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ONTARIO.

Toronto Branch, No. 1—W. Phillips, President; H. E. Terry, Secretary, 19 Hayter Street. Meets 2nd and 4th Fridays of the month, at 8 p.m., in Room D, Shaftesbury Hall.
 Hamilton Branch, No. 2—W. Sweet, President, W. Morris, Secretary, Wellington Street. Meets 1st and 3rd Fridays of the month in Maccabees' Hall.
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 London Branch, No. 5—F. Mitchell, President, Geo. Taylor, Secretary, Free Press office. Meets 2nd Tuesday in the month in Sanford Hall.
 Guelph Branch, No. 6—C. J. Jordan, President, J. L. Dixon, Secretary, box 396. Meets 1st and 3rd Wednesdays, in Knights of Labor Hall.
 Ottawa Branch, No. 7—J. H. Thompson, President; Wm. O'Brien, Secretary, corner Florence and Bay Streets. Meets 2nd and 4th Tuesdays in Odd fellows' Hall.
 Dresden Branch, No. 8—O. S. Merrill, President, Thos. King, Secretary. Meets 2nd and 4th Saturday evenings.
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QUEBEC.

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SAND FOR MOLDS.

A good sand should be refractory to the highest degree; it should neither crackle in contact with the liquid metal, nor set free too much gas; it should neither split nor become too compact on extreme dryness, as the withdrawal of the castings would become too slow and difficult. There are several mixtures of refractory materials, more or less plastic, capable of furnishing good casting molds for steel. The following is one formula: 52 per cent. of the debris of broken crucibles, 43 per cent. of the debris of refractory bricks, 5 per cent. of clay.

Sometimes, when this mixture is found to be too close, coke-dust is added, which thins it out and increases its porosity. The casting sand for steel is ground up and mixed in the ordinary manner for molds for pig. A little molasses is sometimes added to render it more workable to the hand. After the model has been removed, the molds are washed over with plumbagin and then dried in a stove. When the form of the casting permits of a regular shrinking, it is left to cool in the mold, but most frequently there would be risk of fractures and the removal must be at once proceeded with. The castings are thrown, while still red hot, into a furnace to cool, brought to red heat, and recooled along with the furnaces. By operating in this way fractures are almost always avoided.

SEVERAL small passenger steamers plying on the Miramichi River, have been disqualified by the Marine Department Inspector, on the ground that their captains do not hold masters' certificates.

TAYLOR

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