PRACTICAL HINTS ON SAWS—HOME PATRIOTISM.

BY A. J. BURTON.

When my brain becomes languid and ceases to produce the desired line of new thought, I very often get out the old numbers of the trade journals and look them over for new ideas, and while reading over the articles written by others, I get my criticizing machinery in operation on what some other fellow claims to be the only way of doing things, and ten to one I pick up new ideas that had not occurred to me before.

There has been a number of interesting articles in the columns of the trade journals upon the subject of the necessary amount of crown a band saw should have to make it hold its position on the wheels while in the cut. It appears to me that filers differ greatly on this point. I am pleased, however, to see by the

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journals that each year the filers are gradually learning that crown in the back of a single cut band saw is essential to quality and quantity of lumber. Readers of the CANADA LUMBERMAN may call to mind an article by the writer five or six years ago, when I strongly advocated that a single cut band saw should have 1/32 inch crown in five feet. At the same time, several brother filers wrote articles attempting to show that a saw would give the same results with a straight back. To-day I find that most of these straight back advocates are now converted to the crown back (they must have added a new wrinkle to their horn). I wish this to be understood as complimentary to these converts for their wise change of opinion, and not the meaning a farmer would understand when buying an old black cow, upon whose horns every wrinkle after six years of age lessens the value of the animal. With a filer, every wrinkle he gets on his horn adds to his value, both to himself and his employer.

Going back to saws and crown, the argument advanced by some saw makers and many filers is that the fact that double cut band saws are straight on both edges is sufficient to demonstrate the necessityt or single cut saws to be straight also. This theory does not stand for the following reasons:

A single cut band saw works under entirely different conditions than does a double cut band saw.

First, a single cut saw runs with only one of its edges (the front) off the wheels, and the back always being on the wheels will consequently be tighter on the back than on the teeth. It is necessary, therefore, to crown the back of a single cut to overcome this.

Second, a double cut saw is always wider than the wheels, and both edges run off alike, therefore it is necessary that the saw be straight on both edges in order that it be strained up evenly when on the mill.

I trust that the above will explain this matter to all those interested in this subject.

There is another point on which I wish to speak. It appears to me there is a considerable amount of prejudice among the millmen against the double cut band saw. This should not exist, for the reason that there are a great number in use giving highest results. It is up to the filer to produce good lumber and lots of it. It is a poor excuse for a filer to lay his trouble on this or that make of mill, as there are hundreds of all makes in operation in the United States and Canada.

I believe in buying all we can at home, and to prove my assertion will say I have filed for most every make of band mill made in the United States and Canada, both single and double cut, and I can say with great pride for Canada, and not boastingly, that the mills made by the Wm. Hamilton Company and the Waterous Engine Works Company will cut as much and as good lumber per day as any make of mill "Uncle Sam" ever turned out.

There seems to be a great feeling among millmen of Canada that they must buy their saws, emery wheels and file room supplies in the United States in order to get the best. It is difficult to convince them of the fact that they can buy as good an article at home. I often wonder if it is possible that the people of the United States think they must buy lumber in Canada in order to get the best. If they did it would certainly be a good thing for Canada, and our millmen should not be blamed for encouraging them to continue to think so, and if we look on the subject from an American manufacturer's business point, it is only quite natural that they should continue to impress on our people that their goods are the best, for the reason that they have the goods for sale and we have the market.

How many of our readers realize the fact that many of the best tradesmen in the United States are Canadians and at the head of the largest establishments? Why is it that these men are now looked upon as experts when only a few years ago they were considered to be only ordinary Canadian workmen? It appears to me that the Canadian employers themselves did not realize they had good men and did not give the men a chance to show their ability, consequently their modern ideas are checked and the men go to the Unites States, where they can better themselves and soon develop into experts. This is what becomes of our best tradesmen, and I think if there is any reason why the United States can excel Canada, it is because the American companies have Canadians at the head of their establishments in the capacity of president, manager, foreman or expert tradesmen. I will give a few facts which are well worth consideration.

Out of twenty-five bankers in the city of Chicago, eight are Canadians. Mr. John Hancock, formerly of St. Catharines, Ont., is now at the head of the grinding and polishing departments of one of the largest saw shops in the United States. He learned his trade in Ontario. Mr. A. M. Terry was the head of the tempering department of another large saw company for years. Mr. J. W Walton, of New Brunswick, is the inventor of the wood rim for bicycles and is now at the head of one of the largest cycle works in the United States. Mr. Egan, of Toronto, is now at the head of the great firm of J. A. Fay & Egan, Cincinnati, Ohio, the largest wood-working machinery manufacturers in the United States, and yet these men were not considered to possess more than ordinary intelligence. Therefore I say the best way to improve on the qualities of our manufactures is to secure the best tradesmen and endeavor to keep them, even at an increased wage, as it will decrease the percentage of culls and the cost of production, and increase the prestige and reputation of our manufacturers.

COMBINATION SAWING MACHINE.

The accompanying sketch shows a very handy machine, not sold on the market. It is a combination sawing machine, which can be used for ripping, cross-cutting, gaining, plowing, etc., and for a window frame department H. F. Wachter, writing in the Woodworker, says he has never seen its equal. For the ordinary run of every-day work it is used just as any other rip or cut-off machine. Plows, dado heads, etc., can be used at will, and two men can work on the machine at one and the same time, which in itself is a very great item in its favor. The sketch shows the machine rigged for gaining tank staves or doing other circular work of this character. Fig. 2 shows the top used when tank staves, etc., are being made; it is only necessary to lift this top out of its place and set it to one side, and you are ready for the straight top, which need only be laid in place, and you are ready for straight work.

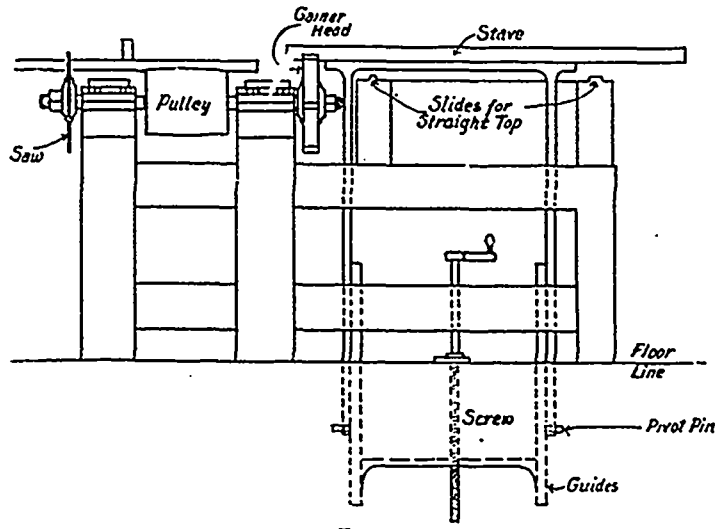

FIG. 1.

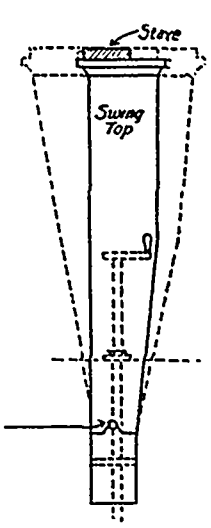

FIG. 2.

The sketches explain the merits of the machine better than the writer can. All that is necessary to say is that it is made of wood in most of its parts, amply large, to balance the material being worked, thus making the work easier for the operator and insuring better results than is possible when the operator has to continually exert himself to balance the stock to keep it in place, which is no easy matter when the stock is heavy, and often requires the help of a boy or man. This is not the case if the top is long, like the one shown. The machine can be made one of the big money-makers of the business, although it is not the best-looking machine in the world.