# A Weekly Journal of Advance Information and Public Works.

ITS PURPOSE: TO SUPPLY TO CONTRACTORS ADVANCE INFORMATION RESPECTING CONTRACTS OPEN TO TEN-DER, AND TO ARCHITECTS, ENGINEERS, MUNICIPAL AND OTHER CORPORATIONS, A DIRECT MEDIUM OF COM MUNICATION WITH CONTRACTORS.

ITS MERIT: ECONOMICAL AND EFFECTIVE SERVICE.

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### THE CANADIAN CONTRACT RECORD,

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ADVERTISING RATES ON APPLICATION.

At the Convention held in Toronto, Nov. 20 and 31, 1889, the Ontario Association of Architects signified its approval of the GANADIAN CONTRACT RECORD, and pleaged its members to use this journal as their medium of communication with contractors with respect to advertisements for Tenders.

The following resolution was unanimously adopted at the First Annual Meeting of the Province of Quebec Association of Architeris, held in Montreal, Qct. 10th and 11th, 180y: "Moved by M. Perrault, seconded by A. R. Dunlop, that we the Architects of the Province of Quebec now assembled in Concentian being satisfied that the CANADIAN CONTRACT RECORD affords us a direct communication with the Contractors.—Resolved, that we pledge our support to it by using its columns when calling for Tendors,"

The publisher of the "Canadian Contract Record" desires to ensure the regular and prompt delivery of this Journal to every subscriber, and requests that any cause of complaint in this particular be reported at once to the office of publication, Subscribers who may change their address should also give prompt notice of same, and in doing so, should give both old and new address.

### TO CONTRACTORS.

Tenders will be received at the office of the undersigned until noon SATURDAY, MARCH 14711, for the several works required in the erection of proposed Additions to St. Simon's Church, Toronto.

Lowest or any tender not necessarily accepted. STRICKLAND & SYMONS. Architects.
18 Toronto Street.

## TENDERS.

Local Improvements—Eglinton Avenue.

Tenders will be received by the undersigned for the Corporations of North Toronto and York Township, for Grading, Macadamising, Bridging, &c., on Eglinton Ave., between Yonge Street and Forest Hill Road. Plans, specifications, &c., can be seen and tenders received at office of under-signed up to SATURDAY, MARCH 21ST, 1891, at. g.p.m. The lowest or any tender not neces-stably accented. at 5 p.m. The

PETER S. GIRSON, C.E. & P.L.S., Engineer for Corporation.

Willowdale, March, 1851.

#### TO ARCHITECTS.

Office and good-will for sale, or will take partner; city. For full particulars, address "R. A.," care CANADIAN ARCHITECT AND BUILDER.

#### TO BUILDERS.

Tenders will be received by the undersigned till noon on Saturday, 14th instant, for the Mason, Carpenter, Iron, Felt Roofing and Painters' Work of a Factory Building on Adelaide st., near York, LANGLEY & BURKE, Architects, Canada Life Building,

### TENDERS

Required for building BRICK WORKSHOPS at the Boys' Industrial School, Mimico, before noon on Saturday, 14th March.
No tender necessarily accepted.

HENRY SIMPSON, Architect, 9% Adelaide Street East, Toronto.

## TO CONTRACTORS.

Sealed tenders will be received at the offices of Scaled tenders will be received at the offices of the undersigned architects until noon of the 16TH MARCH, for all trades required in the erection of NEW PHYSICS BUILDING at McGill College, Montreal. Each contractor must be prepared to provide, if called upon, two approved sureties to the full amount of his contract. It is not guaranteed that the lowest or any tender will be accepted. Plans and specifications may be seen on and after the 3rd March, at the offices of MESSRS, TAYLOR & GORDON, Architects,

Architects,
43 St. Francois-Xavier Street, Montreal.

# A NEW LEAD PIPE JOINT.

A new method of making lead pipe joints, brought out by B. Cooper, Middleton, Lancashire, England, is illustrated in a recent issue of Industries.

The joint is made by forming on the two ends of the piping to be joined, right and left handed threads, and then joining them by means of a coupling nut. To accomplish this a small case of tools, which can easily be carried in a workman's pocket, are provided. These consist of a diminishing tool, having an internal conical recess, which is driven upon the end of one of the pipes, thereby compressing it into a diminished conical shape. An internal screwed nut of the required size, and open at both ends, is placed on the taper end of the pipe, and into the latter a plug is driven which forces out the sides into the thread of the nut, thereby molding a similar thread on the pipe. This process is repeated with a left hand threaded nut on the end of the other pipe, and afterwards the coupling is applied. The maker claims that by this means a joint may be made in about onefourth of the time required by the soldering process, that it does not require a skilled workman, and that the total cost of the new joint is considerably less than

joints made by anyother process. removal purposes the joint may be uncoupled and re-made by simply unscrewing or screwing up the nut. It is stated that the Manchester, Salford and Heywood Corporations have granted permission to use these joints in connection with their water supply.

#### STRENGTH OF STEEL WIRE ROPE.

The railway line up to the Supergna, at Turin, is worked by a rope consisting of six plies of 8 wires each, or 48 wires in all. The diameter of each wire is 0.678 inch, of each ply 0.315 inch, and of the whole rope 0.985 mch, the weight being one pound per lineal foot. Tests from eight single wires from one ply gave a breaking load of from 908 to 1060 pounds, equivalent to from 83.5 to 97.4 tons per square inch. The breaking load of the remaining five plies was 91 1 to 101.1 tons per square inch. Taking the net sectional area of the rope at 0.225 inch, and the lowest result above given as the average, the total breaking weight of the rope would be 19.3 tons per square inch.

#### IRON AND STEEL FOR BUILDING PURPOSES.

In a paper read before the Royal Institute of British Architects, Mr. T. F. Reade gives the following points in reference to wrought iron and steel riveted girders

"It is of the utmost importance that all riveting should be done in the best possible manner. The 'snap' or end of the rivet, which is hammered out while hot, should project uniformly all around the diameter of the rivet, and should be of uniform size. The plates or angles should have the rivet holes countersunk by the drilling machines, and show on the outside at least one-fourth inch to threefourths inch larger in diameter than the size of the insert. It is not advisable to make the webs of steel girders as thin as the increased strength of the material would seem to render possible, except in girders of dimensions much beyond our present example. In the rivet holes in both materials it is usual in good work that all holes should be drilled, but in steel girders of any description this must be done for the effect of punching upon the steel is to weaken the metal for a certain distance round the hole. This is sometimes remedied by punching the holes to about one-eighth inch less than the diameter of the rivet, and then drilling out the holes to the larger size.