NEWS 170

November 2021

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What is TTTG?

TTTG is the Traditional Tools Group; a not-for-profit group of like-minded enthusiasts interested in the history and preservation of traditional trade skills, techniques, and tools, including hand tools, machinery, and other old technologies. TTTG was established in 1992.

Our bi-monthly Members' meetings typically feature a guest speaker or a panel talking on diverse topics related to tools, trades, and technology.

Keeping traditional tool skills alive is a key objective of TTTG.

"Real Skills" workshops have been held every year since 2005. These popular fee-based workshops, open to all, are designed to guide participants in developing their tool skills and learning and practising new techniques.

The Group sells old tools and machinery at affordable prices. Two or three "members and friends" tool sales are held each year at the Old Eastwood Town Hall, Marsfield. And every February TTTG runs Sydney's largest second-hand tools sale at Thornleigh.

Membership of the Traditional Tools Group is open to anyone with an interest in traditional tools history, techniques, and skills.

The TTTG digital magazine, creatively titled "NEWS", is published in digital form, and normally emailed to Members four times a year in February, May, August, and November.

"Trad Tools" a monthly TTTG bulletin sent to registered recipients by Mailchimp every month.

Membership of the Traditional Tools Group is open to anyone with an interest in traditional tools, history, techniques, and skills.

TTTG Membership Rules

MEMBERSHIP YEAR - starts 1 July and ends on the following 30 June.

MEMBERSHIP FEE - currently $50 per year and is due to be paid on 1 July each year and must be paid on or before 15 August.

UN-FINANCIAL MEMBER – any Member who has NOT paid their Membership Fee by 15 August each year. That Member will cease to receive NEWS magazine or access to the Members' area of the website.

NEW MEMBER join between 1 July and 31 March the following year and receive full Membership for the remainder of that MEMBERSHIP YEAR.

NEW MEMBER join between 1 April1and 30 June and receive full membership until the end of the following MEMBERSHIP YEAR.

All MEMBERSHIP inquiries and questions to secretary@tttg.org.au.

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NEWS 170 Front Cover Image: World War 2 USA "War Effort" Ad

Next Members Meeting and *Sale of Tools at Auction*
For details of TTTG Meetings and Sales
Email secretary@tttg.org.au

TTTG Contacts & Fees 2021/22

2021/22 TTTG Fees

Membership $50
Entry Fees:
Real Skills Workshops $60
Members Meetings $5
Members & Friends Tool Sales $5
Sydney Tool Sale $10

TTTG Contacts

Editorial/Advertising Enquiries:

Bob Crosbie
president@tttg.org.au

Membership Enquiries:

John Bates -
secretary@tttg.org.au

NEWS Magazine and TRAD TOOLS Bulletin

NEWS Magazine is emailed to financial Members during:

FEBRUARY MAY AUGUST NOVEMBER

TRAD TOOLS is the "for anyone interested" bulletin on TTTG. TRAD TOOLS is sent to registered recipients by Mailchimp each month.

Next Members Meeting

OETH, 74 Agincourt Rd Marsfield
Tuesday 15 February 2022 – starts at 7.00pm
Entry $5 incl tea & coffee
SPEAKER: George Bolliger on "Fencing" and "Fasteners"
plus
Sale of surplus tools
TTTG needs to make space, again!
Stanley Planes from $15 each
Sharp Oil $6 Citric Acid $5

Volunteers Wanted

-To demonstrate skills
-To "sell" TTTG
-To write articles
-To help with the website
-To sort tools
-To repair tools
-To repair old machines

TTTG needs members who can talk to an audience and can demonstrate "real skills".

Why not get more involved?

TTTG Sydney Tool Sale

Sunday 20 Feb 2022

Looking for pre-loved tools for all trades?
Don't miss Sydney's biggest tool sale.

The Brickpit Sports Stadium
1A Dartford Road Thornleigh

Opens 9am Closes 1pm

Entry $10

The Traditional Tools Group Inc ***tttg.org.au***

Just a Sec

John Bates, TTTG Secretary

A lot has happened since the last edition of NEWS.

Workshops and tool sales have recommenced following the relaxation of COVID restrictions. Two "real skills" workshops were held during November and the next is planned for 16 January 2022.

Our TTTG Friends and Members Tool Sale was held on Sunday 5 December. Following that the Annual General Meeting was held on Tuesday 14 December immediately before our usual Members Meeting. A 'new' Management Committee was duly elected comprising Bob Crosbie, John Deeble, Jim Windschuttle, Matt Pryor, Greg Pryor, and John Bates.

I am also pleased to advise that the TTTG Sydney Tool Sale will be held on Sunday 20 February 2022 at the Brickpit Sports Stadium. 1A Dartford Road, Thornleigh. The cancellation of last year's Sale due to COVID was most disappointing.

Members who wish to be sellers at the 2022 Sale can book tables ($50 each) using the table booking form I sent by email to all members in November.

If you want a table at the February 2022 Sydney Tool Sale don't wait too long as 60% of the available tables have been booked already.

Of course, we must as always fully comply with COVID-Safe Rules & Regulations as they apply at the time of each workshop and tool sale. However inconvenient they may be, QR codes, vaccination certificates, face masks and social distancing are likely to be with us for a little longer.

As some of you will be aware, TTTG currently has four Life Members – Henry Black, Terence Butcher, Clynt Sheehy, and Mike Williams. At its last meeting, the TTTG Management Committee voted two new Life Members - Bob Crosbie and Fred Murrell. I'm sure you will join with me in congratulating them and paying tribute to their long and distinguished service, and their notable contributions and achievements to TTTG.

This is my last report for 2021. I wish you all a happy and healthy Christmas and a New Year with fewer constraints and restrictions on our lives and freedoms.

Want to sell at the 2022 Sydney Tool Sale? Then:

- **become a TTTG member – only $50 per year.**
- **complete the table booking application.**

Just a Word

Bob Crosbie, TTTG Editor

2020 was a year of challenges. The extended Lockdown in Sydney prevented TTTG from holding Meetings, Tool Sales and "Real Skills" Workshops.

TTTG managed to survive and came out with a healthy bank balance.

When the restrictions allowed the Workshops and Tool Sales resumed.

2022 will be a year of consolidation and growth for TTTG.

A bold prediction? The TTTG Committee will make this claim realty!

The first step is to sell the few remaining tables for the February Tool Sale. With over 60% of the tables booked the indications are good.

If you want to be a seller at the February Tool sale book a table asap.

"Real Skills" Workshops.

For the first three months of 2022 there will be a Workshop in each month.
The first advertised workshops are all essential "real skills" workshops.
The emphasis is on time proven techniques.
The sub theme "don't throw money at it."

TTTG isn't only about hand tools.

There is an urban myth that TTTG members only use hand tools.
There is another urban myth that TTTG members are "the old tools mafia".

TTTG promotes appropriate techniques and quality work.
TTTG cannot control the price of old tools.

TTTG accepts donations and can help sell old tools.

Anyone who contacts TTTG to donate old tools is treated with respect.
TTTG can sell old tools "on consignment."
TTTG does not offer an old tool valuation service.

Priority for 2022

A high priority for 2022 is to review and improve the Website.
TTTG needs to attract new members by effectively using technology.
There is interest in "real skills" and time proven methods.
TTTG promotes and teaches "real skills" and time proven methods.

Effective use of the website and social media will promote TTTG.

5 December 2021 Tool Sale

The December 5 TTTG Tool sale at OETH was a success.

Good attendance numbers and no "incidents". Only one seller tried to avoid paying the $5 entry fee for an "assistant.". The only case, to my knowledge, of anyone objecting to the modest entry fee; $5 with free tea, coffee and biscuits is a real bargain.

Sellers with realistic asking prices made good sales and left happy! “Lifeline” offered books at bargain prices and made good sales.

So much for the positives.

The condition of OETH when we set up the Tool Sale at 7am was worrying. By chance I was looking down when I opened the sliding door from the TTTG room. If I hadn't been concentrating, I may have been in Ryde Hospital casualty when the Tool Sale opened. The Razor Scooter and Skateboard placed in the doorway could have caused me to do a backward slip.

Two of the three public access toilets were usable after a quick clean up. The third toilet was full of tables, storage bins and other surplus items preventing its use.

In the hall a "temporary structure" prevented use of the stage and the area immediately in front of the stage. The Secretary photographed all these "breaches of the hire agreement". The photographs have been sent with relevant advice to our landlord the Ryde City Council.

Best buy of the Tool Sale

Rare Shouldering Plane

The buyer of the plane, Matt, consulted the expert, Fred Murrell.

The plane’s blade is marked Thomas Ibbotson and Co. The marker’s mark on the stock is barely visible.

Thomas Ibbotson & Co was in business from 1823 to 1909 and Varvill & Son were making planes from 1829 to 1840. The wedge design appears to be towards the later date. After 1840 the firm was named Varvill and Sons Ltd and it is not clear when the name stamp changed.

Do you know?

Someone interested in assisting with the website.
We are looking for volunteers.

The NEWS Editor has updated his computer but the Editor is considering if producing NEWS is too much for one person.
If NEWS is to continue more members need to be involved.
The Editor is asking for your comments.

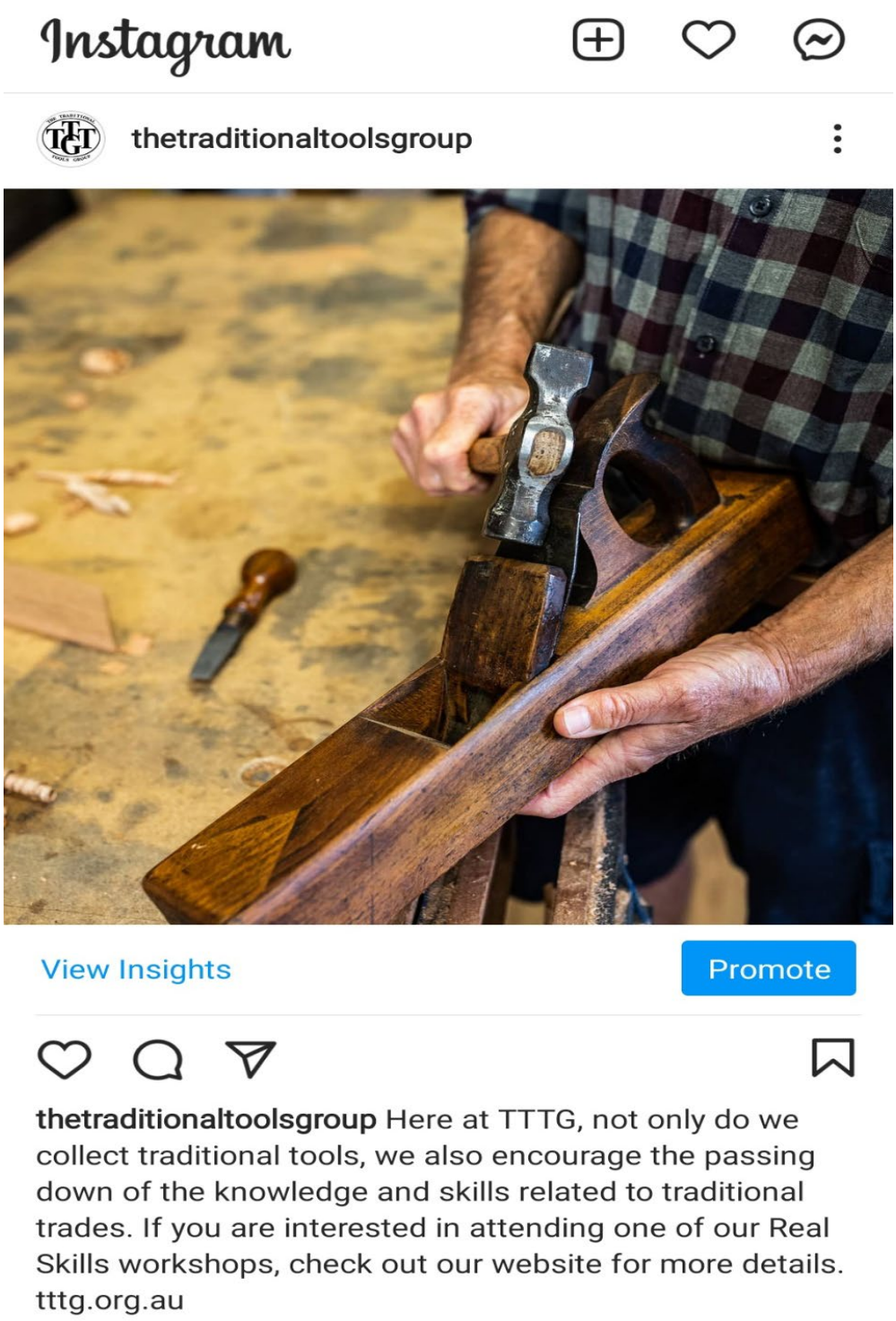
What do the numbers mean?

Most mass-produced old hand tools have a "maker & number".
Stanley Tools cast or stamped a model number on each Stanley tool.

How can you make sense of these numbers?
For Stanley Tools go to Patrick Leach Stanley Blood and Gore
http://www.supertool.com/StanleyBG/stan0.htm

TTTG on Instagram

Search for TTTG by name.
The TTTG Instagram account is @thetraditionaltoolsgroup
or https://www.instagram.com/thetraditionaltoolsgroup/



TTTG Real Skills Workshops

Old Eastwood Town Hall, 74 Agincourt Road, Marsfield

Sign on from 9.15am
Refreshments provided but bring your lunch

Fee $60 6 person limit Enrol online **www.tttg.org.au**

#**Enrol Online**	All enrolments are online
#**What to wear**	Enclosed shoes
#***What not to wear***	Heavy Industrial clothing
#***What to bring***	Lunch
#***Can I bring my tools?***	Yes, but "use TTTG tools"

"Sign On" from 9.15am

Lunch is around 12.30pm and the class finishes by 3pm

There are no chairs to minimise "trip hazards"

Attendees are no longer required to register using the Government QR code system
Attendees are no longer required to provide proof of vaccination.
Masks are now optional.

2022 "Real Skills" Workshop dates:

Using Routers and Trimmers	**Sunday 16 January 2022**
Shaving Wood	**Sunday 6 February 2022**
Sawing Wood	**Sunday 6 March 2022**

Using Routers and Trimmers 16 January 2022

TTTG "Real Skills" Workshop
Old Eastwood Town Hall, 74 Agincourt Road, Marsfield.

Sign on from 9.15am.
Refreshments provided but bring your lunch

Fee $60 6 person limit Enrol online **www.tttg.org.au**

Buying Routers and Trimmers.

The "best' new machines

Assessing a second-hand machine

Buying Router Cutters

Straight versus Spiral Cut

Standard Router accessories

Special Router accessories

What routers can do.

Home-made Router Jigs

Commercial Router Jigs.

Dovetails or Box Joints

Leigh jig isn't the answer!

The Hegner Comb Cutter

The Gifkin Jig

Working safely with Routers.

Protect ears and eyes, lungs, and limbs!

YOU WILL BE USING ROUTERS and TRIMMERS

WORK SAFELY!

Shaving Wood Sunday 6 February 2022

TTTG "Real Skills" Workshop

Old Eastwood Town Hall, 74 Agincourt Road, Marsfield.

Sign on from 9.15am.
Refreshments provided but bring your lunch

Fee $60 6 person limit Enrol online **www.tttg.org.au**

Selecting and Fettling Planes and Shaves
Sharpening and Using Planes and Shaves

What will you be doing at this workshop?

"Hands On" fettling of a rusty old Carter Bench Plane
Learning how to grind and hone a plane blade
Learning how to set and use a flat and sharp plane
Discovering the potential of hand planes and shaves

No rituals, no expensive jigs! Learn real skills.

Sawing Wood Sunday 6 March 2022

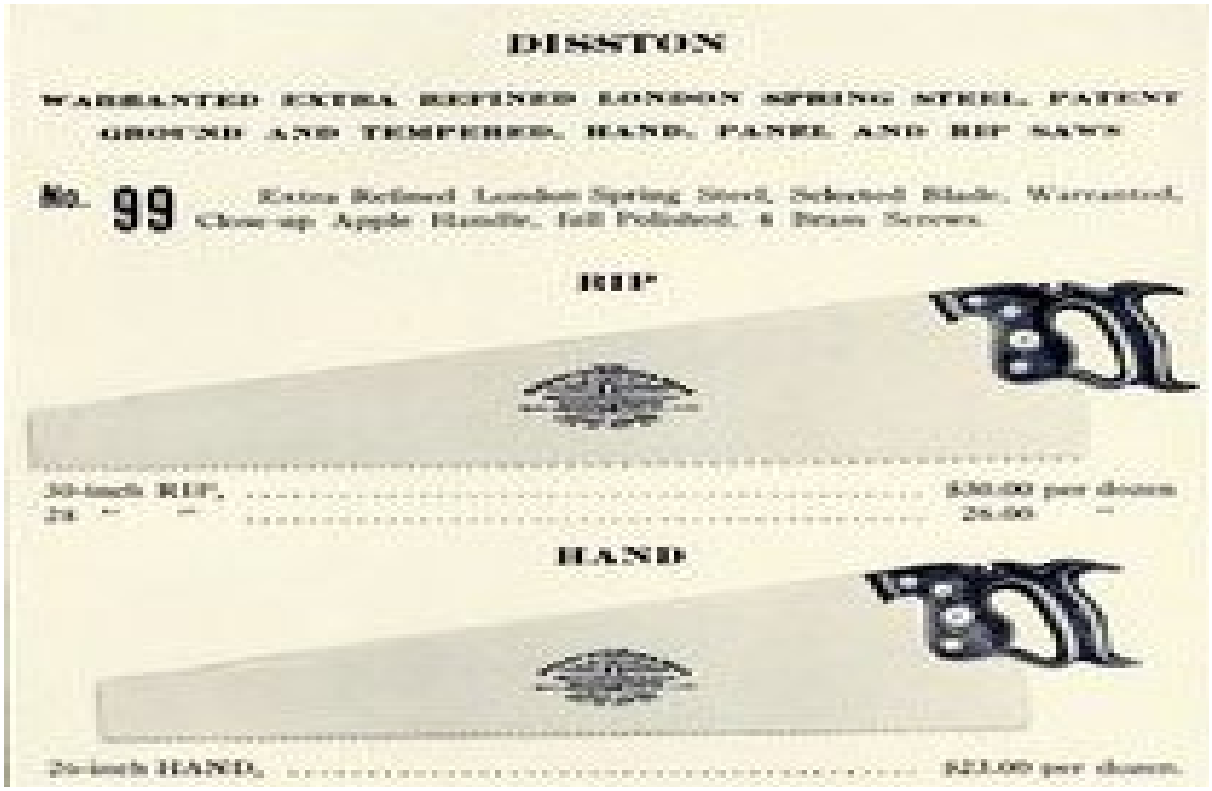
TTTG "Real Skills" Workshop

Old Eastwood Town Hall, 74 Agincourt Road, Marsfield.

Sign on from 9.15am.
Refreshments provided but bring your lunch

Fee $60 6 person limit Enrol online **www.tttg.org.au**

Selecting, Sharpening and Using Hand Saws
Saws for cutting along and across the grain



What will you be doing at this workshop?

Is the saw worth cleaning and sharpening?
Learning how to Top and File saws
Learning how to Shape, Set and Sharpen saws
Discovering the potential of Hand and Back saws

No rituals, no expensive jigs! ***Learn real skills***

“Sharp Oil”

Lamp Oil/White Spirit and Sharp Oil *NEWS Editor*

Both Sharp Oil and Lamp oil/White Spirit mix "improves the cutting action" of diamond plates. Sharp Oil also “self-cleans” oilstones and diamond plates. Both the Lamp Oil/White Spirit mix I recommend, and Sharp Oil are superior cutting compounds. All this is compounded by the structure of the steel and the bonded abrasive.

Sharp Oil comes out best because it "self-cleans" oilstones and diamond plates. At $6 a bottle Sharp Oil is also cheaper and more convenient. Almost a century ago, Norton Abrasives claimed Pike Oil self-cleans oilstones. TTTG claims Sharp Oil self-cleans oilstones and diamond plates.

I want to raise this discussion in NEWS.

TTTG isn't retailing snake oil!

Comment from Mike Williams
"Molecular structure" sounds good and adds a sort of believable cachet without taxing the mind of the reader. Exactly what the action of the oil does is probably quite complex but I'm not sure whether or why it increases the gentleness of the cut. It certainly makes it smoother to run the blade over the stone which is a plus as it is being pushed by hand. I'm sure, like me, when the oil runs out, it is harder to push, and you immediately want to add more. I suspect that an analogy here is lubricating the sole of your plane. It becomes easier to push (and subsequently easier to control) although the blade cuts the same thickness of timber.

Opinions differ on what to use as a plane sole lubricant, linseed oil versus candle wax but the overall effect is the same. Sharpening oil is more complex in its operation as here we are grinding not cutting and the energy required is different for both.

Somewhere I have a paper on cutting steel versus grinding steel and why it requires differing energy. It's all about steel grainsize and the crystal micro-dislocations. I'll have to dig it out but using oil to increase or decrease the grinding speed isn't mentioned.

Using cutting fluid when turning metal just makes a much better cut but if you have set the lathe up for a 10-thou cut, it's still 10-thou. Here the depth of cut is somewhat analogous to the stone grainsize, but I don't think that you can push the analogy any further than this.

Consider:	***Mike Williams has tried Sharp Oil***
	Keith Houston hasn’t tried Sharp Oil

Comment from Keith Houston:
I read with interest the TTTG article on Sharp Oil.

Attached is my take on what I use on sharpening stones. You may wish to include the article in the next edition.

Meanwhile, my boxes of tools are overflowing and eagerly awaiting – hoping for – the February Tool sale!

Best of luck for staying safe.

Further comment by Keith Houston:
Never having used Sharp Oil on my sharpening stones, I am not qualified to comment on Sharp Oil.

However, for nigh on 40 years I have used and recommend the following:

For coarse to medium stones, all diamond stones, and Waterstones, use water to which is added a few drops of washing up liquid. For fine stones use Baby Oil.

Traditionally, coarse to medium stones, for example Carborundum and India stones, were saturated in grease or Vaseline, and/or oil or kerosene added during sharpening. Such stones are all too often found at sales in a terrible state, covered in a congealed mixture of oil, metal filings and stone grit. A good way to clean these encrusted stones is to use a degreasing agent or smother the stone in a paint remover (for example Dichloromethane = Methylene chloride), wrap in aluminium foil or layers of a clear polythene bag, and leave for a good half an hour before hosing off. For stones with stubborn or deeply embedded crud, cover the stone in water primed with a little washing up liquid, carefully bring to the boil, and leave to simmer for 10-15 minutes, before allowing to cool and hosing off. Repeat methods if needed. Thereafter, during sharpening, use only water plus washing up liquid on these stones.

For the fine stones, for example Arkansas and Washita, use Baby Oil. It is a light, mineral oil. Avoid products with perfume – they can be nauseating. Use sparingly. The more oil you use, the gentler the cut. If residue clogs and blackens the surface it is readily removed. To clean the stone, add enough Baby Oil to form a thin layer and work it around with the finger. This will loosen the crud and it can be wiped off. Repeat as necessary.

In use and as you go, wipe the oil and metal filings from the stones with a disposable lint free rag. For the water, Wettex cloths are ideal, or a lint free rag. Avoid the handy throw-away, kitchen paper towel: the fibres come off and form little balls on the stone during use, and cause problems.

As you proceed from coarse to a finer stone, e.g. from coarse to finer grade Carborundum or India Stones, and especially on to a diamond plate or an Arkansas stone, you must ensure there is no grit on your tools or hands, and that your rags are not contaminated. The grit from a coarse stone could not only ruin your sharp edge, but it will also damage the diamond plates and finer stones.

Do not use oil on Waterstones. Use water. Waterstones are friable, and oil can break down the binding matrix, and they require a sharpening technique different to the method used for Carborundum or India stones. Check-out the internet for instructions. Waterstones are ideal for brittle edges, such as some Japanese chisels and the blades on the wooden spokeshaves. Do not use diamond plates on these blades – the hard diamond can chip the brittle edge.

Remember, the water or oil is used to cool the edge created by the friction. It also helps to suspend and 'float' away the metal filings, assisting ready removal.

So why not use oil on the coarse stones, and water on the fine stones? Well, you could. However, the molecular structure of the oil makes it ideal as a lubricant. The more oil you have on the stone the less the stone will cut. For quick and efficient removal of the metal on the coarse and medium stones, you want good contact between the stone and the metal. Thus, water is preferable. On the finer stones, e.g. extra fine carborundum, Washita, or the translucent Arkansas, where you want a lighter cut, a light oil is preferable. Oil will also hang on to the slip stones used for the inner bevel on gouges.

Diamond plates have revolutionised sharpening. Buy the best quality you can afford. A medium and a fine plate will do most of the work. I have medium plates, purchased 20-30 years ago that still cut, but I now rate them as a fine grade. Avoid double sided versions. For significant metal removal, use a grinder. The lighter the pressure on the diamond plate, the lighter the cut – each grade, with care, can thus work as a finer grade of plate. Follow with even finer stones, such as a translucent Arkansas. Ensure you clean and dry your diamond plates. The plate will not go rusty, it will be the iron filings. To clean clogged plates, scrub the plates in hot, soapy water.

You will, of course, finish off your sharpening with a strop primed in Chromium oxide. You do not want grit or oil on your strop. So, before stropping a tool, remove any grit or oil on your blade or on your hands. Depending on your sharpening technique and final stones, you may need to strop only a few times. Due to the natural give in the leather, each pass will round the edge slightly, and the tool edge will dull with work. Stropping can bring it back to life, but sooner or later you will need to go back to the fine stone, and eventually regrind to maintain the correct bevel.

Well, that's my two penneth. And baby oil also leaves your hands in good condition. And I managed to avoid mentioning the joke about its use on door handles!

Keith Houston replies to Bob Crosbie
Thanks for your reply, Bob. I take your points.

You say, "Be warned I disagree with most of your suggestions." I wonder what they are and why? Always willing to learn something and listen to feedback from participants and others, and open to testing new materials and techniques.

Oil as a lubricant, given its molecular structure, serves more than just filling up the spaces on the stones/plates to allow a more-gentle cut. More the oil the lesser the cut.

Yes, diamond etc. could be used for brittle edges – but needs care and understanding, and my experience indicates that all too many run into trouble. Thus, not recommended.

I have no trouble with clogged diamond plates or coarse stones using water and soap, and baby oil easily cleans the fine stones. Try it! So, I do not need citronella or white spirit.

Re attending a TTTG Sharpening Workshop. I must have run well over 40 comprehensive sharpening workshops, covering everything from carving and carpentry tools, leather, bookbinding, engraving etc., and sharpened a multitude of tools on commission.

A claim from the NEWS Editor

A TTTG Sharpening Workshop will take the myths out of sharpening.

"Sharp Oil" is by far the best lubricant for Oilstones and Diamond Plates.

"Sharp Oil" is only $6 a bottle!

Aluminium Oxide Oilstones produce good edges without time wasting.

The best honing jig is still the cheapest! Sharp Oil!

Comment from Michael Williams
Some good advice in Keith's reply and some debatable! Most of his arguments for the use of water could be equally appropriate for the use of "Sharp Oil" with the added bonus that it is ideal for all oil stones both coarse and very fine without having to decide what to use.
On his own admission, using water and detergent still slowly clogs his stones and requires occasional cleaning. My suggestion is that for a very little increase in price he tries "Sharp Oil", and he will never go back!
As a regular user of wooden spoke-shaves I have never noted that the cutters were more brittle than (say) chisels. On the contrary, I have found them to be more tough than hard and easy to sharpen. Also, have I missed some perennial schoolboy joke about baby oil and door handles?

Edge Tools and Sharpening Fantasies Bob Crosbie

Refreshing Edges

When joinery chisels and plane blades are blunt, the cutting edge needs to be resharpened. If the edge is thick, it requires grinding and then honing. Blunt and rounded one honing bevel edges cannot be "refreshed."

Stropping

Stropping is appropriate for open razors and carving tools.
Stropping joinery chisels and plane blades will round over the edge.
Fine abrasive compounds on the strop will speed up rounding over the edge.

Removing the wire edge

"Honing produces a wire edge, so you need to strop the blade on the palm of your hand or draw the blade across the edge of a piece of softwood."
I have been told this numerous times. If the fantasy merchant will listen, I will show them how to hone effectively on an oilstone or diamond plate.

Sharpening through progressively finer grits

This fantasy seems to have arrived with water stones. A Fine Aluminium Oxide Oilstone or Fine Diamond plate will produce surgically sharp edges on joinery chisels and plane blades. The coarse oilstone or diamond plate speeds up honing when the edge is getting thick.

Micro bevels, great sale's hype but?

"…and to achieve micro bevels you need "digital read out honing jigs."

Save money and time, come to a TTTG Sharpening Workshop, and learn how to sharpen joiner's chisels and plane blades without time wasting rituals.

Saw Sharpening Online Matt Pryor

Below is a link to an episode on saw sharpening by Tim Plavan.
Tim is the Saw Wright at Lie Nielsen.

The presentation is very informative, and even the most experienced might pick up some good pointers.

The episode goes for a little over and hour.
https://www.youtube.com/watch?v=LX7PuiNJajU

Metric Working on an Imperial Lathe

Michael Williams

Like many of our readers, I own an imperial calibrated metal working lathe. The reason is simple, old imperial lathes tend to be much cheaper on the second-hand market than more modern metric calibrated lathes whilst in many cases, they are intrinsically better finished than their modern counterparts, so often they are a better buy.

My new (old) lathe being calibrated in thou did not bother me at first because for many years I have owned (and used extensively) a small Unimat lathe which is calibrated in metric units and on the odd occasions when I needed to machine a project to an imperial dimension, I could do the conversion roughly in my head (that is thousands of an inch to mm) or just one simple calculation on my calculator. Going the other way then should present no real problem but I was wrong!

All the lead screws on my imperial lathe are fairly standard at 8 turns per inch hence one turn of the control advances by 1/8 of an inch or 125 thou. Turning the control through a number of turns moves it multiples of 125 thousand of an inch.

You can see the problem; you must keep careful track of the number of turns so that you can add those extra 25 thou each turn.

An example will make this a little clearer.

For small tool movements, I usually use the compound rest as the control is precise and clearly calibrated in thousandths of an inch. Say we want to advance the tool 37mm. Using our trusty workshop calculator, we divide by 25.4 to get 1.457 inches or 1 inch plus 457 thou. The 1 inch is easy, just 8 turns of the control but what about the 457? One extra turn will give us another 125 thou, leaving 457-125=332 to go. OK that will need yet another turn leaving 332-125= 207. Not there yet, so another turn leaves 207-125=82 to go and we can then dial up that extra 82 and confidently know that we have advanced by the wanted 37mm.

The main carriage control wheel is uncalibrated, so I purchased a cheap digital readout for the carriage which reads in both imperial and metric, but this only solved part of the problem as I mostly use the compound slide and if I am drilling to a particular depth, the tail stock calibration has the same annoying problem.

The answer is a conversion table which I have stuck to the wall next to my lathe and which I reproduce here. The advantage of News being digital is that you can just print out your own copy if you have the same metric to imperial conversion frustration that I have!

A glance at Table 1 shows us that 37mm will require 11 turns plus 82 thou as per our example above.

TABLE 1 – Metric Working on an Imperial Lathe by Michael Williams

Millimetres	Turns plus	Thousandths plus
1	0	39
2	0	79
3	0	118
4	1	32
5	1	72
6	1	111
7	2	26
8	2	65
9	2	104
10	3	19
11	3	58
12	3	97
13	4	12
14	4	51
15	4	90
16	5	5
17	5	44
18	5	84
19	5	123
20	6	37
21	6	77
22	6	116
23	7	31
24	7	70
25	7	109
26	8	24
27	8	63
28	8	102
29	9	17
30	9	56
31	9	95
32	10	10
33	10	49
34	10	88
35	11	3
36	11	42
37	11	82
38	11	121
39	12	35
40	12	75

Cutting Saw Teeth

Matt Pryor

Filing a uniform tooth-line on a badly sharpened old saw

One method is to use a power saw blade as a template.
Power hacksaw blades are available in Teeth per inch (TPI) sizes matching handsaw TPI sizes.
Cramp the power saw blade to the handsaw blade in a vice with a backing piece of wood. The correct size three square file will survive one re-cut! This is a cheap and accurate way to re-establish the saw's tooth pattern.
Follow this with Topping, Shaping, Setting and Sharpening.

Another method is to use a "print out pattern.

The Blackburn templates are easy to use, simply fold the printout, and place it over the de-toothed saw, giving two or three passes at each tooth marking, then remove the template and finish shaping.

This method is not as complicated as it seems at first reading. The printable tooth pattern is laid over the saw to be re-toothed. There are numerous versions for all the different ppi/TPI (ppi = Points per inch / TPI = Teeth per inch). See https://www.blackburntools.com/articles/saw-tooth-spacing-templates/index.html. You only need a couple of passes at each gullet and then the template can be removed.

Ray Millar uses blades from reciprocating saws as a pattern to re-tooth saws.

Bob Crosbie uses Power Hacksaw blades as a pattern to re-tooth saws.

Re-cutting saw teeth is easier with a good vice, correct size sharp three-square file and ear protection!

Too many saws!

TTTG is over stocked with saws
Old blunt and lightly rusted saws

But

Top quality saws only needing TLC

Give-away prices at

Sawing Wood "Real Skills Workshop" 6 March 2022

Worth Doing

Making a 600mm Jointer Plane

Hugh McKid

Like many people who hang around talented craftsmen/women you sometimes doubt your ability to actually do what they do. Making tools always seemed likely to be beyond my abilities.

Here is a different story.

Five years ago, in Issue No 93 (December 2016) of the Australian Wood Review I came across an article by John Kennedy, a North Queensland woodworker and teacher in which he made a 580mm jointer plane out of Kwila (body) and New Guinea rosewood for the sides.

John's issue was that Australian hardwoods are bloody hard and often the best ones are cranky and grain rich and conventional planes induced a lot of tear-out.

So, he endeavoured to making his own plane and a starting point was the James Krenov style. Krenov played around with planning wood and making wooden planes and amongst his simpler, more efficient designs was a five-piece wooden plane, preferably cut from the one piece of timber.

It consists of:

1. Two sides and a central body and a sole from a piece of hardwood
2. The central body is cut into two, a front of blade and a bed for the blade
3. Using Australian hardwoods for the body and sides means you can dispense with the sole as a separate piece, and this simplifies the process.

So, John played around with various aspects starting with a bed (for a bevel down blade) of 45 degrees (too much tear out) and slowly increasing to 60 degrees (no tear-out, but too much chatter in the blade – the blade missing and skipping across the wood). This led to John having a discussion with Terry Gordon (HNT Gordon) who suggested a thick blade.

Terry makes a very wide range of wooden planes and is renowned internationally for his planes – he is based at Alstonville in northern NSW – have a look at hntgordon.com.au). Terry uses, in his bigger planes, a 6mm thick blade which he makes himself and also sells to the public.

John used the Terry Gordon blade and the chatter disappeared and the plane continued to conquer the tear-out.

So, I decided to make a 600mm jointer plane following John's plans in his AWR article. In 2017, whilst in Cape York, I cut down a Cooktown Ironwood tree on a privately owned cattle station (with permission).

This tree was about 150mm in diameter, and I allowed it to season over the next 4 years as a whole (uncut). This is what I decided to use as my plane body, despite a small hollow through the centre (heresy!). I cut the body block (sides and central body), incorporating the sole in Feb 2021 and noted over the ensuring 4 months that no movement occurred – it remained flat and square and was very hard.

I'm not going to repeat all the dimensions and lay-out in this article, that's in John's AWR article, as are sufficient details / steps on making the plane.

The following photos demonstrate that good, practical woodworking tools can be made. This exercise probably took me 40 hours (a week) because I was very aware that a high degree of accuracy was required in certain aspects to attain the best result.

The starting point – a piece of Cooktown Ironwood ready for band-sawing and sizing. I found the sapwood was as hard as the heartwood.

The two sides and the body cut into front of blade (curved to allow easy access to clear out shavings) and the bed for the blade at 58 degrees). The triangular cut out piece in the background because it is the exact width is shaped to form the timber wedge bar – a piece of timber, with a brass rod through it, placed in the body to hold the wedge.

Gluing up the sides to the two central body pieces: note the brass bar through the wedge bar and the wedge and blade inserted. Accuracy is paramount in this stage. Particularly ensuring all pieces are flat, square and aligned to each other and the blade opening in the sole is at the correct aperture. Gluing up, with the wedge bar, the wedge and the blade in place, is crucial in achieving this accuracy. The wedge is flat against the blade and has an angle of 62 degrees compared to the bed (58 degrees), so it pressures the blade as it is inserted. This wedge is made from a piece of bulloak / buloke.

Below is the handle template. This template came from an old wooden jointer plane that I found to be incredibly comfortable.

The actual timber for the handle was from a piece of river red gum I pulled out from a mate's woodheap down at Cootamundra! Fitting the partly shaped handle into the plane.

The finished jointer plane and the evidence is beside it. The one advantage I probably do have over most people is access to a well-equipped workshop. That's handy dealing with Cooktown Ironwood.

Stanley Block Plane wooden knobs

Knobs on Stanley block planes often have stripped internal threads.

Jim Davey has been making these plane knobs and reports:

"It took a few attempts but now have something that does a pretty good job (better than a lot of Stanley knobs I have seen.
The thread is about 7/16" – 8 TPI with an angle close to 90 degrees."

"I've done some in Bubinga, which cuts well without chipping and a couple of smaller knobs from Cocobolo for my #203 & #61."

Turning a special thread

Norm Heckenberg

John Bates asked me to write about a project he helped me with.

Years ago, I was given a Stanley No 278 Rabbet and Fillister plane. Unfortunately, it was missing its blade, cap iron, and fence. Although its locking screw was gone, the depth stop was held on by rust.

This 278 languished in the junk box until joining TTTG gave me the incentive and assistance I needed to get it working. I discovered that the fence of my No 78 fitted, a TTTG member (F) gave me an old No.45 blade of the right width and thickness to grind to shape. I was able to cut the grooves on the stem with a 1mm thick metal cut off blade. Not perfect but good enough.

The original cap iron was a casting, but F came to the rescue again, letting me measure and photograph one from his collection. I was able to fabricate something pretty similar from 3/16" steel pieces, brazed together with all the corners liberally filled. Sprayed black and fitted with an M4 thumbwheel it worked and looked the part. With a 5/32" BSW screw holding the depth stop I now had a working plane and was ready to cut rebates.

But the depth stop slipped, because as F later explained, the screw should have been an unobtainable 5/32" 30 TPI (not 32 TPI). No problem, I thought – I'll make one on the trusty Hercus model A I inherited from my dad. But 30 TPI does not appear on the table on the gearbox, nor did I have the change gears required to do it without the gearbox.

John is my guru on metal machining, and he directed me to a website that calculates all the possible threads you can get with the gearbox driven by any combination of change gears that are near enough (say 0.5%) to any TPI you want.

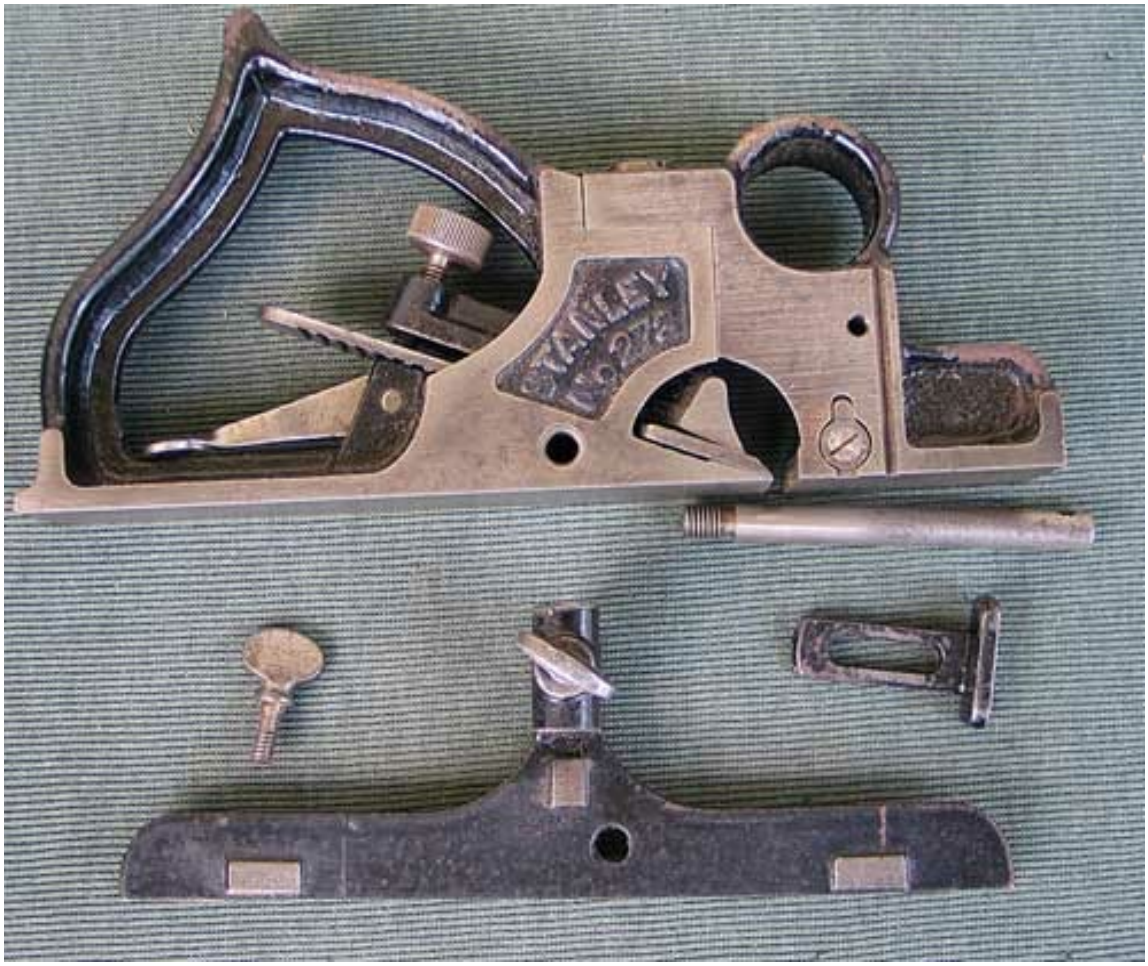
Selecting 'Norton Imperial Gearbox for BOXFORD and other South Bend 9 Clones' I got 14 possibilities, five of which are exact. One simply required swapping the normal 20T stud gear for a 48T one (which I had) and setting the gearbox to D2.

Problem solved. The thread was soon cut, and it fitted perfectly.

Thanks to F and John and Evan Lewis, author of the Ride the Gear Train website: Ride the gear train (herosteamengine.com)

A photo of a complete original No.278 is on the next page.

Replacement Stanley parts
Stanley plane bodies are cast iron. There are many broken Stanley planes. Several TTTG members hoard old parts. Ask and you may find!



Hard to find Stanley thread - button dies

John Deeble

A recent search on eBay revealed that dies for two of the special Stanley Plane threads were available at a reasonable price and postage cost.

The 7/32 x 20 TPI BSW die is the size for threads on handle rods and frog screws and the 9/32 x 24 UN Left Hand die is the size of some depth adjustment screws.

At this time no corresponding taps are available unless an order is placed for 50 items. The dies appear well made and are suitable to clean up existing threads and should be suitable to make replacement parts. *Conversion of 1/4 x 20 TPI Whitworth metal thread screws to 7/32 x 20 TPI thread should not be a problem.*

The eBay supplier, Klot-tool sent the items very promptly and was very responsive to enquiries regarding other items.
Klot **Right Hand Round Die 7/32-20** BSW 1 inch
US $10.99 Klot-tool3062
Klot **Left Hand Round Die 9/32-20** BSW 1 inch
US $13.19 Klot-tool3062

JD's

John Daniel

De-rusting using a 12Volt battery charger

Electrolysis

How do you get rid of rust?

Well, I'd like to have a dollar for every time I've been asked that question however, my usual answer is," what are you de-rusting?"

There are many tales, suggestions, and tried-and-true methods of removing oxidation of ferrous metals (rust), molasses, white vinegar, salt and rice water, and citric acid. All of these are very efficient at removing rust. There are also a few patented propriety rust-remover alternatives, one which comes to mind is EVAPO-RUST (see https://www.evapo-rust.com.au/) which I've tried with pleasing results.

Another alternative is electrolysis, one that I use, a system which is simple, efficient, and easy to set up with minimal expense. Here are a few simple instructions which may answer your next question,

"What is electrolysis and how do you set it up"?

Setting up an electrolysis bath

Equipment needed

Plastic container
Domestic plastic bucket
Stainless steel plate or strip, if not within reach, a length of steel reinforcements bar or similar works just as well.
12 Volt battery charger
Water
Washing soda

How to set-up and use

I'll keep this description simple, no technical stuff, just what I do.

Firstly, choose an outside or well- ventilated area as during the process the hydrogen gas, which being lighter than air could accumulate in inside spaces and present an explosion risk.

A heavily rusted pair of pliers were rescued from the metal recycling bin to be the example for this demonstration

The process

1. Fill the plastic bucket with warm water, add a couple of heaped table-spoons of washing soda (now electrolyte), then tip this into the plastic Container. The water needs to be deep enough to cover the rusted pliers.

2. Place the stainless steel up one end of the container (Photo 1

3. Clean off all the loose dirt etc. from the pliers then connect the black lead (negative) connection on the battery charger to the pliers, then put it under the water in the container. (Photo 2)

4. Connect the battery charger's red lead (positive) to the stainless steel keeping the connection above the water. (Photo 1)

5. Connect the battery charger to the power source and turn on.
In a short while, you'll notice a reaction in the form of hydrogen bubbles rising. (Photo 3 before reaction & Photo 4 reaction)

6. Leave for about an hour, then disconnect to check on progress; this can be done with a stiff bristle brush or steel wool in a bucket of warm soapy water; this may be repeated several times for heavily pitted objects.

7. Once satisfied, the tool will have a black sludge and lifted iron oxide (rust flakes) that will easily wash off with steel wool or brush.

Once dry, the surface can be brightened up with a fine wire brush then buffed on a cloth wheel with a green or brown 'buffing stick'…those without such equipment can achieve the same results with a polishing cloth and a suitable metal polish.

The end result is seldom disappointing, this relic, not only is now a useful tool, but also revealed the marking, TORO – made in USA (Pic f.) …maybe close to 100 years ago.

'Electrolysis', I'd recommend it, no special equipment needed, and it removes only rust…must admit, it does remove paint splotches and other surface unwanted deposits.

Note:
As with all rust-removing processes, it is recommended that the wooden handles and brass on tools such as try squares, trowels, and the like, be protected with a smear of clear wax or Vaseline on the wood or brass before placing them in the bath.

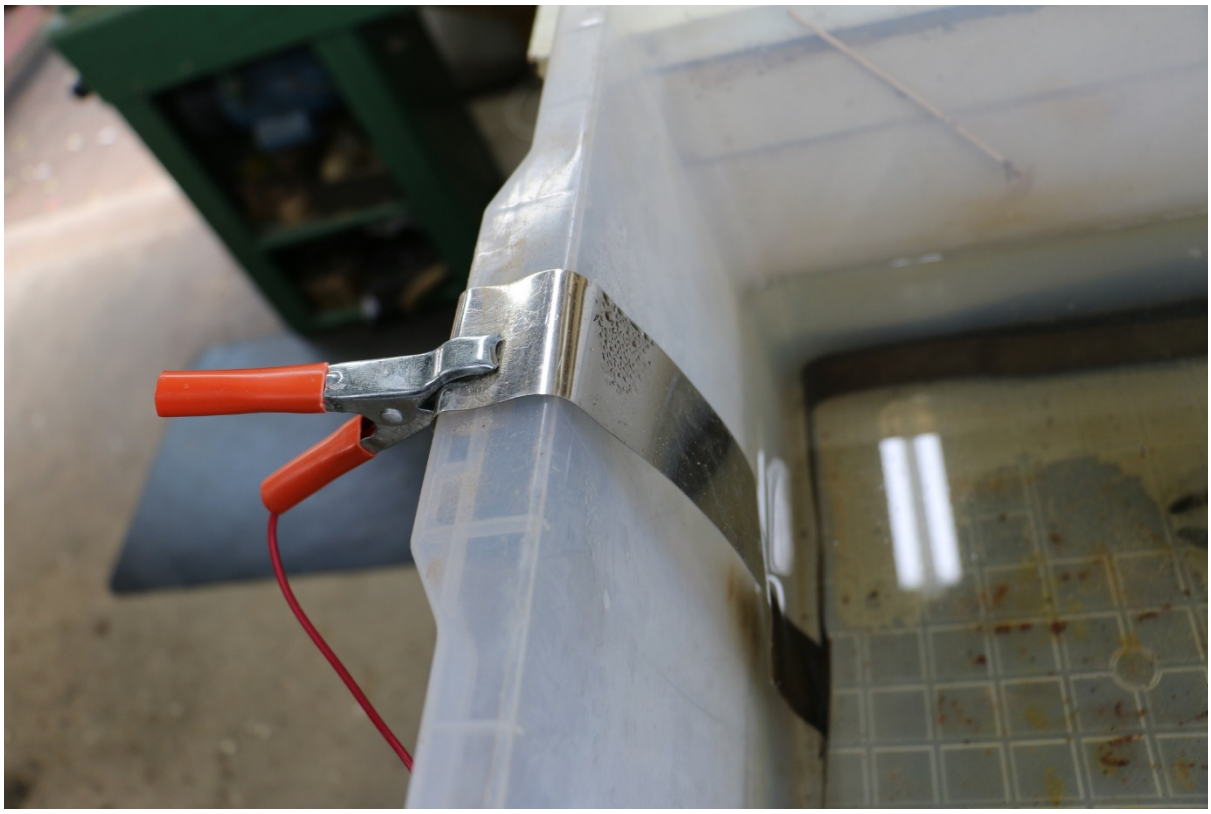


Photo 1 above

Photo 2 below

Photo 3 above

Photo 4 below

Photo 5 below

Asbestos Awareness and TTTG

Asbestos awareness is a valid subject for TTTG to consider.

Tools of particular interest to our membership base, were manufactured and used in a time when asbestos was in popular use in industry.

Many tools and other items either have the potential to be contaminated with, or even contain asbestos.

Some of these include, electrical components, Bakelite, fibro shears, scoring knives, and the list goes on.

Some types of Formica contain asbestos.

Some older tradesmen will remember being shown how to “score and snap” Asbestos Cement Sheets.
“Turn the saw round, score and snap, light a smoke to cut the dust.”

https://www.health.nsw.gov.au/environment/factsheets/Pages/asbestos-and-health-risks.aspx

Worth Reading

Hugh McKid

Review of Fine Woodworking June 2021 (Issue 289) 82 pages, 5 articles

Mike Korsak opens with "Tune up your block plane" which is a good, stock standard article – he is tuning a Lie-Nielsen block plane (not rejuvenating an old Stanley). My best advice – go and spend a day with Jim Davey or Bob Crosbie at a TTTG workshop and take a notebook and ask questions! I still refer to my notes that I took from Jim's TTTG Workshop in 2009 because there are some little subtleties with Jim that are worth their weight in gold. Korsak follows with "Seven tasks for a block plane" – No 7 making wedges to secure draw-pulls is an interesting aspect of drawer making.

John Hartman does an arts and crafts coffee table which is pretty good if you're into this design genre.

Bob Van Dyke writes on applying a finish that's apparently easy to apply – trouble is some of these products aren't available in Australia, however it's a detailed article, plenty of photos, some innovative techniques and the result (of something that can go wrong) is very good.

Rob Hare does a deck chair – a good, useful project for a reasonably handy person with a modest tool shed.

And we finish with an article on making contemporary door and drawer pulls (handles).

Review of Fine Woodworking August 2021 (Issue 290) 82 pages, 5 articles

Technical drawing is avoided by many woodworkers supposedly because they can't "draw". So, Mike Korsak's article, "Assemble a drafting tool kit" is a good reference to the technical aspects of drawing.

In my mind drawing out a piece technically (to scale and in the third dimension) allows you to "size" the design, solve technical issues such as how a joint will work, produce a cutting list and a methodology of construction roadmap (the step-by-step process that you will need to follow).

Michael Pekovich's article "Building with Rabbets and Dadoes" is a wall cabinet with much of the case joinery using rabbets and dadoes. It can be applied to any case work and is a good solution to cabinetry in high humidity rooms (bathrooms).

If you do a lot of work on a table saw, then Bob Van Dyke's article on an adjustable fence could be a solution.

If Shaker furniture is your go, along with dovetails, then Tom McLaughlin's chest of drawers is for you. Personally, I prefer Steve Latta's drop leaves on a

Pembroke table – this article is only on the knuckle joint. Latta is noted for his inlay work, and you will glimpse why.

Craig Vandall Stevens' "The Art of Marquetry" is a masterclass in this refined and delicate woodworking art.

And finally, *from the bench* allows Philip Morley to talk about his struggles with dyslexia and how an insightful judge and an English "old school" trade school gave a young man direction for life. Our Editor and past teachers like John Daniel must just cry at the dismantlement of Australia's secondary school trade and TAFE teaching system – we will reap a bitter harvest as a society.

Review of Fine Woodworking October 2021 (Issue 291) 82 pages, 5 articles

To be honest I felt this Issue was a bit flat – sure it has charring of a stool (*shou sugi ban*), Mario Rodriguez's Scandinavian modern table, a heirloom box and an adjustable router table fence but….

What it did have that was pretty groovy was a steam bending lamp stand with a burl veneer lamp shade. And a wall shelf made from turning a glued-up blank – could give the reader ideas for other things.

Review of Australian Wood Review June 2021 (Issue 111) 82 pages, 7 articles

Simeon Dux does a small occasional table – all I will say is that elegant and well-proportioned with beautifully carved legs doesn't do it complete justice.

Steven Der-Garabedian builds a veneered cabinet, showcasing special woods – good for those Australian burls and timbers. Rolf Barfoed (probably Australia's best young designer/maker) has three cabinets as examples for clients – good for ideas. Vivienne Wong, after 14 years with the Australian Ballet, is building a new career in furniture design and making – as you can imagine, her furniture is finely balanced with very clean lines. A further article is on woods for musical instruments but in Florence Italy, perhaps we need a referral closer to home.

There are articles on choosing bandsaw blades (and folding them!) but doesn't mention Henry Bros as a source. Another on working with plywood.

But the most interest goes to The Humble Card Scraper by Neil Erasmus. This is a good article by a top-notch woodworker and teacher. This is the simplest of tools and one of my favourites in the workshop – get on board!

Review of Australian Wood Review September 2021 (Issue 112) 82 pages, 9 articles

What a stunning cover! English sculptor, Alison Crowther and her 1.5m diameter, carved, turned oak tree sphere would have to be the quintessential woodworking photo. This article, written by Robert Howard, himself no slouch when it comes to creative woodwork, is titled "Speaking the Trees". It is an expose of a sculptor that has crafted her work's raison d'étre slowly and not without sacrifice, as many artists do, working at menial jobs to support an ambition over a long time. She is now collected internationally. Two more expose articles follow, one on Italian craftsman Giordano Vigano at 87 and the other on Dom Dudkiewicz, a Polish Australian at 30+, both articles giving credence to the saying, "the more things change, the more they stay the same".

Likewise, there is a profile on Jon Goulder, an Australian who has works in the major state institution collections around Australian and who works on projects around the world. He is seriously impressive in his designs and his ability to work a number of different modes of production.

Finally, Fire Ball, a hollowed sphere with delicately carved flames by Neil Turner. This just shows that with patience, time, a pursuit of excellence then anything is possible with wood.

Jim Davey Workshops

Jim Davey has now retired and will no longer be involved with TTTG Workshops or other TTTG Events. However, Jim Davey – Hand Tools can be found at:
https://www.jimdaveyhandtools.com

TTTG Real Skills Workshops

Next year TTTG Workshops will continue to offer quality instruction.

Bob Crosbie emphasises the basic time proven techniques and tools.

TTTG does not sell new tools ***"Don't throw money at it"***

Sharpening tools doesn't need the latest machine or gadget.

Learn how to sharpen planes, chisels, saws, and other edge tools.

Workshops cost $60 ***This small investment will pay off***

A Special Review

Hugh McKid

The Anarchist's Tool Chest

Christopher Schwarz, 2011

This is the first of a three-part review on various writings by Christopher Schwarz, David Charlesworth and James Krenov.

I had always heard that Schwarz had written this book, but it (the title) didn't necessarily grasp my full attention. Schwarz, an American woodworker, was for years the editor of the Popular Woodworking magazine and now focuses on furniture making, teaching and writing. He recently wrote an article in Fine Woodworking which made me think differently enough to investigate The Anarchist's Tool Chest again.

Schwarz is a trained journalist, but a self-taught woodworker and I know our Editor has a very high opinion of him (probably because he can actually write unlike your reviewer!). So, I lashed out and bought the hard cover version (don't do this – buy a paperback edition and a second-hand block plane instead!). Schwarz's writing is immaculate. What do I mean by that? It's very well written, you understand it first read and it is easy to read big chunks without falling asleep. It keeps you engaged, interested and you want to keep reading it and he just talks common sense. And I'm talking about a technical woodworking book!

What's it about? Essentially Schwarz sets out the hand tools that a cabinetmaker/joiner needs in their everyday life, then the design and build of a tool chest that fits all the tools which is then able to be carried to the van (Ute in Australia) and taken on-site. Anarchy? An extract from the book (and this is as deep as it gets):

Anarchy & Tool Chests

By owning your own tools, you are thumbing your nose at the dehumanizing concept of labour specialization. By rejecting the mass-manufactured style-of-the-moment dining tables, you are questioning the dominant institutions that produce them. By filling your home with furniture that will last for generations, you are knee capping the system that requires constant consumption.

I call that anarchy. But even if you don't call it that you need a proper tool chest.

Being an avid tool person who has bought far too many old and new tools (well I can't stand golf!) I'm always interested in a ***List of Essential Woodworking Tools***. Well, here is an author that lists the tools and why and then doesn't spare a lashing on what features you should be looking for in both old and new tools, what you do need and don't need.
For example:

The things that are important on tools are rarely highlighted on the marketing copy. You'll never see:
Balanced!
Not too heavy!
Totes that won't raise blisters!
Steel that is a good balance of hardness and ease of sharpening!
Arrises that won't slice your palm!

So over 300 pages, Schwarz goes through these subjects; Essential Planes; Marking and Measuring Tools; Essential Edge Tools; Striking & Fastening Tools; Essential Saws; Essential Sharpening Kit; Essential Appliances (home-made aids and jigs); Good-to-have Tools. What to look for, using them.

The next 120 pages goes into the design and construction of a tool chest that contains all those tools (not all the appliances and some Good-to-haves) with a layout that allows you to see them and get to them easily. Then comes 30 pages of Listings, Sources, Index and final thoughts.

I thoroughly enjoyed reading it, I need to start getting rid of stuff. But I don't know about actually building the chest. Maybe, so I can get to just the essentials.

Buying low quality isn't frugality. It's stupidity! Christopher Schwarz, 2011.

Making Tools ***Finding the right steel***

There is a modern steel for ever tool you want to make.

For edge tools Ground Flat Stock or Silver Steel is suitable.
After cutting and filing Ground Flat Stock can be heat treated.
After forging Silver Steel can be heat treated.
For wood working edge tools the preferred hardness is 60-62 RC.

Or

Old plane blades and chisels can be easily refurbished.

An example

Making a wooden plane? The problem is finding a suitable blade.
Buying a bespoke new plane blade costs real money.
Buying an old plane blade costs petty cash.

TTTG sells old wooden plane blades at bargain prices!

A Special Review

Hugh McKid

The Woodworking Blog of Paul Sellers

The Editor asked me to look at the blog of Paul Sellers, or more precisely his instructions were:

I would be interested in your reaction to Paul Seller's latest blog on planes. I enjoy the way he cuts through the BS.

Persuasive man our Editor. And I fully agree and here is why.

Paul Sellers had a traditional English woodworking apprenticeship, starting at age 15 in 1965 in Stockport, England. Years later he moved to the US and began teaching woodworking, where over the years he gained a huge international following on his blog (paulsellers.com) and on his two websites (Common Woodworking and Woodworking Masterclasses). Two pieces of his furniture are in the Cabinet Room of the White House, part of the White House Permanent Collection. (He moved back to the UK some years ago).

Sellers approach to woodworking is a counter-balance to much of today's modern life. He values tradition and history favouring restoring good quality, common, affordable, long lasting, old tools, therefore has much in common with members of The Traditional Tools Group.

So, I clicked on to paulsellers.com and started reading his last two postings:

1. The Best Router Plane, Episode 1 & 2 Making my best router plane in the world.
2. Paul's Plane Strategy.

The first is very interesting in that Sellers has always been about using the most suitable tool for a particular job and one of those tools is handheld router planes and that followers should buy old ones for what was initially about 10 quid (British pounds). So vast is his following that the price of old ones moved to over 200 quid, more expensive than good new ones. This caused Sellers great anguish, so these two Episodes is him showing how to make your own router plane for bugger all. This is why he is so popular. His finishing comment "*Do enjoy them my wonderful woodworking friends*".

The second post just sets out how he goes about planning and sizing rough stock and what planes he uses and why. Simple, common sense with no BS, spoken by a tradesman whose hands and brain have done it so many times over fifty-five years. (And there is a humorous side dialogue on the old chestnut of laying your bench plane on its side between uses – read the posted comments).

Yes, NEWS Editor you have uncovered a gem!

TTTG Special Publication

A new publication penned by Jim Longworth. In depth research and great contemporary engineering workshop photos. **A History of Purcell Engineering** will be sent by Mailchimp to financial TTTG members.

A Visit to Hare and Forbes

Getting around North Parramatta by bicycle is currently a challenge due to the extensive construction works for the Parramatta Light Rail. That said, I needed something, and I knew Hare and Forbes was likely to have it!

Hare and Forbes is spacious, with good lighting and knowledgeable staff. The range of metalworking and woodworking machinery is impressive.

Equally comprehensive is the stock of hand tools and machine extras.

On this visit I was after Bobbin Sander Sleeves, right size at the right price. Even despite the current "low stock level due to Covid logistics" I found what I wanted and was totally satisfied with the price.

The shop layout excellent and it doesn't take long to find what you are after. If it isn't immediately visible ask on of the sales assistants.

As the advert on the next page claims:

THE TOOL SHOP THAT HAS IT ALL

Lee Brothers

I didn't need any engineering special items so this time I didn't stop off at Lee Bros. in Dunlop Street. For readers who haven't been to Lee Bros. this place is worth a visit.

If a screw thread is still in production, chances are Lee Bros. can supply. Half a dozen screws or a large number, all orders given the same attention.

Real "old world atmosphere".

TTTG members get 15% discount - Remember to ask!

TTTG Sydney Tool Sale

Sunday 20 Feb 2022

Looking for pre-loved tools for all trades?
Don't miss Sydney's biggest tool sale.

The Brickpit Sports Stadium
1A Dartford Road Thornleigh

Opens 9am Closes 1pm

Entry $10

The Traditional Tools Group Inc ***tttg.org.au***