

Resisting Strength of Structures, and that of their Component Parts and Materials," and "Bribery and Boodling, Fraud, Hypocrisy and Humbug." The last-named is a pamphlet of 74 pages, and in it Mr. Baillairge scathingly denounces the dishonesty that is rampant in municipal and other contract work, citing cases that have come under his own knowledge.

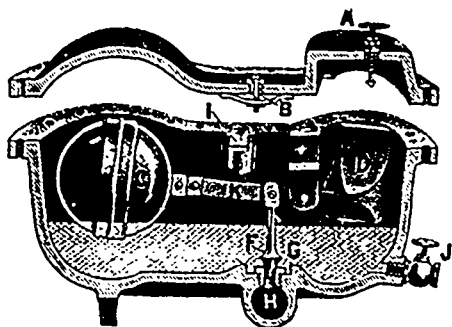
"The Kootenay Mines: A Sketch of their Progress and Condition To-day," by Chas. St. Barbe, Nelson, B.C. is an instructive account of what has been accomplished in this wonderfully rich mining region, whose value seems to be only now becoming really known to the outside world.

The *Orillia Packet* is to be complimented on its fine souvenir number, which, besides views of Orillia as it stood a mere hamlet in 1854, contains portraits of 70 of its prominent citizens. No paper in Ontario stands higher in moral tone than the *Packet*.

A complete and immediate revolution of transportation methods, involving a reduction of freight charges on grain from the West to New York, of from 50 to 60 per cent, is what is predicted in the November *Cosmopolitan*. The plan proposes using light and inexpensive corrugated iron cylinders, hung on a slight rail supported on poles from a cross arm—the whole system involving an expense of not more than fifteen hundred dollars a mile for construction. The rolling stock is equally simple and comparatively inexpensive. Continuous lines of cylinders, moving with no interval to speak of, would carry more grain in a day than a quadruple track railway. This would constitute a sort of grain-pipe line. The *Cosmopolitan* also points out the probable abolition of street-cars before the coming horseless carriage, which can be operated by a boy on asphalt pavements at a total expense for labor, oil and interest, of not more than one dollar a day.

THE McDANIEL STEAM TRAP.

A new steam trap, adapted for use in sugar refineries, breweries, distilleries, paper mills, canneries, etc., is now being offered to the trade. Many advantages are claimed for the new trap, and a number of them are guaranteed. It is a continuous drainer, does not discharge at intervals, or throw out any steam with the condensation, and it is said to give more drainage for the amount it is sold at than any other trap on the market.



The chief points to which attention is called are the large water outlet and the special make of copper float, which is neither braised nor soldered, and will neither sweat nor leak, and so requires no outside air communication. Garth & Co., Montreal, and the Jas. Morrison Brass Manufacturing Co., Toronto, are agents for Watson & McDaniel, Philadelphia, the manufacturers.

CABLE MAKING AND WIRE COVERING MACHINERY.

We have received from Johnson & Phillips, the well known engineers and electricians of Old Charlton, Kent, Eng., and 14 Union Court, Old Broad Street, London, a new catalogue of "Cable Making and Wire Covering Machinery," which is unique in being the only publication in the world dealing so fully with this class of machinery. The illustrations are all taken from photographs of the actual machines, and the designs are of strikingly elegant form, the whole of the metal being disposed to the very best advantage, this ideal quality having been reached by long experience with and great care in the production of each separate machine. It seldom falls to the lot of one firm to be both manufacturers and users of the same machines, but when it does, as in the present case, it cannot fail that the experience gained by actual touch with the working of the machines will result in the best design to fulfil the requirements of the work to be performed. In this connection it is worthy of notice that they have been enabled to give particulars of the output of the various machines, a departure which is unusual in trade catalogues. The tabular particulars of the sizes, capacity, ground space

required, etc., for the different machines, are given in English and also in metrical measures. The large "shore end" machine, shown on page 2, calls for particular notice, as it is probably the largest of its kind in the world. The function is to armor the heaviest types of submarine cables, and at the same operation sheath with tapes and compound. Variations of this machine can be made to sheath with steel tapes or hemp yarns. The particular machine shown in the engraving has been in successful work for several years in the factory of a large continental cable manufacturer, and is giving every satisfaction.

As showing the capacity of this establishment for rapidly turning out large volumes of work in cases of emergency, it may be mentioned that on a recent occasion they successfully manufactured no less than 25 of the large vertical multiple taping and compounding machines, shown on page 16, in seven weeks. An idea of the magnitude of this order can be gained when it is stated that the combined capacity of these 25 machines is 750 miles of covered wires per day. This book, which is copyrighted, will be sent to any person requiring it in good faith.

ONTARIO ASSOCIATION STATIONARY ENGINEERS.

Editor CANADIAN ENGINEER:

During the month of November twenty-three engineers have been examined, and nineteen succeeded in passing their examinations. Names of successful candidates in the first-class are as follows:—I. Crozier, Cobourg; C. Stillwell, Brockville; Jas. Walker, Trenton; J. Kemsley, Picton; W. Irvin, Belleville; J. Coughlin, Hintonburg; H. C. Sutton, Cumming's Bridge; Geo. Cameron, Ottawa; R. J. Stewart, Lucknow; F. G. Hall, Kincardine; W. J. Hackett, Geo. Nelson, Toronto; R. J. Levey, Wingham; R. A. Root, J. T. Nicholls, R. A. Ballantyne, Strathroy; S. Barber, Lucknow. Those who passed in second-class were:—O. Monger, Strathroy; F. H. Walker, Kincardine.

Four applicants for certificates either failed in examination, or had not had the required experience. The following engineers who held second-class have passed the first-class, and received certificates, viz:—Jas. Queen, Toronto Junction; John Fox, Toronto. The following who held third class have passed for second-class, viz:—E. Carr, Brockville; A. Cunningham, Toronto; A. R. Barwick, Strathroy. Enquiries re examinations are coming in from all over the Province.

A. E. EDKINS, Registrar,
139 Borden street, Toronto.

P. S.—Any engineer desiring information re examinations, etc., who will send me a post-card to that effect, will receive a copy of by-laws and Act respecting stationary engineers, giving all information. The association has decided to introduce a bill for examination of engineers during the next session of the Local Legislature, and want the assistance of all practical engineers.

A. E. E.

METAL IMPORTS FROM GREAT BRITAIN.

The following are the values in sterling money of the imports in the undermentioned metals for the month of October, 1894 and 1895, and for the ten months ending October, 1894 and 1895:—

	Month of October,		Ten mos. end'g October,	
	1894	1895	1894	1895
Hardware and cutlery	£5,894	£5,152	£58,119	£46,379
Pig iron.....	5,597	8,219	23,386	29,845
Bar, etc.....	797	3,850	16,993	13,670
Railroad	25,545	12,943	217,626	120,658
Hoops, sheets, etc.....	6,742	11,763	75,752	53,844
Galvanized sheets	5,962	6,871	45,631	55,006
Tin plates	35,505	37,697	172,655	133,189
Cast, wrought, etc., iron ..	6,572	7,959	59,167	49,049
Old (for re-manufacture) ..	3,626	9,238	18,295	20,781
Steel	8,011	10,075	80,651	62,717
Lead	2,789	5,184	11,180	22,403
Tin, unwrought	3,473	4,490	20,574	21,527
Cement	1,905	3,226	33,028	24,292

Under the head of exports to Great Britain we notice that copper ore was exported in October, 1895, to the value of £12,540, as against £2,985 for the same month of 1894, and £29,566 for the ten months ending in October, 1895, as against £24,563 for the period ending October, 1894.

EVERYBODY interested in boilers will appreciate a very interesting article in the last issue of THE CANADIAN ENGINEER, entitled "The Bent Tube." This article is very interesting as showing the evolution of the modern boiler.—*American Artisan*.