T

<u>Tinning:</u> pre-coating the metal with solder before making the joint. This helps especially when laminating components.

<u>Turning:</u> a lathe isn't always necessary simple shaping can be done with a file in the jaws of an electric drill or a hand drill held in a vice.

<u>Troubleshooting:</u> if you have a problem with any thing break it down into small parts and check each. The task isn't so daunting then.

For example a loco that sticks.

Check gear mesh for obstructing debris. Yes - Clean out. No- Continue.

Check pickups are they catching on the wheels? Yes - Adjust. No - Continue.

Take off the motion and rods.

Does it run OK?

Yes - Put the rods back; No - Check each wheelset. Does it run OK with the rods on?

Yes – Put the con rods on. No – Check the clearances in the rods on the crankpins.

Does it run OK with the con rods on?

Yes- put on the rest of the motion. No- Check crosshead movement in the slidebars.

Does it run OK with rest of the motion?

Should be Yes by now.

<u>Trimming:</u> Always trim parts from fret or sprue by leaving a part of the joining tab on the component. It's much easier and safer to trim this off close to the component when it is free from the fret or sprue.

U

<u>Underframes:</u> Sometimes it is inevitable that you have to paint something with the wheels in situ. Masking the treads is not easy. It is much easier to remove the paint from the wheel treads with cellulose thinners on a cotton bud.

V

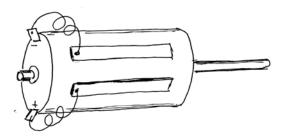
<u>Vice</u>: Vice jaws often come with a serrated surface that can damage components. To blind these and still hold items secure fit soft jaws. These can be purchased, certainly for the larger vices, but a simple alternative is sheet lead. After a while you will have to replace it when it becomes too marked. It can then move on to ballasting rolling stock.

W

<u>Water:</u> Keep a small squeezy container on the workbench. It is handy for replenishing the wiping pad for the soldering iron. It can be used in an emergency when you pick up something that is too hot to take the heat out of the burn. Other uses will come to mind too.

White paint: Use this as an undercoat before painting a buffer beam red.

<u>Wiring</u> Modern motors for models have very small terminal for attaching the wires from the current collection device. These can be very vulnerable if there is repeated connection/disconnection. Secure two pieces of copper clad strip to the motor body with double sided tape. Solder short wire from the motor terminals to these. Other wiring can then be attached to the strips.



X

<u>Xerox copiers</u>: These can used to rescale drawings, dial in the percentage change of scale and copy away. Watch out for shrink or stretch though. A scanned image on the computer may be rescaled in the same way. There is usually no distortion on a computer.

Y

York: The National Railway Museum, an excellent reference resource.

Z

Nothing like a well earned "zzzz" after a hard days modelling!