

worn out; a poor wheel will cost perhaps half as much, and won't run 10,000 miles; it will therefore really cost a great deal more than the expensive one. The same principle holds throughout. Cheap machinery and work means high repair account, probable loss.

Special attention should be paid to the electrical connections of the track. This is the return circuit, and the higher its conductivity the greater the total efficiency of the system. Feeders may, or may not, be required, depending solely upon the particular conditions; careful planning of feeder system may considerably reduce expense of copper. In the power house the same remarks as to solidity apply. Engines may be either high or low speed, simple or compound, as particular conditions determine. There are conditions which are best met by high speed, while a low speed is best under others. It is not a question of individual preference, unless the purchaser is content to lose the advantage gained by using machinery specially adapted for particular service. The same may be said with respect to electrical machinery. Generators and motors are so good now-a-days, and their design is so thoroughly understood, that although agents will each and all claim superiority for their own makes and talk learnedly about magnetic friction and all sorts of other scientific technicalities, the general public may be perfectly content to waive all those matters and to get agents to talk dollars and cents to them on the basis of specifications drawn up by an independent engineer.

It has been quite usual to get a manufacturing company to do the preliminary engineering, and to draw up specifications which are supposed to be "disinterested." Such a specification will, of course, be made so as to suit the particular styles and size of machines made by the company furnishing it, if possible, so as to exclude all machinery of rival make. It is very easy to "cook" specifications in this way, and it has the effect of practically excluding all competition. It can hardly be expected that a manufacturing company will not avail itself of a possible advantage, and so purchasers should be cautious how they place themselves unreservedly in interested hands.

In the matter of long distance transmission, for instance, not all manufacturing companies make proper multiphase machinery, so that any company that does not will be certain to advise ordinary direct current generators, and plenty feeder copper, for the use of a multiphase generator would lose them possible business. And yet, in many cases, multiphase transmission would be far cheaper. A careful consideration of every particular case will always reveal the best system of working, and thereafter it becomes merely a question of specifications and good construction.

The results of the operation of a system of interurban electric

railways, is, of course, impossible of close estimating; but experience has shown that on the average, in well managed roads, the total operating expenses will amount to about 60 to 65 per cent. of the gross receipts, the balance being net profit.

CAPTAINS OF INDUSTRY.

This department of the Canadian Manufacturer is considered of special value to our readers because of the information contained therein. With a view to sustaining its interesting features, friends are invited to contribute any items of information coming to their knowledge regarding any Canadian manufacturing enterprises. Be concise and explicit. State facts clearly, giving correct name and address of person or firm alluded to, and nature of business.

The Cariboo Company at Camp McKinney, B.C., are putting in a 10 stamp mill.

Ed. Turner, formerly of Woodbridge, Ont., has started a foundry at Stayner, Ont.

The Mattawa, Ont., Electric Light & Power Co., will erect a new brick power house.

The Langmuir Mfg. Co., Toronto, whose trunk factory at that place was recently destroyed by fire are re-building.

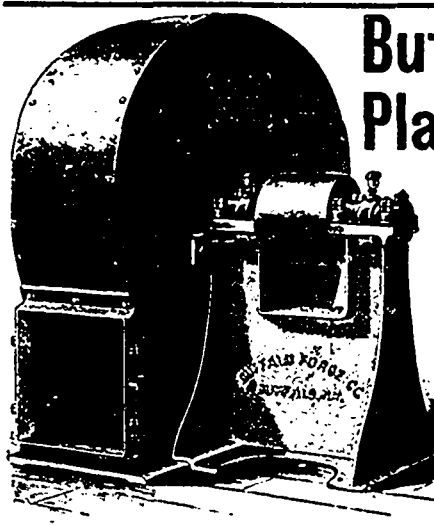
The Anderson Furniture Co., Woodstock, Ont., are applying for incorporation with a capital stock of \$250,000 to manufacture furniture.

The Chanteloup Mfg. Co., Montreal, are applying for incorporation with a capital stock of \$10,000 to manufacture materials necessary for the manufacture of brass, tin, iron, copper works, etc.

R. McMaster, Tremont, N.S., is refitting and thoroughly repairing the McMaster mills which have been closed for some time, and of which he is the owner. They consist of a sawmill, including shingle and stave machines, threshing and grist mill, etc.

Between thirty-five and forty elevators are to be erected at points on the C. P. R., and others on the Northern Pacific and Manitoba and Northwestern, besides two in Winnipeg, Man. The Ogilvie Milling Company will erect a mammoth elevator at Winnipeg this summer, adjoining the mill.


The Trades Journal, speaking of coal operations in Nova Scotia, says: "Some 400,000 tons have already been contracted for in the St. Lawrence, with the expectation of further sales amounting to 75,000 tons. A large proportion of the coal sent this year will be screened. There is little objection to this, as there is a big demand for slack at fair prices. It is hoped to make increased sales this year in the United States."



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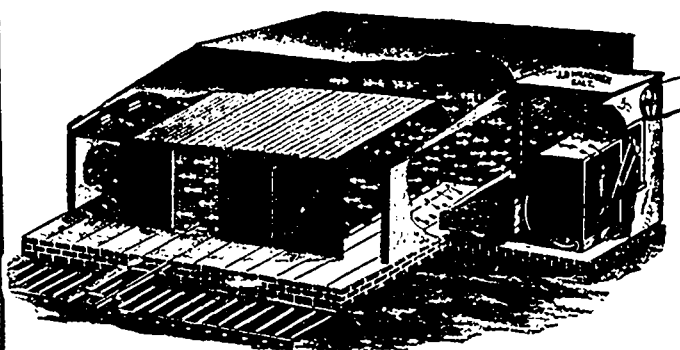


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The following is a specimen of letters received from customers:

Ottawa, April 1, 1895.

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Dear Sir,—Replying to your enquiry regarding Dry-Kiln purchased from you last summer, we beg to state that our lumber is stained hardwood, principally birch, which is put through a chemical process thereby rendering seasoning a very difficult operation. We tried to have it dried in the several styles of kilns used by factories in this district, all of which failed to take the moisture out of the core of the wood. In August last we put in one of your kilns with a capacity of 10 cars, or 30,000 feet and since that time have seasoned most satisfactorily about 200,000 feet. The boards come out free from checks and warp and we are now thoroughly convinced that it is the only dry-kiln in the market which fills the bill both as to efficiency and economy.

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