

the chimney, throughout its whole length to the top, should be plastered very smooth with good mortar, which will harden with age. The area of a chimney should be at least half a square foot, and no flue less than sixty square inches. The best shape for a chimney is circular or many sides, as giving less friction (brick is the best material, as it is a non-conductor), and the higher above the roof the better.—*Scientific American*.

WHETSTONES.—When first putting a new whetstone into use, try water upon it, and if this keeps the surface from being glazed or burnished, oil will not be needed. Some stones work better with water than oil. A dry stone is very apt to give a wire-edge. It has been said that a little carboric acid added to water will increase the friction on either a whetstone or a grindstone.—*Ohio Farmer*.

Our Country.

THE INTERCOLONIAL RAILWAY.

The *Montreal Gazette* of Tuesday contains a long and interesting description of the condition of the Intercolonial Railway. The space at our disposal will not permit us to even summarize the reports from the separate sections of the work; but the general results attained and the prospects of the undertaking will be gathered from the following extracts:

The general results, then, of the careful examination which has been made, and which we have thus in detail laid before the public, shows that the Intercolonial Railway will be ready for traffic from Riviere du Loup to Metis, a distance of about ninety miles, and from Painsee Junction to Truro, a distance of about 117 miles, before the close of the season next year. This will make a total length completed of the Intercolonial Railway of 207 miles. A considerable portion of the track will be laid on other parts of the line during the next year and early in the season of 1873. The portion between Monoton and the Miramichi River, as well as that between Bathurst and the Metapedia, will be then completed and ready for operation, and there does not seem to be any reason to doubt that by the end of 1873 the entire line will be completed and ready for operation from one end to the other. The iron bridges have all been ordered, and with

the exception of the long spans for the Restigouche and Miramichi bridges will be on the ground during the next season, during which time the great bulk of them will be put in place. A large proportion of the rails required will also be on the ground during next season, and very considerable quantity laid in the track. The whole of the rails will be delivered by the spring of 1873, and in fact the whole of the material required to be procured from abroad will be upon the spot in ample time to carry out the results which have been here stated.

There is now rather more than half of the amount of the whole of the contracts executed and paid for, and at the rate at which work was executed last year, at least four-fifths of the entire work will be completed by the end of 1872. The work then remaining to be done will be concentrated in a few places, and will permit of the concentrating upon those spots, all the labor which will, by that time, be set free from the portions of the work which are now rapidly approaching completion. The whole of the work will thus be completed next year from Riviere du Loup to the Metis River—all the work in Nova Scotia,—nearly the whole between Monoton and the Miramichi River—and also between the Miramichi River and the Metapedia.

The points that will be last completed will be too heavy bridges across the Miramichi River, and the very extensive contract let to W. E. Macdonald & Co., eastward of the Metis River.

The necessary quality of engines and cars required for the ballasting and track-laying of the different sections of the line are now being supplied, and there will be a full sufficiency of these as rapidly as they will be needed.

The total outlay which has been made upon the line up to the end of the present year, will probably somewhat exceed \$7,000,000. With the amount of work which will be done next year, and the payment for the iron bridge work, rails, and rolling stock, it is probable that the outlay during the year 1872 will be from \$5,000,000 to \$6,000,000, making the total expenditure to the end of 1872 about \$13,000,000.

The whole of the works that have been so far executed are of the best possible description, and there is no masonry on the continent which can exceed, in quality, that on the Intercolonial Railway.