## SUCESSFUL MILL MANAGEMENT.

The portable saw mill, as is often alleged, is not altogether responsible for all the poorly manufactured hardwoods thrown upon the market. While much inferior lumber may, says an exchange, and probably does emanate from that source, it is equally true that some of the largest and best-equipped mills in operation are turning out lumber that is far from perfect. There are various reasons for this. One is a policy of forcing a mill to saw to its utmost capacity, sacrificing quality to quantity. It does not require much common sense to perceive that it is far better to saw 75,000 feet of lumber a day; and have it perfect in thickness and intelligently graded, than to produce 100,000 feet and obtain mis-cuts and low grades generally.

Again, there are large mills where may be found a theorist in the office, a practical foreman in the yard and a burn sawyer at the lever. Between the office and the foreman there is a constant variance of opinion, while the sawyer is butchering logs and drawing his wages. The sawyer knows that, while his superior is capable of grading and piling lumber, he cannot take the lever and illustrate the proper manner of sawing a log. The remedy in such cases is to employ a mill foreman capable of operating every machine in the mill. It requires brains to fill such a position, and brains of any account can not be had for a song. If low priced sawyers are employed, a first-class foreman by all means should be had, but it is better and cheaper in the end, to employ good sawers, filers and foreman, and permit them to follow the dictates of judgment gained by years of practical experience. There are good mills and first-class foreman and sawyers struggling to do themselves justice, simply because the powers that be are forcing them to follow theoretical lines.

The foreman should be a man who, in a pinch, can run a band or circular saw, edger or any other machine used. He should be able to direct the turning and sawing of a log so as to get the latgest amount of good lumber out of it, and, following the boards and plank to the edger, prevent an operator from spoiling lumber by idiotic ripping. All this can be brought about by the employment of good mill hands and sawing not over 60 per cent, of the forced capacity of the mill.

## ABOUT CIRCULAR SAWS. TIMBERMAN.

The successful working of machinery at all times depends much upon the conditions under which it is used and the care bestowed upon it. If the manufacturer were always sure that his machine would fall into the lands of expert and ski'ful men, who thoroughly understands the conditions required in order to obtain the best results, there would be less anxiety on his part and less occasion for fault finding on the part of the purchaser. Probably no class of manufacturers are subjected to more annoyance from these causes than the manufacturers of circular mill saw. No two mills will be found where the working conditions under which the saw is required to perform its work are alike, and it is impossible for the saw maker to always know just what those conditions are.

It is true that if the saw maker is informed just what speed the saw is to run, the kind o lumber to be sawed and the rate of feed required, he may adjust the tension of the saw approximately to those conditions so that if everything else is favorable, a saw may start off and perform its work in a satisfactory manner. But there are so many other things that may operate against it, that when taken into consideration, it is a wonder that so many start off satisfactorily and fulfill the conditions required of them.

. While imperfect collars and a carriage out of square with the mandrel are important factors that are frequently met with, often preventing the new saw from working in a satisfactory manner, yet these are matters that may be easily remedied by an experienced saw-yer. But the principal difficulty in most cases is in the tension. A saw maker may give the saw a proper tension for a certain speed, but what assurance has he that that same speed will always be kept up? Any experienced sawyer knows that a saw hammered to the proper tension to run six hundred revolutions per

minute, everything else being equal, will work well it that speed is maintained, but if he attempts to run the same saw with the same tension at a speed of four hundred revolutions per minute he will find the conditions entirely changed and the chances are that it would not work at all.

And just here is where much of the trouble with mill saws originates. Hundreds of mills all over the country may be found where the power is inadequate to maintain a uniform speed at all times and under all conditions, especially so with a class of mills that are operated by water power. The speed is irregular and cannot be-depended upon. It may be all right when the saw is running idle or it may be kept up in small sized logs, but when a large log is being sawed the speed may run down one-half before the saw is half way through the log.

Now how can a saw be expected to stand up to its work under such conditions? The only practical remedy that can be suggested in cases of this kind where the power cannot be increased, is to decrease the feed or have a variable one that may be adapted to the size of the log, but by all means keep the saw up to its regular speed. Finding fault and writing ugly letters to the saw maker will not help the matter one particle, for it should be understood that no saw maker can adjust a saw to a tension that will work well under a speed varying from four to six hundred revolutions per minute.

The practice of stopping the feed entirely to allow the saw to recover its speed and then slashing it into the log and slacking it down again is a bad one, no matter how well it is practiced. It is much better to adapt the feed to the power so as to allow the saw to run at all times at its regular speed.

## BRITISH COLUMBIA LETTER.

NEW WESTMINSTER, Dec. 23rd, 1890.
The lumber business continues brisk, all the mills running full time and having orders for a long time ahead.

The Brunette Saw Mill Co., of this city, keep in the line of progress and improvement. This week they have lighted the greater part of their yard and all their buildings with electric light made on the premises. This is the first used in this city. Their plant consists of a "Compton" of four arc and 182 incandescent lights. The mill and remainder of the yard will be lit also next week. The fine new mills of the company continue to turn out excellent work, and are fast earning a reputation for accuracy and finish that was impossible to produce with their old mill.

It is likely that a new company, to be known as the Canadian Pacific Lumber Co., will build a mill in close proximity to the Brunette Saw Mill Co. Mr. Andrew McLaughlin, who has been connected with the management of the Royal City Mills for some years, will assume the management of the new company. Early in January Mr. McLaughlin will leave for the East, to purchase machinery for the new mills. The company have secured some valuable timber limits, and before spring will be on a good footing in this respect.

Messrs. James Harris & Co., of St. John, N.B., the extensive car builders, are about closing negotiations with the Royal City Planing Mills Co. for their supply of car sills, etc. This will be the greatest distance the British Columbia fir is shipped in Canada. The Barney-Smith Car Mfg. Co., of Dayton, Ohio, continue to receive consignments of it from this firm. The Mc-Kinley duty has seemingly not affected this article so seriously as to prevent its being shipped as before.

Mr. J. W. McRae, of Ottawa, well known in Eastern lumber circles, has just paid British Columbia a visit. He expressed the opinion that the fine fir, spruce and cedar of this coast would soon make a name for themselves in any market, and predicts a good future for the lumber trade of this province in general. He was delighted with New Westminster, and its favorable situation seemed to impress him very much, and rightly so.

The building of Messrs. Dixon & Purdy's mill, near

Mission Station on the line of the C.P.R., is making good progress.

The McLaren-Ross Lumber Co. have been sawing pretty steadily lately, but not to-their full capacity. They are still erecting dwellings for their employees.

The employees of the Royal Gity Planing Mills Co. have formed a debating club and reading room. The rooms will be comfortably furnished and debates held weekly.

The work of laying tracks for the electric street railway in this city began on the 15th inst., and is progressing rapidly. The Trail of 35 pounds per yard is strongly objected to by the City Council, and it is not yet known what decision will be come to in the matter, as the railway company contend it is up to all the requirements of the times.

The shipments of lumber from Burrard Inlet, B.C., during the month of November were 1,591,344 feet to Melbourne, Australia.

The machinery for a shingle mill has been brought in by R. Cunningham for a mill on the Skena river.

The Davies-Sayward Mill Company, on Kootenay Lake, has let a contract for 5,000,000 feet of logs, to be delivered at the company's sawmill at Pilot Bay. McLean & Flager will undertake the work.

G. F. Slater, of the Vancouver Shingle Mill, is putting in saw mill machinery on a more extensive scale, for the manufacture of all kinds of lumber. Heretofore attention was directed only to the manufacture of shingles and fine cedar lumber.

The Vancouver World says: "Phillip Kelly and Duncan Box, timber rangers for the Canadian Pacific Lumber Company, returned on Saturday from an extended trip up the coast and inland, locating claims for that company. They met with good success, and a party of surveyors will leave in a day or two for that part of the province. The company propose to erect a large saw mill at the mouth of the Amacon river, down which the logs will be floated to the mill yard. Ships can load in these waters.

A. St. Geo. Hamersley, a prominent barrister of Vancouver, is now at Ottawa in conference with some English capitalists there in reference to an extensive dry dock and harbor scheme at Vancouver, which will involve an expenditure of a sum in the millions. This has been under consideration for some time and seems to be just now taking a shape which augurs for its success.

Grading on the Mission branch of the C. P. R. is almost completed to the boundary. The border town sites, Huntingdon, on this side of the line, and Sumas City, immediately opposite, are experiencing something of a boom in consequence of railway construction, and some improvements are going on in both places. The Huntingdon Mill Company are working on an order of 300,000 feet of lumber for planking streets in the "twin cities."

We notice that the CANADA LUNBERMAN has again changed the location of its offices, which are now situated in one of the finest buildings in Canada: We wish you the compliments of the season and a prosperous New Year.

H.G.R.

## A "GOLDEN" RULE FOR ADVERTISERS.

Said a gentleman, the managing man of a concern, "The only rule I have for determining whether or not a paper is a desirable one for our house to use as an advertising medium is to ascertain if the paper, upon examination, has interest for me as a reader. I go through its columns carefully, and consider what is being presented from month to month to its subscribers and readers, and then attempt to conceive of the kind of people who are likely to take the paper in order to obtain such information or such reading matter. I believe," he continued, "that this rule enables me to weed out many papers which have only a free circulation, and some of those also which do not employ editors, or which do not make any real attempt to take high rank as periodicals. When I find a paper that I think I could afford to pay for as a subscriber on account of the matter it contains, I am impressed with the idea that it circulates among a class that I can. afford to pay for to reach with my advertisement."