THE

Canadian Contract Record

A Weekly Journal of Advance Information and Public Works.

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THE CANADIAN CONTRACT RECORD,

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The purpose of this journal is to supply Contractors, Manufacturers and Dealers throughout Canada, with advance information regarding contracts open to tender, and to furnish Architects, Municipal and other Corporations with a direct medium of communication with Contractors.

Information from any part of the Dominion regarding contracts open to tender will be gratefully received.

ADVERTISING RATES ON APPLICATION.

At its Convention held in Toronto, Nov. 20 and 21, 1889, the Ontario Association of Architects signified its approval of the CANADIAN CONTRACT RECORD, and pledged its members to use this journal as their medium of communication with contractors with respect to advertisements for Tenders.

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.

THE SITUATION.

The demand of the stonecutters, bricklayers and laborers of Toronto for a considerable increase in wages has met with a determined refusal from the members of the Contractors' Association. The bricklayers and stonecutters have quit work, and a dead-lock is the present result. Public sympathy appears to be with the employers, as it is generally known that the building season about to open does not promise to be one of unusual activity, such as might justify the demand for an increase in the rate of wages. It is to be hoped that the workmen will not under the circumstances precipitate a strike which can only result in much hardship to themselves and the entire community. The wisest course would be for both parties to the dispute to agree to a settlement of their differences by arbitration, and this we hope to see done.

The bricklayers of Vancouver, B. C., have struck for higher wages.

The workmen in the building trades at Winnipeg have notified employers that they expect the adoption of the nine-hour day on May 1. It is said that some of the contractors will refuse to accede, and are preparing to import from the east.

At a meeting of builders and contractors of St. John, N. B., it was decided to accede to the demands of the workmen that nine hours shall constitute a day's labor, and that no reduction in wages shall accompany the change. Few contracts for building have been taken pending the settlement of this question, and contract prices will be regulated accordingly.

HOW TO ESTIMATE FOR EITHER STEAM OR HOT WATER.

The amount of radiation to be placed in a house depends not so much on the quantity of air in the building, as upon the area and nature of the exposed outside surfaces, such as windows, walls, doors, etc., and their cooling effect upon the house, says the *Building Trades Journal.*

It is evident that small rooms or small houses have a much greater amount of exposure per cubic foot of space than large rooms or large buildings. For example. A building 30 x 40 ft. and 25 ft. high will contain 30,000 cubic feet of space, and have 3,500 square feet of exposed wall surface. While a building 75 x 100 ft. and 40 ft. high will contain ten times the space of the first building, or 300,000 cubic feet, with only four times the area of exposed wall surface, or 14,000 square feet.

If the smaller building may be warmed by 500 sq. ft. of radiation, the larger one, if it be similar in style and shape, will be equally warmed by four times that amount, or 2,000 sq. ft. of radiation. In the first case the proportion according to contents is one foot of radiation to 60 cubic feet of space, while in the latter case it is one to 150, or 2½ times as much as the former, which is the exact ratio of the increased capacity to the increased exposure. In this comparison the exposure of the roof is not counted, as it would be practically neutralized by the attic or garret in either case.

While therefore the true way of estimating buildings is solely by exposure, for ordinary residences, where the ratio of the exposure follows pretty closely that of the cubical contents, it has been customary for greater convenience, to estimate them by cubical contents, with such additions to or subtractions from the result obtained as may suggest themselves to the experienced engineer by considering the special exposure as to winds, etc., or the character of the structure, etc.

LOW PRESSURE STEAM. DIRECT RADIATION.

To give an inside temperature of 70 degrees Fahrenheit, outside temperature being zero, the house being of medium size and well built:

For first floor. Allow one square foot of radiation to from 35 to 50 cubic feet of space.

For second floor. Allow one square foot of radiation to from 50 to 75 cubic feet of space.

LOW PRESSURE STEAM. INDIRECT RADIATION

For first floor. Allow one square foot of radiation to from 25 to 35 cubic feet of space.

For second floor. Allow one square foot of radiation to from 40 to 50 cubic feet of space.

HOT WATER. DIRECT RADIATION.

For first floor.—Allow one square foot of radiation to from 20 to 30 cubic feet of space.

For second floor.—Allow one square foot of radiation to from 30 to 40 cubic feet of space.

HOT WATER. INDIRECT RADIATION.

Figure about one-third more than for hot water direct radiation.

In estimating the amount of radiation, all flow and return pipes, unless so covered and protected as to prevent loss of heat, must be considered as part of the radiation carried by the boiler. All isolated rooms, or those having a northern or western exposure, also very small rooms, and those having large window surfaces, etc., should be allowed the maximum amount of radiation as indicated above.

We desire to emphasize the importance of having ample radiation. It is much more desirable to close off part of your radiation in mild weather, than to suffer from cold on severe days on account of not having sufficient radiating surface to keep your house warm.