

STARTING A NEW HEAD FILING JOB

By; DONALD MASON

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After deciding that you are qualified to hold the position of head filer, determine if the job measures up to your standards by applying the following procedures:

Ask yourself, is there enough help in the filing room? As an example, there is nothing worse than a double-cut band mill operating two shifts with no fitter in the filing room at night. When you arrive at work the next morning, saws are all over the filing room with perhaps the last sharp saw on the mill. You then have to select a couple of saws with the biggest swage to fit up in a hurry; but what if they are turned over, or pulled in spots? This situation causes you to waste an hour or so, and you start playing a game of "catch up". There a lot of mills that always seem to have saw problems, and if you look closely you will find that many times it is the result of an undermanned filing room. Consider this when taking a new job; don't dig yourself a hole you can't get out of.

Don't oversell yourself to management when applying for a job. If you tell them you're too good they may expect too much from you. When you improve the situation, let them be pleasantly surprised at the results.

Never be guilty of degrading the man who filed the mill before you. If you found the job in a run-down condition, do the best you can to better the conditions without criticizing the former filer. Remember, he had to go elsewhere to make a living, so don't let adverse comments on your part deprive him of employment.

If you take over a job that is in trouble, look for the number one priority first; that is, the condition that is most likely to be hurting the lumber or the saws. Change only one thing at a time, watch the results, and if one change is favorable, go on to change another. If you change too many things at once, some of them may not work out. Go slowly and carefully. It can't all be done in a week.

When first stepping into the filing room, look for a few important things. Is the saw sharpener lined up properly? Sometimes this is the last thing a fellow looks at; it should be the first. Are the swages and shapers in good condition? Beware of carbide shaper jaws that have been in service too long. Is the grinding wheel the proper size for the job? Just because the cupboard is filled with wheels doesn't mean that they are the best grit or grade for this operation. Make certain the grinding wheel has the proper number of turns in the bottom of the gullet. A wheel that plunges down too quickly and up too soon will not clean the gullet properly. Either change the cam action or slow down the machine.

When observing the bench, first determine whether the rolls are dishing the saw one way or another. Level a saw, run it through the rolls and it dishes the saw, change the rolls or level the bench. You could waste a lot of time with poor stretcher rolls.

Regarding the headrig, look first to see how the mill is lined up with the carriage travel. Lining the wheels square with the track is satisfactory on a double-cut, but is not the answer on a single-cut. A saw with a long back will hang out of the cut, so remove the guides and sawdust shear and let the saw hang free. Then align the saw with the carriage travel by moving the wheels. It doesn't make much sense to twist a saw around with the guides to keep it in line. If you disagree with this method, ask yourself: "How would I line up a mill with no pressure guides?" So line up the saw, not the wheels, then the pressure guides will be pushing the saw straight out instead of twisting it around.

Look at the bottom wheel and observe how far the saw is hanging over the edge. Then ob-

serve the same on the top wheel. If there is any great difference, it would indicate three different things: 1) the wheels are not directly aligned endwise: 2) the bottom wheel is out of tilt; 3) one wheel is worn or faced differently, causing the saw to hang more over one wheel than the other.

There is always a lot of talk about cross-line, but there is one sure way of checking for it. Turn the wheel backward, if the saw moves one way or another, you have cross-line. When you turn the wheel both forward and backward and the saw does not move over a fraction, you have attained perfection.

Take a good look at the strain bar when the mill is sawing. As the saw stretches and gets longer, the strain must tighten to drop the saw. If you see a strain arm rising in the cut, it indicates an abnormal amount of sawdust is rushing around the wheel, creating an attraction for the saw to climb, thus raising the strain lever and moving the saw forward in the cut.

When a mill is first started up, see if the strain arm moves up and down. This could be out of round wheels or a loose or broken spoke. If the wheels are bad, grind them as soon as possible. Never put new saws on a worn wheel. The two just don't fit. Before surfacing the wheels, inspect the bearings on the mill. You cannot grind a wheel properly with faulty bearings, especially at full speed.

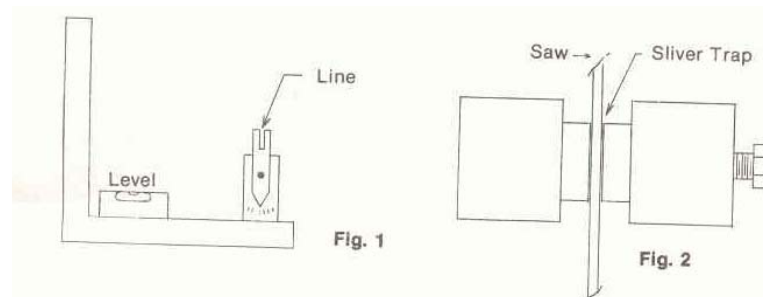
There is only one place on a mill that must be level or square with the carriage, and that is the guide ways on which the guides run up and down. If there is an "out of square" condition, whenever a cant is turned, the felony will be compounded and instead of square cuts you will have parallelograms. After squaring the saw with the bedplate, place a dial indicator against the saw and raise and lower the guide. This will show you how far you are out of square.

One of the most inaccurate pieces of machinery in the sawmill is the carriage. There is a lot of emphasis put on new set works that set within a few thousandths of an inch, but what good does this accuracy do when the carriage doesn't travel within quarter of an inch because of bad track, loose trucks, etc. A carriage is a massive piece of machinery with logs being turned against it continually; it is impossible to maintain anything that large within a few thousandths of an inch.

If you believe that the track is crooked, be prepared to prove your case to management. Words aren't enough; you will have to use some device that spells it out for them. Stretch a line just above the carriage as tight as possible about 3" above the bedplate. Clamp a pointer device with a slot for the line to fit in, and run the carriage up and down the track until the pointer shows '0' at both ends.

Place a machinist's level along the pointer (see Fig.1), get management on the carriage with you and have the sawyer make a line. When the pointer moves, or the level takes a dive, there is no argument, they will be convinced. If you can load a log on the carriage, so much the better. It will give you the benefit of weight.

Fig. 1 Fig. 2 \.



A lot of broken saws over the years can be traced to poorly designed guides. One particular type of guide has been the biggest offender, especially the bottom guide (see Fig. 2). Sawdust and slivers drive down into the crevice between the saw and the guide and build up pressure that pushes the saw out of

line or against the outside guide. I've seen it packed so tightly that it was like fiberboard, acting like a spring against the saw. A saw doesn't have to be case hardened to center crack. The fact that the saw is heated within a narrow area is like a "popping oil" can. Metal fatigue will result. If you see a rash or center crack and a guide like this exists, get rid of it or bevel off the top, eliminating the crevice.

Make certain the saws are always lubricated with enough water; saws with pressure guides must have water on them. Make sure a sawyer or off bearer isn't turning it off because he doesn't want to get wet.

Circular saw trouble can many times be attributed to faulty collars. If you put a level saw on the collar and it appears to be dished, take the saw off and turn it around the other way. If the saw still dishes in the same direction, you have a bad collar.

Make sure the feed roll is on the edger are in line. Run some cants through without any saws in the machine and see if the cants travel through in a straight line. Many a thin saw edger problem has been due to a bad feed roll situation. Also, if a cant comes off the headrig out of square, it will lead to the high side.

Guides that are the circular "screw-in" type are bad news. The full face of the guide is never on the saw, making it impossible to run thin saws successfully.

Make sure the guides are square with the arbor and also parallel with the saw. Make a point to be friends with sawyers or anyone who operates machinery using your saws. It is much better to have a friend in the saw box than an enemy. Cooperation between sawyers and filers is very important to a successful operation.

Pride in one's work is a very important factor, but don't let pride lead to your downfall. If a filer has a problem he can't solve, or is in serious trouble, he should talk it over with another filer. Sometimes two or three heads can be better than one. Many a filer has lost his job because he kept his troubles to himself. I think the greatest thing about these meetings is the sharing of ideas with other filers. Never demand that a saw be replaced because of cracks, crumbling, etc., until you have completely eliminated all things that could have caused the problem. I'm sure if you shout loud enough someone will replace the saw, but what if the saw is not at fault; have you really solved the problem? In closing, I would like to leave you with a couple of thoughts:

Never stop learning, look back a year ago and feel that you are much smarter today than you were then. And, also remember that constant vigilance of saws, machinery, and tools is the secret of success.