

foot of Howe Island, for W. H. Nichols, a New York millionaire. It is estimated that the building will cost \$80,000.—R. J. Decker has been given the contract for erecting two dwellings on Division street.

OTTAWA, ONT.—Work has been commenced upon the new bridge to be built across the Ottawa river by Mr. H. J. Beemer. The contract for the sub-structure is said to have been given to a New York firm, while the superstructure will be handled by the Dominion Bridge Company, of Montreal. There will be five piers, with a cantilever span of 550 feet in the clear, with arms of 250 feet each. The total length will be about 1,300 feet, and the estimated cost \$750,000.

MONTREAL, QUE.—Eric Mann, architect, has let contracts as below for alterations to a house on Mansfield street for P. Starr: Masonry, bricklaying and carpentry, John O'Leary; plumbing and heating, John Watson & Co.; plastering, M. McCarthy.—W. E. Doran, architect, has awarded the contract for an extension to a store, corner of Montcalm and St. Catherine streets, for F. J. Hart, to Henri Pepin & Co.

WINNIPEG, MAN.—The tender of the Vulcan Iron Company for a new boiler for the steamer "Alex. Brown," at the price of \$850, has been accepted.—The Fire, Water and Light Committee have reported that the most favorable tenders received in connection with the street lighting contract were from the Western Electric Company and the Canadian General Electric Company. In view of the fact that before taking action a by-law will have to be submitted to the ratepayers, it has been recommended that the tender of the Manitoba Electric & Gas Light Company for 121 lights, at 45c. per light per night, be accepted, from the expiration of the present contract to 1st June, 1899.

POLISHES AND VARNISHES FOR WOODWORK IN BUILDINGS.

In this age of cheapness, when prices have to be cut so very fine for a living profit to be made, it behooves the contractor or builder to consider every little item on which a saving can be effected. Hence the many substitutes so frequently advertised to meet the want of many branches of the building trade; to wit, linseed oil is an article so extensively used in paints that this article has received a large share of attention by inventors in the direction of finding a substitute, make believe, or imitation.

As, however, the chief object of the inventor of a substitute is to produce an article that can be sold cheaper than the article imitated, it is necessary to work with materials that are intrinsically inferior to the imitated articles.

If the imitation takes the form of an adulteration of the original article the adulteration necessary has to be cheaper oil than the linseed, and as linseed oil is the best oil to use for paint mixing, all other oils are ipso facto inferior.

The adulteration of linseed oils, however, can now be readily detected, as chemists during the last ten years have given the article much attention with a view to detect adulterants.

The inventive brain of men, therefore, turned to another way of producing something that should pass current as linseed oil, but made up from different, and necessarily cheaper, materials.

These ingeniously found a compound made up of resin oil and turps or similar articles, and thus a linseed oil substitute was put on the market and proclaimed by the makers as being "just as good" as the old established honest linseed.

As regards the qualities of the substitute versus the real article it is not the writer's intention to discuss in this article. What he wants to emphasize is the fact that the master builder has to be very careful in selecting his materials, so as to make a profit out of his labors, for while the jerry builder can buy cheap substitutes for linseed oil, cheap terebenes as substitutes for turpentine, and resin oil varnishes for good oil varnishes, the builder who desires to use only good honest materials has to pay very particular attention to the use of an article that, while it still be good, shall also be as cheap as possible.

Now, a considerable saving can be effected by using a varnish instead of polishing woodwork for some structural parts of a house. It is sheer waste of labor to go to the expense of a polish on wood when a coat of varnish will answer equally as well.

But it may not always be an easy matter to know which is the most suitable varnish to use, as the nature of wood vary so much, and a varnish that would answer well on a hard, close grained wood would be useless on a soft, porous, absorbent wood.

It is the object of the writer, therefore, to give some hints on what are the best articles to use for certain kinds of wood or parts of structural woodwork in a house, together with instructions how to prepare such articles himself if the builder so desires.

In all new woodwork before it can be painted the knots in the wood need painting over with what is called "knotting" so as to prevent the exudation of resinous matters from the knot in future. Such compounds as "patent knotting" are easily prepared by the builder or carpenter himself thus:—

Provide several gallon or two gallon stoneware jars, clean them out and dry the insides by standing the jars before a fire for some time so as to expel all moisture. This is necessary because if there be any moisture present when methylated spirit and resins are put in the jar, the resins will be precipitated, while if it be turpentine and resins the compound will become milky.

RECIPE NO. 1.

All parts are reckoned by weight unless otherwise specified.

Ingredients: Thirty parts kaurie resin finely powdered, two parts methylated spirits, one part turpentine.

Method of preparation: Put all these ingredients into one jar and give the contents a frequent shake up until the resin has dissolved.

In a separate jar put seven parts of button shellac, three parts amber resin powdered, two parts (fluid measure) methylated spirits.

Method of preparation: Stand this jar in hot ashes, hot sand, or a vessel of boiling water (taking the precaution to put

the bung in the jar, so as to prevent water vapour mixing with the contents) and gently heat the mixture until the solids have dissolved.

For use, one part of the kaurie varnish made in the first jar is mixed with three parts of this "patent knotting," or the latter may be used alone.

A cheaper "knotting" is made by dissolving 6 oz. or 7 oz. of orange shellac in one pint of methylated spirit.

Turpentine varnishes are much used for woodwork.

The following give good results:—

RECIPE NO. 2.

Ingredients. Thirty-six pounds colophony (yellow resin), 14 lb. venice turpentine, four gallons boiled oil, two gallons naphtha, three gallons turpentine.

Method of preparation: Mix the naphtha and turps and then digest in the mixture the resin and venice turpentine, and when they have dissolved add the oil; well mix the whole before use.

For a common turpentine or resin varnish, dissolve black resin in turpentine in the proportion of 1 lb. of resin per pint of turpentine.—Carpenter and Building.

MARKET CONDITIONS.

The cement market at Montreal is steadily gaining in strength. Contracts have been made of greater magnitude than any on record for this season of the year. Importers who placed orders for foreign cement have already re-sold a large quantity of the expected receipts. A local firm is reported to have placed an order last Fall with a Belgian manufacturer for about 50,000 barrels, which he has succeeded in placing at advanced prices. Owing to a sharp advance made by British manufacturers, very little cement is likely to be imported from Great Britain this year, as it is possible to obtain the Belgian and German brands at a much lower figure. There is no change in fire bricks, the demand being fair for small lots, at prices ranging from \$16 to \$21.

Manufacturers of wire nails in the United States have advised Toronto jobbers of a proposed advance in price. This, however, will have little effect, as the price at which Canadian manufactured nails are now selling practically excludes the foreign article.

The heavy iron and metal trade is of average volume. In the west values of galvanized iron are somewhat unsettled, while quotations on iron pipe are slightly lower in Toronto.

The Londonderry Iron Co., Londonderry, Nova Scotia, write: "Referring to the 42-inch water pipe cast at the Londonderry Iron Company's works at Londonderry, we would say that we have cast 22 of these for an order for the I. C. R., and have not lost a single one. The weight is about two tons each. We expect an additional order for these pipes early in the spring. We would also state that our company does not claim that this is the largest pipe manufactured in Canada, but that this is the largest pipe made in and for the lower provinces.

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