## SAWMILL FORUM

CASEY CREAMER

SAW DOCTOR



One of my saws just won't run right. The guy who has been hammering my saws for years told me that it has been hammered too many times and that is why it doesn't run after he hammered it. What does that mean, or how many times can you hammer a saw before it is worn out?

Saws do wear out eventually if they don't get completely wrecked first. But they don't wear out from being properly hammered. I have to tell you that when I hear that an anvilman says a saw won't run because it has been hammered too many times, it reminds me of that old school tradition of keeping the world of saw smithing a big stupid secret.

I will get to what defines a worn out saw, but first I want to address the issue of a saw being hammered too many times. I used to hear tales of various saw doctors who claimed they could fix any saw. At first I even believed those claims. I have now been at it long enough that I can tell you that there are saws out there that I can't fix. I suppose "can't" is slightly misleading. In reality, any saw that I can't fix is actually just a saw that I haven't figured out how to fix. There may be other saw doctors who would know how to fix that particular saw. And by the same token, there may be a saw that they don't know how to handle that I can fix with no problem.

Any time someone unsuccessfully hammers a saw for you and it doesn't run and his response is that it has been hammered too many times, he's just making a saw doctor's lame excuse for not knowing how to properly hammer that particular saw.

If I try to hammer a saw and come to the conclusion that I don't know how to fix it, I will know that before I send it back to you, and you will be made aware of the fact that although I worked on it, I just don't know how to fix it. At that point you can try to run it if you want, but I already know it won't run properly. You might be able to live with how crappy the saw runs in a back-up situation, but I know

it won't run properly. There is no need to blame the saw. It is just a saw that I wasn't able to figure how to properly hammer. That does not mean it is time to make a sign out of that saw. It still is fixable, you just have to find another saw doctor willing to give a second opinion.

I have also heard saw doctors say that a saw won't hold its tension because the saw has been hammered too many times. That is another one of those less-than-genuine excuses for not knowing how to fix that saw. With the exception a saw that has been through a fire, why would it not hold its tension? Let's remember that tension is merely one part of the steel in the saw being stretched a little more than the steel in another part of the saw. I also hear sawyers say the saw has "lost its tension." Where has the tension gone? Tension can't really be lost or found. Most of the time when a sawyer says the saw lost its tension, it actually has become dished (bent) towards the board side. When you try to saw with it, the body of the saw heats and stretches and starts to wobble, thus creating the feeling that the tension has gone out of it. No, the saw is just dished and needs to be rehammered.

Or, the sawyer may have heated the saw so much that the body or the rim has stretched, and now the tension is different from what it is supposed to be and the saw therefore needs to be rehammered. We saw doctors also refer to "adding tension" or "taking tension out." That's just a form of shop talk that is actually a misnomer. When we say we want to put more tension in; that means we are going to stretch the body a little more in relation to the rim. And when we say we want to take some tension out of the saw because we say it has too much tension for the speed it is running, that means that we want to stretch the rim a little more in relation to how much the body is stretched.

As for when a saw is worn out, part of that depends on the demands of the mill. A saw that won't stand up to the rigors of a high production mill might function properly



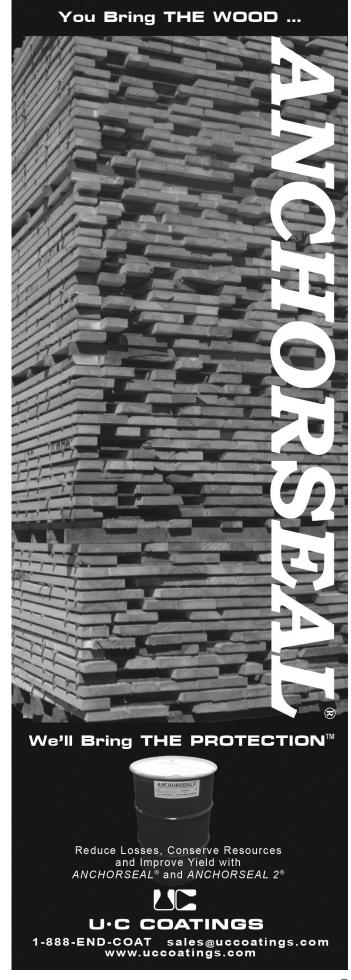
A new saw properly cared for should last a lifetime. But if you're trying to make a living with your grandfather's saw, it may well be worn out—just not from hammering.

on a lower production setup. Some saws are considered to be worn out simply because it will cost more to fix them than they are worth. That might be the case with a saw that needs maybe ten or more shoulders welded. Ten shoulders can be welded properly, but it becomes a case of pure economics. Is it worth the money to fix it? If you don't bother to oil the sockets when you change bits, you will wear the sockets out sooner instead of later and they won't hold bits properly. That would be a saw that could be considered to be worn out. Even if you treat the sockets properly, they will eventually wear out, but it probably won't be in your lifetime if you bought the saw new. Of course, sockets can also get loose by hitting metal that may not break any of the shoulders, but will push some back to the point where they won't hold bits very well anymore.

Additionally, the shoulders on an inserted tooth circular saw do wear right behind the bits. So if you keep your saw out of trouble long enough, the shoulders will eventually wear to the point where they may be too thin to withstand the rigors of a high production mill sawing frozen hard maple on a regular basis. But again, if you bought that saw new, it is unlikely that you will completely wear out the shoulders in one lifetime. Of course if it's the same saw your grandfather used, that's another story.

Questions about sawmills and their operation should be sent to Forum, *The Northern Logger*, P.O. Box 69, Old Forge, NY 13420, FAX #315-369-3736.

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