

The Canadian Engineer

WEEKLY

ESTABLISHED 1893.

VOL. 18.

TORONTO, CANADA, MAY 6th, 1910.

No. 18.

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Issued Weekly in the interests of the

CIVIL, MECHANICAL, STRUCTURAL, ELECTRICAL, MARINE AND
MINING ENGINEER, THE SURVEYOR, THE
MANUFACTURER, AND THE
CONTRACTOR.

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Canada and Great Britain:	United States and other Countries:
One Year - - - \$3.00	One Year - - - \$3.50
Six Months - - - 1.75	Six Months - - - 2.00
Three Months - - - 1.00	Three Months - - - 1.25

Copies Antedating This Issue by Two Months or More, 25 Cents.

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Address all communications to the Company and not to individuals.
Everything affecting the editorial department should be directed to the Editor.

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Changes of advertisement copy should reach the Head Office by 10 a.m. Friday preceding the date of publication, except in cases where proofs are to be mailed to distant points, for which due time should be allowed.

Printed at the Office of The Monetary Times Printing Company, Limited, Toronto, Canada.

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GUY ANCHORS.

Pole lines on city and town streets are at best unsightly. When it is necessary to cross from one side of the street to the other or turn sharp corners, anchoring devices are necessary. At best the most improved device and its necessary wiring is unsightly, and frequently a matter of great annoyance to the property-owner.

The best known device is a "dead man." To place it in the ground frequently necessitates the cutting up of lawns, with the attendant mud and annoyances. More recently there has come upon the market patent guy anchors, and many of these are just as efficient as the old-fashioned "dead man."

The patent anchors on the market to-day are of various types, but the construction man has them pretty well reduced to the few efficient and cheaply-installed systems. Usually it is not necessary to dig or in any way cut the sod when using these approved patterns. The cost of installation is cheaper than with the old style of anchor, and the property-owner is saved the annoyance to which he was formerly subjected.

In suitable soil the patent anchors will have sufficient holding power to do the work required. There are, however, conditions under which they are not as efficient as might be desired. A construction gang, from the conditions and from their knowledge of these anchors, will not make any mistake in the selection of the proper system.

The many advantages of the patent anchor are so apparent that it would be well for the city and town engineers to insist upon their use in lines placed upon the streets of the municipality.

GRADE SEPARATION.

The question of grade separation has been for some time in Canada a much-debated subject. A year ago the Canadian Parliament set aside a large sum of money to be used for this work, and passed a number of regulations, making it much easier for municipalities to require from the railways the elimination of grade crossings.

Last week at the Engineers' Club, Toronto, Mr. W. H. Breithaupt, M. Inst. of C.E., of the firm of Keating & Breithaupt, Toronto, read a very interesting paper on this subject. The paper will be found published in part elsewhere in this issue.

One of the difficulties in securing the elimination of grade crossings in the past has been the great cost of constructing subways or overhead bridges with the present requirements. Railway regulations for a long time have insisted upon brakemen standing upon top of box cars. Some very experienced railway men insist that this is necessary for the proper handling of long freight trains. When the air-brakes and the signal systems on freight trains are perfect enough to allow of their handling in the same manner as passenger trains, the