Messrs. Bastien & Valiquette, the lowest tenderers, at the price of $34,975. The work will be commenced as soon as possible.—Mr. A. J. Cooke, architect, has awarded contracts for two cottages at St. Lambert, for Mrs. Mary A. Mackay, as follows: masonry, F. X. Feille; brickwork, Chas. Narbonne; carpenter and joiners' work, M. Desantels; plastering, Charbonneau & Co.; steel work, Donaldson & Sons Same architect has also awarded contracts for two cottages at same place, one for Mayor Horsfall and the other for J. W. Hill to Geo. Beatty, for all trades.

BUSINESS NOTES.

Landry & Belanger, plumbers, Montreal, have dissolved partnership.

Orman Higman, plumber, of Ottawa, has assigned to Alex Mutchmore.

Andrew Mackay and Walter Ryan, of Montreal, have dissolved partnership as plumbers.

Kausen, Tressider & Wood, is the style of a new firm of contractors recently formed in Montreal.

Wm. Hall & Son, dealers in lumber and builders' supplies, Toronto, have been compelled to place their estate in the hands of the assignee.

The plant of the Hamilton Bridge Works is offered for sale by tender by the liquidator, C. S. Scott. Tenders are to be sent in by the 24th inst.

A partnership has been registered between David Yulle and James Cochrane, to do business as founders under the style of the Chanteloup Manufacturing Co.

Gauthier, Vincent & Dufresne, architects, Montreal, have dissolved partnership, and a new partnership has been registered between A. J. Vincent and L. A. Dufresne.

USEFUL HINTS.

The doors of a room in a recently finished house were constructed with the panels flush with the stiles and rails, thus giving a perfectly level surface, which by itself would, of course, be very ugly. The wood was a dark color, varnished with a rubbing varnish, and rubbed down to a dead polish, and then a scroll design was formed with silver-headed nails, the position of the panels being clearly defined by nails with rather larger heads than the rest. The effect was uncommon, to say the least, and while it savored somewhat of a coffin lid, it was not entirely objectionable.

CEMENT FOR GLASS.—Dissolve gum mastic 1 oz. in alcohol; soak 1 oz. of isinglass in water; add alcohol to dissolve it to a strong glue, and add ¼ oz. of sal ammoniac. Put the two solutions into a pipkin; beat and stir; put in a stoppered vial, and warm in a water bath when about to use it. For chemical glasses, 1 oz. pulverized glass, 1 oz. pulverized chalk, ½ oz. of fine brickdust, scraped lint, white of egg. Spread on a linen cloth, and apply to the crack of the glass To attach metallic letters to plate-glass windows Copal varnish, 16 parts, drying oil, 6 parts; Venice turpentine, 3 parts; oil of turpentine, 3 parts; liquefied glue, 5 parts, and add 10 parts of quicklime in powder.

NEW STAINS FOR WOOD.—The following recipes for new stains for wood are given in the Scientific American: A solution of fifty parts of commercial alizarin in 1,000 parts of water, to which a solution of ammonia has been added drop by drop until a perceptible ammonia odour is developed, will give to fir and oak a yellow brown colour and to maple a red brown If the wood is then treated with a one per cent aqnes barium chloride solution, the first-named become brown and the latter a dark brown. If calcium chloride be used instead of barium chloride, the fir becomes brown, the oak red brown, and the maple a dark brown If a two per cent. aqueous solution of magnesium sulphate be used, the fir and oak become dark brown and the maple a dark violet brown. Alum and aluminium sulphate produce on the fir a high red and on oak and maple a blood red. Chrome alum colours maple and fir reddish brown and oak havana brown.

BRUSH MATTRESS WORK FOR SHORE PROTECTION.—On the Upper Mississippi River, according to the American correspondent of the Engineer, considerable work is being done to protect the shores by means of dams or groins of brush work filled with stone, and by means of brush mattresses. The government specifications provide that the dams shall consist of brush made into fascines and loaded with rock. The fascines may be laid one at a time or in mats, except in places where the water is over 2 ft. deep, when they must be made in mats. Where only one layer of brush is laid, the covering of rock is 1 ft. thick at the tips and butts, and 2 ft. at the middle of the dams, if required. When more than one layer of brush is used, the bottom layer is covered with rock 6 in. thick at the upper side, and 81 in. at the lower side, if required. On this rock a second layer of brush is laid, 10 ft. or 15 ft further up stream than the lower layer, and this second layer is fastened and covered as the lower Additional layers are similarly placed and covered, except that they each are placed and laid 2 ft. farther up stream than the one immediately below it, and the top layer is covered with rock, as where a single layer of brush is used.

MUNICIPAL DEPARTMENT.

STEEL v. WOODEN BREAST-SUMMERS.

TOWN CLERK'S OFFICE,
PARRY SOUND, Dec. 21st, 1894.

Editor CANADIAN CONTRACT RECORD.

SIR,—The following section of our Town by-laws has given rise to a good deal of bitter controversy; it being urged on the one hand that the provision is not only too severe, but that the use of wrought iron for the purpose is not, at this time, more favored than wood; and on the other, that having been taken from a city by-law, it is a very good guide to follow. It may be said by way of explanation that only a small portion of the business centre is affected by the by-law, and that within these limits a second class building according to the Toronto standard is taken as our standard for a first-class building.

Here is the section · Breastsummers in "front or rear of any other part of a building on which a brick or stone wall is to be built, shall be made of wrought iron supported by iron columns set on stone foundations."

A breastsummer was recently placed in a building to which the said section is applicable, constructed of six 2 × 12 in. pine planks, nailed together with 3½ or 4 inch nails, and not otherwise bound together, and supported on brick piers and iron columns, the intention being later on to cover it with sheet iron on the under sides. The breastsummer is 28 feet long, and the building a two-storey brick on stone foundations. I should like an answer, giving in the abstract, the relative values of wood and iron for the purpose mentioned and whether a breastsummer nailed together in the manner indicated is as good as a solid timber, or whether one constructed of plank should not be bolted and strapped in any case.

Yours very truly,
H. L. HAIGHT.

[A wooden breastsummer is safer in case of fire than an unprotected iron one. There is no advantage in metal over wood other than freedom from shrinkage and the possibility of a greater span given. A breastsummer of seasoned timber with span not too great for its carrying powers, or to cause undue deflection, and you have a very good support for a wall above. Of course the wood should be kept free from moisture. The best method of construction is to build with several thicknesses, keeping each far enough apart to permit of circulation of air. This can be done with strips of oak ½ inch thick. The various pieces should be bolted together with say ½ inch bolts about 2½ feet apart, with two bolts near each end. With steel or iron beams all shrinkage is, of course, avoided, and greater span possible; but in case of a hot fire, the movement would be so great as to damage the brickwork, whereas the wood breastsummers would simply char. Wood is considered quite admirable in our Toronto 2nd class buildings.—EDITOR C. RECORD.]