

By altitudes of the sun.

By observations of Polaris, using altitudes of other circumpolar stars to determine its hour angle.

By observations of Polaris and other stars on the same vertical circle.

The more accurate method by observing Polaris at any hour angle.

By Polaris at elongation.

By equal altitudes of a star or the sun. Some of the simpler methods of determining latitude and time are also introduced incidentally.