

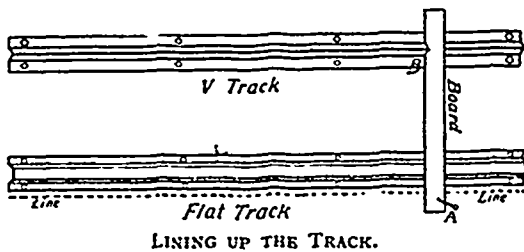
POOR MILL PLANS AND POOR MILLWRIGHTS.

By A. J. HUNTON.

Not long ago I took charge of a new mill, beginning a few weeks before it was completed, so I could set up the filing room machines, and have the saws in order when the mill started. The mill owners told me they had a full filing room outfit, a nice room, etc., but I didn't find it so, at least in my opinion. The filing room was only 20x18 feet, about the size of the dining room in an old-fashioned southern plantation dwelling. The owners couldn't see where more room was needed, and as a matter of course there was friction. There were not enough machines to do such work as they wanted done, so I made out a list of machines necessary besides those already there, as follows: One lap grinder, one blow forge, one 12x16 inch anvil, one retoucher, long and cross shears, patch machine, band saw swage, one dozen emery wheels, and six ounces of silver solder. Experienced men will thus see how complete the outfit was when I began. When the company saw I would not go to work without these machines, they were ordered.

With the arrival of the machines came trouble. The mill owners could plainly see then why more room was necessary; there wasn't enough room for the machines, to say nothing of room to work in. After twelve feet had been added to the length of the filing room, and the machines placed, we had as nice a room for fitting the saws of a one-band mill as one could wish.

The point I wish to make is that cheap millwrights are usually expensive in the end. The



LINING UP THE TRACK.

millwright who built this mill would have a better taster in a wholesale liquor house—he would have longer hours, with less pay, but more tastes. He had been "under the weather" most of the time while the mill was building, hence the work was not done well and the machines were not well placed. This, however, being none of my business, I said nothing.

About the time the mill was ready to start this millwright "loaded up" and was discharged. Next day the superintendent requested me to look over the band mill, carriage, live rolls, slasher, turner, etc. I found the driving pulley on the slasher had been put on wrong end to, so that the key could not be driven. Considerable time was spent in taking down the shaft and turning the pulley around. The live rolls were neither level nor in line; they had to be taken out and rebabbitted before they could be started. The carrier chains in the slasher table were too high and the table had to be rebuilt. There were no two pulleys in line, one with the other, in the entire mill. I lined up the band mill and tried to line up the head blocks on the carriage, but to my surprise, found the carriage had been set a half inch too near the saw. The blocks were hard back in their slots and I could not move them further. When the offset moved forward the rests struck the bed husk of the band mill.

I explained this to the mill owners, who thought

I could make it work by chipping off the rests with a cold chisel, for by this time they were getting tired of making changes, and I didn't blame them. We finally got ready to start, but had a freight train load of trouble with the belts because the pulleys were so out of line. I had to build a new tightener frame, for the first one was so tight that the motion caused the tightener pulley to dance so much that it led the belt on the band mill pulley and would have spoiled the belt if used. We made a new tightener frame and could then adjust the belt properly.

After a lot of other minor changes we got the mill started, but only ran two days, broken time at that, for, as stated, the carriage was too close to the saw and would not allow full throw in the offset, while the dogs in the offset would not release at the end of each throw, as they should do, and caused so much friction that half the time the trucks would not turn round and the offset would heat and stick fast.

The superintendent was an easy-going kind of a fellow, and had little knowledge of the successful operation of saw mill machinery. He came to the filing room and asked me to go out and try to fix the offset. I told him it would never work right until the V-track was moved a half inch away from the saw. This was Saturday night, and I went home to see my family. The superintendent told me he thought they would not run Monday, as they had some repairing to do, so I did not get back to the mill till Tuesday morning. They had decided to move the track over, and had it nearly done. They did not use a line at all, but used a rule, measuring over a half inch, marking it, moving the track over, and using drift bolts to hold the track down.

When I arrived the boys asked me what I thought of it. I asked them if they had set the track at right angles with the band wheel shaft. They said, "Why, no, but we have it just as it was, only over a half inch." I decided to put lines on and find out for myself whether they had it in line with the saw and straight, or not, knowing full well I could not make the saws make good lumber if the track was out of line. After placing the line on it, it was not necessary to do any talking to convince them they were not right, for it was out of line, and so crooked as to remind one of a narrow gauge railroad in the mountain regions of Pennsylvania. We had to take the track up again and put it down straight and in line, which took another day, before we got started.

Let me try to explain how I line up a track. Reference to the sketch will show that it can be done quickly, easily and well. We will suppose the V-track is further from the saw. Get a piece of white pine board four inches wide by one inch thick, and long enough to reach from one track to the other. Lay it across both tracks and cut a v-shaped notch to fit the V-track exact, in one edge of the board, as at B. Place the board on its edge, letting the other end rest on the flat track. Now draw a line parallel with the saw, over flat track. In this way you will have no lines over the V-track to interfere with your work.

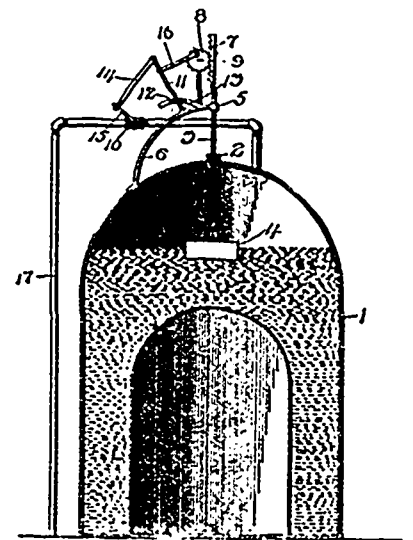
Place the V-shaped notch in board on the V-track and drive a nail in the board close to the line over the flat track, as shown at A. This will be a tram or gauge to set the V-track by, and if you keep the nail close to the line the full length of the track, your track will be straight, provided you are careful to have the V-notch down tight

on the V-track all the time. The dotted line shows the line to work by.

After the track was set over the offset worked without heating, and the carriage caused no trouble. The mill finally got to doing work, but not until it had been entirely overhauled and the machines reset. The mill, when I left, was cutting 50,000 to 65,000 feet per day of eleven hours, from small hemlock, red and white oregon logs, running eight and nine logs to the thousand. This mill must have cost its owners nearly twice as much as it would had they had good mill plans and a competent millwright from the start; besides, they could have begun sawing one month earlier. I would advise mill owners to employ only reliable millwrights.—The Wood Worker.

WATER FEED REGULATOR FOR BOILERS.

Mr. W. H. Tobey, of Tupperville, Ont., has been granted a patent in Canada for a water feed regulator for boilers, as shown in the accompanying illustration, which he makes the following claim: The combination with a boiler, having a water inlet supply pipe and a valve located in said supply pipe to regulate the passage



WATER FEED REGULATOR FOR BOILERS.

water into said boiler, of a float mounted to have a vertical movement within said boiler, a pinion mounted to have a operative connection with said float, whereby a vertical movement of said float will impart a rotary movement to said pinion, and connections operatively connected to said pinion and the handle of said valve, whereby the movement of said pinion will serve to impart an oscillatory movement to said handle, substantially as described.

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