## AUGUST 2018 10 MINUTES SAFETY PRESENTATION

## CHUCKS AND FACEPLATES

In the July presentation we discussed taking risks with unsafe wood and wood flaws.

The next logical topic is chucks and faceplates, which hold the wood in place.

Quoting in part from an AAW article by Hilda V. Carpenter.

Chuck failure can be a creeping, hidden disaster waiting to happen.

This seems so simple, yet danger can be avoided.

Chucks need to be used properly and regularly maintained.

Ensure that the chuck is securely screwed unto the lathe spindle, and tightened. Tighten the set screw if available both on the chuck and face plates.

With the lathe in reverse while sanding, a chuck (or a faceplate) can unwind and fly off the lathe all too quickly.

Chuck jaws do come loose, occasionally check the screws that hold jaws in place.

These screws, even slightly loose, will create shimmies or wobbles in the turnings that can cause an out of balance piece of wood to fly loose at high speeds.

Turn at slow to moderate speeds and if a wobble is detected, determine the source and fix the problem before turning up the speed dial.

The design of the tenon that holds the blank into a four-jaw chuck should be such that the tenon does not bottom out in the chuck.

The shoulder of the chuck squarely paired with the shoulder of the tenon will provide a safe hold when combined with the tenon diameter that closely matches the diameter of the chuck jaws.

Chucks that are not cleaned often and regularly lubricated will pack with dust and shavings. This condition will prevent the jaws from clamping down on the tenon giving a false sense of security.

Remember green wood requires you to tighten the jaws of the chuck repeatedly as moisture is forced out of the blank.

Use the tail stock with a live center, whenever possible, for assistance. Invest in a quality chuck; a properly maintained chuck will provide literally thousands of hours of dependable service.

Faceplates can be a dependable alternative with a blank with no tenon, or with larger blanks.

It is important to use NEW sheet metal screws with each installation Don't skip faceplate holes, use a screw per each hole you will be glad you did.

*Use screws to go as deep in the wood as the blank allows.* 

For securing turning stock, one size does not fit all, match the size of the screw to the size of the blank.

You must also consider the material you will be putting the screws into. End grain requires larger and longer screws. Beware of punky or spalted woods; once the wood has started to decay, it is extremely difficult to get screws to hold.

Do not use drywall screws as they snap off easily giving you a week connection.

It is worth repeating remember to bring up the tailstock with the live center to give added security.

Turn safely and have fun. But by all means, think about what you are doing and consider the risks involved.

If you are unsure, ask someone with more experience.

IF IT LOOKS DANGEROUS IT PROBABLY IS..... STOP, DON'T DO THAT!

Some of these last tidbits were hijacked from Twenty Ways Not TO Turn A Bowl by Nick Cook, written for the AAW SAFETY FOR WOODTURNERS.

Our next 10 minutes safety presentation will deal with," Sharp Tools Are Safe".

August 2018 safety presentation.

Frank P. Safety Officer