NEWS 122

CHRISTMAS EDITION

December 2011

TTTG Inc www.tttg.org.au

Next Workshop

Sunday 25 March

Sharpening Edge Tools

This workshop has developed a reputation as the best class on sharpening all types of edge tools.

Sharpening equipment, old and new tools and replacement plane blades will be available to buy.

Venue: *Strathfield Men's Shed.*
Pomeroy Road. Strathfield

Workshop Fee

Members $20
Others $40

Join at a workshop for $55*
***Workshop plus membership*

Refreshments are provided but you are advised to bring lunch.

Please wear sensible clothing and substantial footwear.

Contacting TTTG

Postal Address

P.O. Box N240 Grosvenor Place
Sydney NSW 1220

Enquires

Mike Williams 02 9144 6356

Bob Crosbie crosbie.bob@gmail.com

www.tttg.org.au

Next Meeting

Australian Power Tools

Tuesday December 13

Annie Wyatt Room
National Trust Centre
Observatory Hill

Entry $5
'Doors open at 7pm'

Berto is a lecturer of Industrial Design at UTS and is undertaking a PhD about the manufacture of Power Tools in Australia from the 1940s to 1990.

Berto will talk about the depth and variety of power tool manufacture that existed in Australia and that no-one so far has recorded.
Visit Berto's blog
http://powertoolstudy.blogspot.com

The *TTTG* Auction

As usual there will be good tools going under the auctioneer's hammer.

Prospective buyers must not rearrange items or make offers on auction items.

TTTG *Membership $35*

For only $35 a year TTTG members receive a quality newsletter and a discount on workshop fees.

TTTG fees will remain at the current rate for at least another year.

The TTTG Committee has fixed the membership at only $35 for another year. TTTG is the best value Tool Group around.

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Front and Back

From the front page of the December 1947 issue of Popular Mechanics.

The night before Christmas and Mom and Pop are finishing the presents. 3 am and Pop is bushed but Mom has the refreshing pot of coffee.
The few tools just pictured under the clock are the editor's justification for putting this on the cover of News 122.

2012 TTTG Tool Sale on back cover.

If you want to book tables get in early as demand is already strong.

Entry is only $5.

Trading tables are only $40 each.

The TTTG Library

www.tttg.org.au
Log on for the TTTG Library list.

The TTTG Tool Collection

TTTG will continue to accept donations of tools and books

TTTG has the basis of a comprehensive library of publications on traditional machinery and hand tools.

WHEN WE HAVE A HOME BASE

With a Home Base the Library and Tool Collection will be open to all TTTG members.

By mid 2012 the TTTG Library catalogue will be available on line.

Members' adverts are free

Contact the editor

Next Meeting

Australian Power Tools

Tuesday December 13

Annie Wyatt Room
National Trust Centre Observatory Hill

Entry $5
'Doors open at 7pm'

Berto is a lecturer of Industrial Design at UTS and is undertaking a PhD about the manufacture of Power Tools in Australia from the 1940s to 1990.

Berto will talk about Australian made Power Tools illustrating his address with a vast array of old Australian made power tools.

Please bring any old Australian Power Tools to the meeting.

The Traditional Tools Group and Strathfield Men's Shed

The majority of the 2012 Workshops will be in the Strathfield Mens Shed.

TTTG also is renting storage space in the Strathfield Mens Shed.

TTTG hopes to also rent space in the Strathfield Mens Shed for the TTTG Library and TTTG Tool Collection. When negotiations are finalised the details will be announced in *NEWS*.

The TTTG Committee has decided to negotiate access to the Strathfield Mens Shed because of the central location of these premises.

The General Meetings will continue to be held in the Annie Wyatt Room.

Last Meeting

Saw Making

Tuesday October 11

The audience enjoyed examining an outstanding display of old saws. The TTTG displays invariably include rarer and better tools than can be found in any museum in Sydney.

The Film on Saw Sharpening was brief but appreciated by the audience. The commentary and methods shown led to lively discussion. One observation voiced by many was
"TTTG workshops are a better way to learn practical skills."

A brief talk on Saws and saw making was followed by questions from the audience. A brief intermission and refreshments preceded the Auction.

The TTTG Auction was small but there were some surprises. Every item sold and some bidding was competitive.

Lifeline sold a quantity of technical books to appreciative TTTG members.

TTTG sold a large number of new files in a variety of sizes on commission. The buyers were thrilled to get new files at reasonable prices.
The vendor commented that the prices realised were higher than those he had got for similar files sold on *EBAY!*

TTTG will try and sell old tools at the best price we can secure for the seller.

TTTG Library Donations

The holdings of the TTTG are being regularly augmented by generous donations by members and others.

Tool Skills Workshops

March to June 2012

The Tools You Need

Sunday 25 March

This workshop will show you what tools you need to set up a home work shop.

Selecting the right tools at the right price, basic tool repair, sharpening and tool use. Everything you need to know.

Venue: Strathfield Men's Shed.

Sunday 27 May

Saw Sharpening

This workshop has developed a reputation as the best class on sharpening saws.

Sharpening equipment and old and new saws will be available to buy.

The entry fee includes one saw file.

Venue: *Strathfield Men's Shed.*

Sunday 24 June

Blacksmithing

The TTTG blacksmithing workshop is held beside a bay in the shadow of an iron clad ship.
Large workshops combined with friendly teachers have made this a popular TTTG workshop.

Venue: *Sydney Heritage Fleet.*

August to November 2012
Workshops in NEWS 123

Workshop Venues

Strathfield Men's Shed
Pomeroy Road. Strathfield
Sydney Heritage
Fleet
Heritage Shipyard
Gate number 4
James Craig Road
Rozelle

Tea, Coffee and biscuits provided

Bring your lunch Wear safe shoes

How Much?

Members $20
Others $40

Join at a workshop for $55*
***Workshop plus membership*

Enquiries

www.tttg.org.au

Mike Williams

02 9144 6356

Bob Crosbie

crosbie.bob@gmail.com

WANT A SPECIAL WORKSHOP?

If you have a suggestion for a workshop please contact the TTTG Committee.

The easy way is to use the links on the website.

www.tttg.org.au

THE LEDGER

New Member

On behalf of the TTTG Executive and Members, a welcome is extended to new member:-

Kath Kemp M636

Kath, we hope you find your membership rewarding and look forward to your participation in our activities.

GREAT ACTIVITIES FOR TTTG's 21st YEAR.

On the 27th November, 2011, The Traditional Tools Group turned 20!

And 2012 will again be a great year for TTTG activities.

Ink the following activities into your diaries, calendars or into the hand-held devices to which you have become a slave:

TTTG Tool Sale, Sunday 11th March, 2012.

Our third annual tool sale will be held, as before, at Asquith Boys' High School from 9am to 1pm (eager buyers will already be lined up at 9am for the great bargains which are always on sale or maybe for that special tool you've been looking for). There will be plenty of free parking; customers enter from the Pacific Highway entrance; sellers enter and unload early from the Jersey Street North entrance.

For customers, entry will again be only $5 per head. (Young children and wives and partners who are not interested in tools or their use are admitted free.) Sellers may rent one or more tables for $40 each; unchanged from 2011 (tables are supplied by TTTG and are approximately 1800 x 720 mm). Those who rent one or more tables are admitted free together with ONE assistant.

People wanting to book tables for our sale should get in touch with me on (02) 9416 7134 or at treasurer@tttg.org.au

Everyone who comes to the tool sale will have an enjoyable and rewarding time.

2012 WORKSHOPS

With the **exception** of our Blacksmithing Workshop, TTTG's 2012 workshops will be held at the Strathfield Men's Shed at 28 Pomeroy Street, Homebush. Free parking is available behind the Shed; driveway is between the Shed and the former club building next door.

All workshops start at 9:30 am. But if you get there at 9 am, or shortly thereafter, you can get a cup of tea or coffee and bickies (which are included in your $20 workshop fee) and available all day. Bring your lunch if required. Non-members pay $40 to attend TTTG workshops; but virtually all non-member attendees join TTTG on the day ($35 annual membership fee plus $20 workshop fee) and thereby get all the incredible benefits of TTTG membership.

Your Committee has entered into an agreement with Strathfield Men's Shed management to hold our workshops at this venue as we believe the more central location of the Shed, at Homebush, will enable a wider range of our membership to access and benefit from our workshops. TTTG's library is also located at the Shed.

Of course our female members are welcome at TTTG's workshops at the Strathfield Mens' Shed (a good chance to have a look at this inner sanctum of secret men's business; it's an eye-opener).

On Sunday 25th March, 2012, at the Strathfield Mens' Shed (28 Pomeroy St., Homebush), TTTG will be holding a **Setting up a home workshop** class. A basic tool kit will be discussed together with optimal bench designs and vices. The Mens' Shed has a comprehensive range of workshop machinery and workshop participants will learn how to use them safely.
On Sunday 27th May, 2012, also at the Strathfield Mens' Shed TTTG will be holding our very popular **Saw Sharpening Workshop**. Australia is awash with blunt saws; bring one along and you'll take home a saw that'll cut through old ironbark as if it were butter. A coarse-toothed handsaw (say 5 to 8 teeth per 25 mm) is easier to learn on. The $20 workshop fee includes one saw file with handle; one additional file with handle may be purchased for $10.

On Sunday 24th June, 2012, at the Sydney Heritage Fleet Shipyard, Gate 4, James Craig Road, Rozelle, we will be holding our **Blacksmithing Workshop** (my favourite). A fun day for everybody and you'll get to take home a semi-useful steel object you've made yourself. Be sure to wear appropriate footwear and clothing, including suitable eyewear and leather gloves.

Everyone who attends a TTTG workshop will leave with that little bit of extra skill and knowledge. As TTTG treasurer, I'm required to attend all workshops and have attended all of them several times over; but a workshop doesn't pass without me learning something new. We have quite a few "regulars" who always attend our workshops for the camaraderie of like-minded people while picking up tool use skills.

Donations sought of Australian-made Power Tools.

TTTG member Berto Pandolfo, lecturer in Industrial Design at the University of Technology, Sydney, is undertaking a PhD on power tool manufacture in Australia between 1940 and 1990.

If anyone has any old Australian-made power tools, especially drills, that they don't need and would like to donate, or loan, to this research project, then they may contact Berto on (02) 9514 8986 (day) or 0414 587 686 or by E-mail at berto.pandolfo@uts.edu.au

The power tools are sought whether they work or not (but don't plug 'em in to test them unless the cord is sound and they're protected by an earth leakage residual current device).

Merry Christmas

Compliments of the season; see you all at our December 13 meeting and at the first TTTG Meeting of 2012 on Tuesday 14th February both at the National Trust Building on Observatory Hill.

Clynt Sheehy
TTTG Treasurer

Correspondence

Occasionally *NEWS* receives some comments from readers and such correspondence is always welcome.

George Stamper sent the letter below along with a photograph of the lethal device featured in last issue's *JD's*.

I've kept this letter in a secure place in case our kept our pet rabbit develops a *TTTG NEWS* phobia.

John Daniel is always on the lookout for unusual 'tools' to feature in his regular column. If you have a tool that may be interesting to John and *NEWS* readers send a photo to the editor.

Popular Mechanics April 1936

Dear John.

Reference your article in this months thenis re the Nox-All.

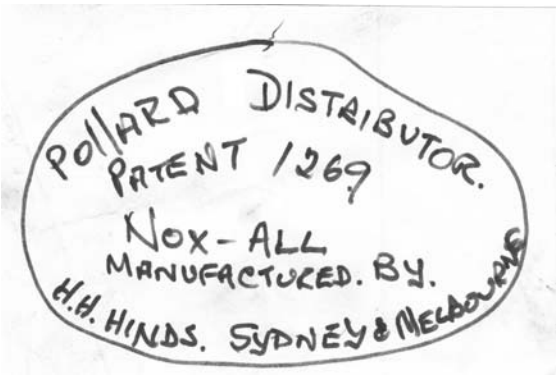
I have one of these which I bought from a junk shop in Portland several years ago.

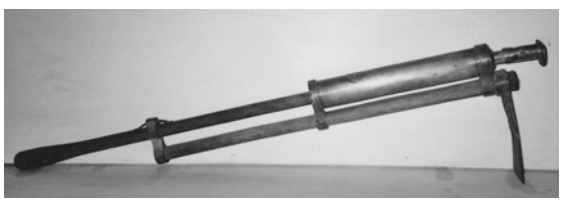
I doubt that its previous owner had been a farmer as the brass work had all been cleaned.

The trade plate is intact and would seem to indicate they were sold through produce stores, though thats just a guess.

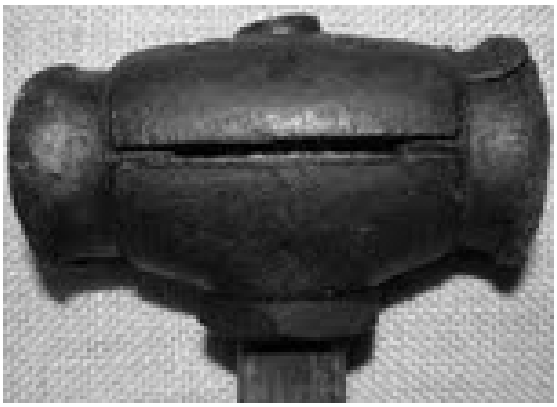
Regards

George Stamper.

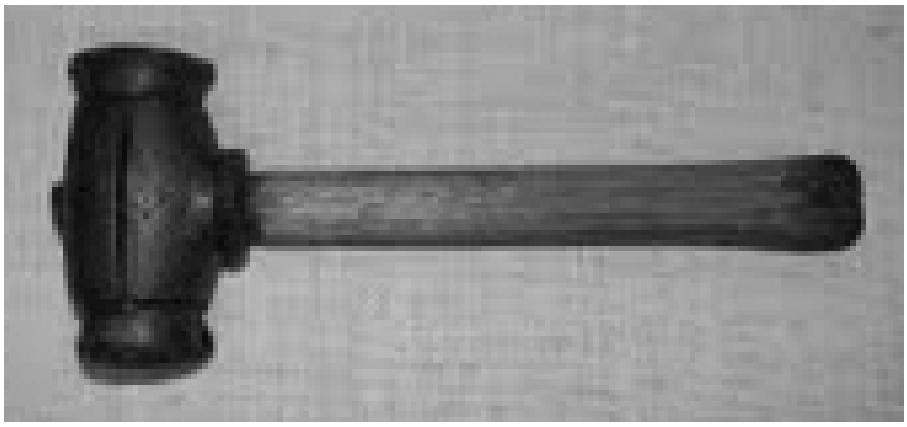




TTTG member Martin Wyles from the Illawarra sent in these photos of a hammer that a friend had dug up in the backyard, he thought it may be of interest to some of our readers. *Rumour has it that Martin has volunteered to help with the gardening over the Xmas break.* The head is mark OREO STEEL and is similar to an example of a rawhide faced DANCO illustrated in RON BAIRD and DAN COMFORD' s book "THE HAMMER'.



As can be seen from the photo, the rawhide faces can easily be replaced by slacking off the nut under the head. This hammer is just another example of the ingenuity of our early tool makers.



2012 TTTG Publications

TTTG will reprint some old and print some new publications in 2012.

The first 2012 TTTG publication will be

JD's

The complete JD's columns as published in *NEWS 2000-2011*

In 2012 TTTG will publish a compilation of John Daniel's ***JD's***

Any verifiable stories about John will be considered for inclusion.

JD's

John Daniel

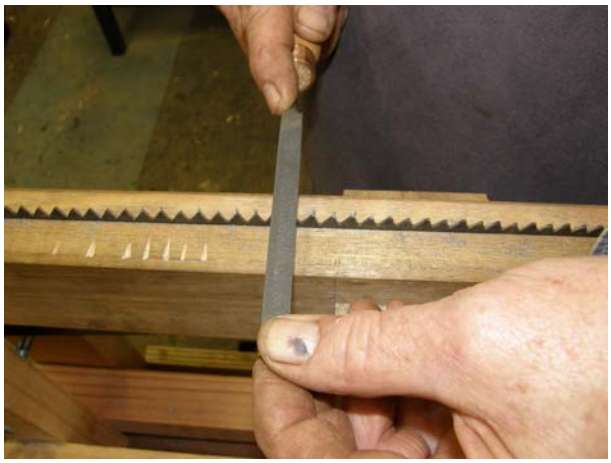
HANDS-ON

Workshops that work

There are many reference books and articles by various clubs and groups that give the impression that if one checks out the technical stuff, they'll be able to perform skills at a *Trade Level*; perhaps true for those who have had previous experience in a workshop, however not so for someone that has been deprived of such an exposure or the opportunity to have a go at hand eye challenges. I'm not discounting the value of reference material, for as part of sequential learning, one must start on a firm first step. Getting down to business is the challenge, a step that the TTTG workshops endeavour to give guidance and understanding in.

Hand eye co-ordination comes naturally to some, however to truly develop hand skills one must have a *hands on* encounter. It's interesting to see the sharp learning curve over the duration of a Saw sharpening Workshop that the participants experience, and to see the expressions of achievement of previously shed deprived folk have; mind you, we have many experienced participants that wish to up on their skills and others that wish to be a part of the relaxed environment of the workshop, and repeat participants whose presence is valued as their encouragement to the beginners doesn't go unnoticed.

The pictures tell a part of the story; an eagerness to learn, great camaraderie, chat time and a great reward for Bob and myself for effort put in to develop an appreciation of hand-tools and the value of maintenance over the throw away mentality that is taking over the work place.



Editor

When John submitted the draft he made this comment
"Hope this conveys a disguised message; our workshops meet a need and it's good to be a part of it".
As co-presenter/ teacher of the saw sharpening workshops I'm in total agreement with John's comment.

When we first offered a workshop on sharpening saws I assumed it would be a one off. We were totally wrong! The saw sharpening workshop has become one of TTTG's most popular workshops. Each year TTTG offers this workshop twice.

27 May 2012

Saw Sharpening

This workshop has developed a reputation as the best class on sharpening saws.

Sharpening equipment and old and new saws will be available.

The entry fee includes a saw file.

Venue: *Strathfield Men's Shed.*

The best saw to start with is a Disston D8. Expect to pay $20+.

Jim Davey

PLANES

FULLY FETTLED (TUNED) AND SHARP
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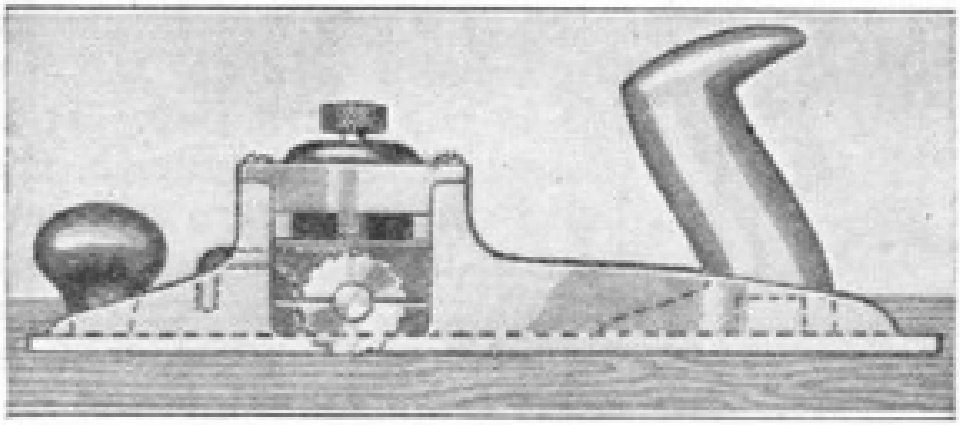
1921 Portable Power Plane

Is this the Prototype of the modern portable electric power plane?

Popular Mechanics June 1921

PORTABLE POWER MILLER IS USED LIKE A JACK PLANE

A small miller, planer, and grinder looks and is used like a carpenter's jack plane. Here the resemblance ceases, as the device is a true power tool, the cutters being rotary and driven by a portable electric motor, suspended from the operator's shoulders, through a flexible shaft. It may be used for milling metal, planing wood, and also as a sander by installing the proper cutters or wheels. One of these, which projects from the side of the



A Portable Power Miller-Planer-Grinder: It is Moved over the Work like a Carpenter's Hand Plane. The Cutters are Driven by a Small Electric Motor, Suspended from the Operator's Shoulders, through a Flexible Shaft

device, is fitted with a sheet of emery cloth on its face and serves the purpose of a small disk grinder.

Machete Files

Bob Crosbie

TTTG Saw Sharpening Workshops are always well attended. Until recently the biggest logistical problem was in supplying files for the workshop. Good quality saw files (three square files) are available but they do take some finding. The workshop presenters hate the sound of blunt files so they have the strongest motivation to remove any excuse for not using sharp files.

A few years ago at a WWW Show Clynt was demonstrating saw filing and ran out of sharp files. In desperation he tried the only sixty degree files on sale on one of the vendors' tables. The file was parallel sided but sixty degrees and the right size for saws near 8 TPI. So Clynt put his hand in his pocket and purchased one of the files.

The orthodox view is that only tapered files are suitable for saw filing. Clynt found the file he had acquired very suitable for filing saw teeth. I decided to buy one of the files and try it out. As it turned out we both purchased half a dozen of the files each.

Earlier in the year we decided to buy saw files in bulk for the TTTG Saw Sharpening workshops. Finding a supplier of quality three square saw files at the right price proved difficult. So at this year's Sydney WWW Show Clynt struck a deal with the supplier of that first parallel sided file.

I've been using these files since that first WWW Show when Clynt found the files but I always assumed they were *blunt* files. Blunt is the term used to describe parallel sided files. Clynt read what was stamped on the files! *Machete.* What does it mean? The mystery remains unanswered.

Clynt and I attended the last open day at Linnwood in Guildford.

As has become tradition Clynt was demonstrating saw filing. We always meet interesting people at Linnwood.

One of the conversations we had with a member of the public was about Steam Trains. This individual casually claimed he had a few of the rarest type of file. Clynt asked him what file this was and he replied *a Machete file.*

Without a moment's hesitation Clynt presented the file he had been using to file a saw and said *one of these? Yes* was the reply.

According to our informant *Machete* files were used to sharpen machetes. He collects military equipment. Army issued Machetes came in a canvas case with two side pockets. One of the pockets held an oilstone and the other pocket housed a machete file. The file was to quickly restore the cutting edge which was then honed with the stone.

The story seems to be plausible.
So I did a bit of a Google search.

As was to be expected this came up with places best not visited. The only file recommended for sharpening a Machete is a *mill saw* file.

I checked out some old file lists and couldn't find any *Machete* files. I had always assumed these files were *blunt* (parallel sided) files.

The nearest file I could find was listed as a *bandsaw blunt* file in the 1953 Vonnegut Hardware Co. Indianapolis, Indiana Catalog 53. Nicholson's 1950 Standard File List has *Handsaw Blunt* and *Bandsaw Blunt* files.

Files

Nicholson and Arcade
Regular Blunt Bandsaw

Designed especially for sharpening Bandsaws with well-rounded gullets between the saw teeth. Made in Blunt. They are single cut. The rounded edges are cut with three rows of teeth to preserve the shape of the saw gullets.

Length, in.	6	8
Approx. Width, in.	$\frac{15}{32}$	$\frac{19}{32}$
Wt. per doz., lbs.	$2\frac{3}{8}$	$4\frac{3}{4}$
Per Doz.	**6.40**	**9.10**

Twelve in a box.

Slim Blunt Bandsaw

Slim type file made in Blunt.

Length, in.	6	8
Approx. Width, in.	$\frac{5}{16}$	$\frac{15}{32}$
Wt. per dozen, lbs.	$1\frac{1}{8}$	$3\frac{1}{16}$
Per Doz.	**5.30**	**7.20**

Twelve in a box.

List of February 1, 1950 Saw Files

INCH	TAPER	SLIM TAPER	EXTRA SLIM TAPER	DBL. EXTRA SLIM TAPER	BANDSAW BLUNT		HANDSAW BLUNT		DBL. END-ER	CANT-SAW
					Reg.	Slim	Slim	Extra Slim		
4	.....	3.00	3.00	3.00	.....	.....	.....	.....	.....	.....
4½	.....	3.10	3.10	3.10	.....	.....	.....	.....	.....	.....
5	.....	3.40	3.40	3.40	.....	.....	.....	.....	.....	.....
5½	.....	.....	3.90	.....	.....	.....	.....	5.10	.....	.....
6	4.60	4.20	4.20	4.20	6.40	5.30	5.10	6.10	4.70	7.30
7	5.80	5.10	5.10	5.10	.....	.....	.....	7.30	4.70	.....
8	7.30	6.10	6.10	6.10	9.10	7.20	.....	.....	5.30	8.60
9	.....	.....	.....	.....	.....	.....	.....	.....	5.90	.....
10	10.90	8.60	.....	.....	.....	.....	.....	.....	6.60	11.80
12	.....	12.80	.....	.....	.....	.....	.....	.....	.....	.....

Black Wood Planes

Mutton or Myth?

This saga started with an article in Popular Woodworking #184.

The last decade or so has seen the renaissance of older technologies.
The magazine ***Popular Woodworking*** has consistently encouraged readers to explore the possibilities of old hand tools. This magazine is always worth reading and the PM Internet sites are full of useful information.

However this American publication sometimes perpetuates some curious reconstructions of old trade practices.

In #184 August 2010 is the article
Tallow Tales &
The Black Planes Of Britain.

Roy Underhill is the author.

Roy argues that tallow was used as a common lubricant in the past. This is no doubt true but his contention that tallow was used to lubricate wooden bodied planes is presented without any supporting evidence. His case is based on inference from the use of tallow for other lubrication tasks.

Roy discusses the *grease box* which was once found on all woodworker's benches. It probably did hold tallow, or something similar, but the old text books always explain its use for oiling screws before screwing them into the work piece. It had other uses but lubricating plane soles was not one.

Every woodworker's bench had an oil pad for lubricating planes. This was either a hollow block of wood or an old tobacco tin with rolled up felt inside. The felt was charged with linseed oil.

Linseed oil was used to lubricate wood planes. The common practice was to soak wood planes in linseed oil when they were purchased. This practice was so universal that by the 1950s the plane makers were advising plane buyers not to soak planes in linseed oil as it was likely to distort the plane.

Over time the linseed oil also turned the planes black and to extrude a fatty substance on hot days.

When Roy's article was published last year I was tempted to write a reply but I decided to wait and see. Nowadays informed debate can occur in print but wild speculation is more likely to follow on the internet.

There is a running discussion on the blogs about the use of tallow. There is no analysis of Roy's argument, rather wild speculation about tallow. Some of the bloggers have offered recipes for making homemade mutton fat.

Roy is correct about the bench grease box but what was the grease?

Probably some type of cooking fat was used in woodworker's grease boxes. This may have been mutton fat but it is more likely to have been *dripping.* Some readers will remember their grannies' kitchen with the bowl of dripping near the stove. This was the residue from any fry up. Nothing was wasted and the dripping was reused constantly. Spread on bread this salty fat was eaten. It was also a universal household lubricant.

Tallow, even a tallow candle, is not suitable for wood planes. Curiously some woodworkers are now using mutton fat on wood planes. Linseed oil has its disadvantages and a good organic oil for use the oil pad is G15.

Linseed Oil and dark staining

What to do

In the British Isles beech planes were traditionally soaked in Linseed Oil when purchased and then regularly wiped with linseed oil. In use the soles of planes were passed over the linseed oil soaked bench pad.

Old planes that have been oiled will:

a) Smell of Linseed oil

b) Be black where they have been held in use and on the end grain surfaces

c) Be incrusted with dried linseed oil

d) Be sticky on hot days

b & *c* will be referred to as *patina* by tool dealers. Patina is actually the oxidised surface under this layer of dried oil and dirt.

You get used to *a*. *d* is a real problem.

What can be done?

The objective should be to make the plane useable and good looking.

This doesn't mean looking like new.

The condition of every old wood plane will be different. Remember each case is unique and decisions must always be made based on the plane.

The first thing is to clean the plane. It may be dusty and dry and only need a dry bushing. If it is dirty then start with a gentle wash in warm soapy water. Use a green kitchen pad and dry with paper towel. For planes that have not been oiled this may be all.

If the plane is still black and smells or feels oily then more will be necessary.

The Linseed Oil Problem

It isn't important what type of linseed oil was used to soak or feed the plane. Neither *boiled* nor *raw* linseed oil ever dry completely and become inert. This means that you can use a solvent to reduce the quantity of oil in the wood.

Methylated Spirits is the best solvent to use. Meths will dissolve any hide glue used in assembling the plane. So expect any boxing or handle to come out. These components can be reglued after the plane has been treated.

Begin by removing the wedge, blade and any removable metal components. Any metal part screwed to the wood can be left fixed in place.

Soak the plane in Methylated Spirits. How long depends on the amount of oil in the wood. Checking at half day intervals is the most convenient way. *The meths will not damage the wood so don't worry too much.*

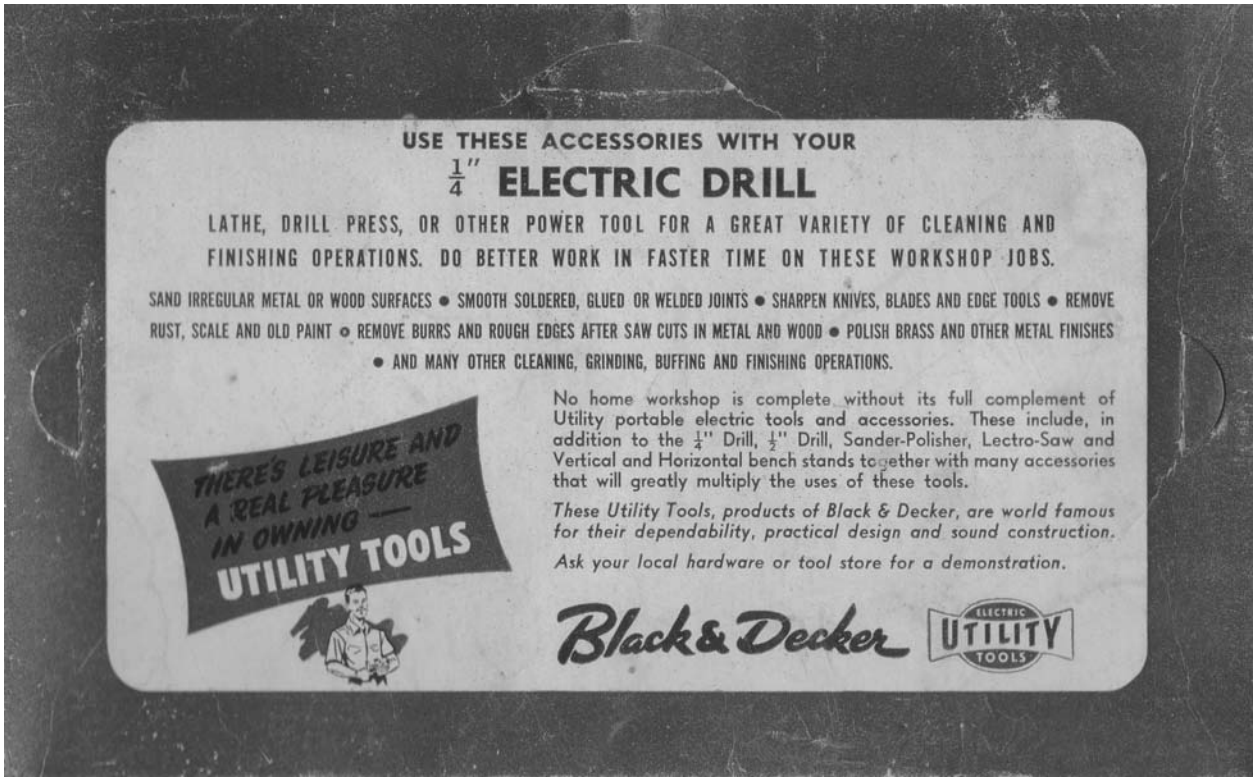
After soaking clean the plane with a green kitchen pad and dry. The really cheap no brand pads are fine. Rub in the direction of the grain. Allow the plane to dry out overnight. If black oil patches are still present repeat the process as many times as necessary.

Black areas around iron or steel parts are caused by rust. These marks can be removed with oxalic acid, but be careful as oxalic acid is carcinogenic.

When the plane is fully dried out the surface will look a bit dull but the plane can be rejuvenated by a dry rub with a cloth touched in linseed oil. The plane will now show real patina.

TTTG can teach you how to care for and use your cleaned wooden plane.

Black & Decker ***Abrasive Kit***



Black & Decker

Abrasive Kit

The packaging has the catalogue number HU-1003. There is no date. The graphics appear to be 1950s. The editor found the package in a box of junk about to be thrown out. Another scrap of Australia's manufacturing heritage saved from destruction.

A browse in a number of McPherson's catalogues unearthed some additional information about B&D Kits.

McPherson's 1955 catalogue includes HU-1003 with the B&D Utility Tools.

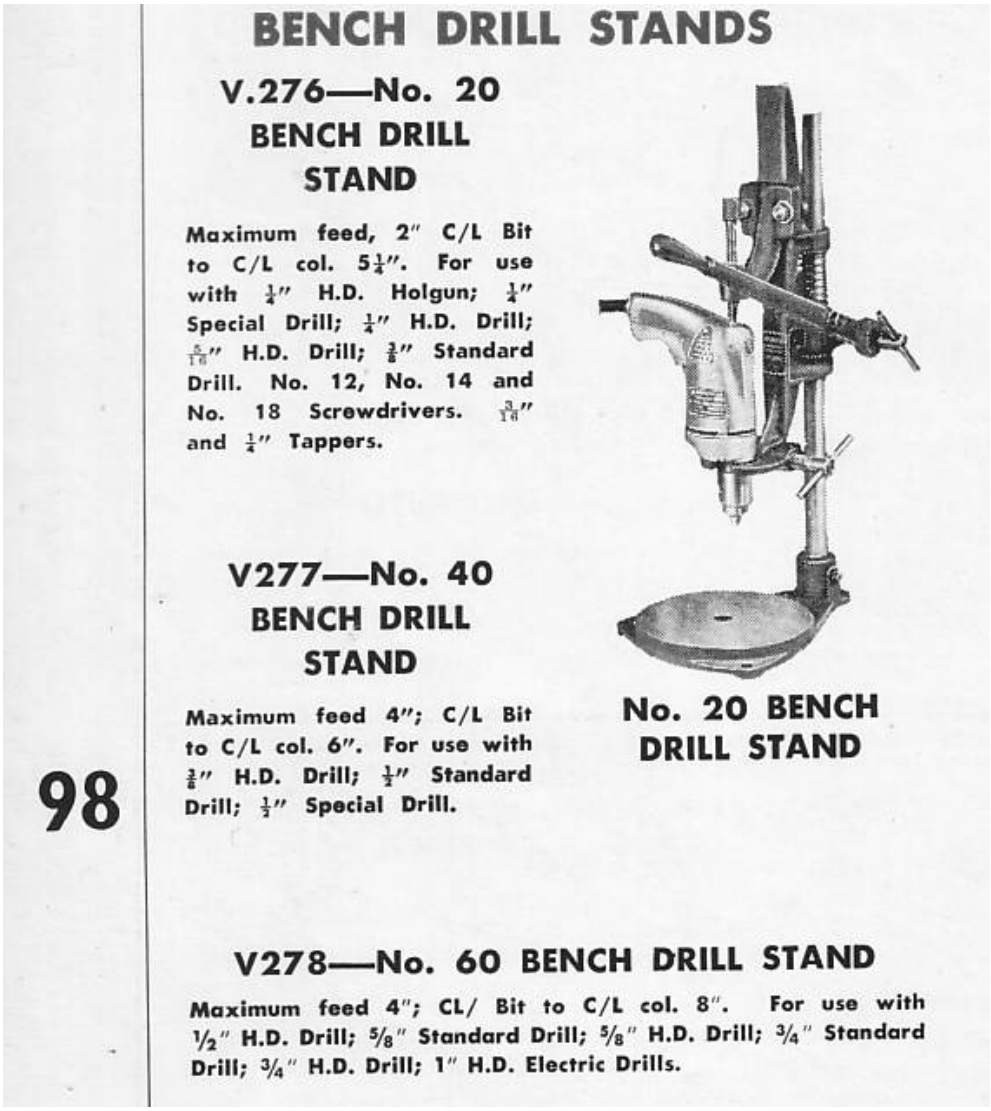
The Black & Decker Utility Kits were,

V306 -Polishing and Sanding Kit

V307 -Abrasive Kit

V308 -De Luxe
Grinding and Buffing Kit

Two Black & Decker Drill Stands were available these were;
V.276-No. 20 for ½" Drills
V302 for ¼" Drills



BENCH DRILL STANDS

V.276—No. 20 BENCH DRILL STAND

Maximum feed, 2" C/L Bit to C/L col. 5¼". For use with ¼" H.D. Holgun; ¼" Special Drill; ¼" H.D. Drill; 5/16" H.D. Drill; ⅜" Standard Drill. No. 12, No. 14 and No. 18 Screwdrivers. 5/16" and ¼" Tappers.

V277—No. 40 BENCH DRILL STAND

Maximum feed 4"; C/L Bit to C/L col. 6". For use with ⅜" H.D. Drill; ½" Standard Drill; ½" Special Drill.

No. 20 BENCH DRILL STAND

V278—No. 60 BENCH DRILL STAND

Maximum feed 4"; CL/ Bit to C/L col. 8". For use with ½" H.D. Drill; ⅝" Standard Drill; ⅝" H.D. Drill; ¾" Standard Drill; ¾" H.D. Drill; 1" H.D. Electric Drills.

98

File Cutter's Disease

Files were hand cut for centuries and the speed of the hand file Cutters was legendary. There was a darker side to the file cutter's trade.
File cutters invariably suffered from a serious occupational disease know as File Cutter's Disease.

A Sheffield doctor investigated this disease and published his findings. The following extracts are from

Sheffield File-Cutters

John Charles Hall, M.D.
British Medical Journal May 9 1857

It is my intention to pursue the same course with the file-cutters as with the Sheffield grinders, and to consider the disease which arises in consequence of the peculiar occupation of cutting files.

A file goes through several processes before it is completed. It is first forged, then ground, then cut, and, lastly, it is hardened.

My present remarks will be confined to the disease which is the result of cutting files, and which is known as the file-cutters' disease.

Files vary in size and in weight. Some files are only on inch long; others are at the least forty inches.

Excluding from our present consideration the "file-grinders" and "file-hardeners", I find from returns kindly supplied to me by Mr. John Warren, the intelligent secretary of the file trade, that at present about two thousand eight hundred men, women, boys, and girls, are engaged in Sheffield in the manufacture of files: and of these, two thousand are employed in cutting files.

Boys frequently commence their trade at nine and ten years of age.

During the process of cutting, the file is placed upon a bed of lead, which rests upon an anvil. The quantity of lead consumed varies with the size of the file. In cutting "rasps", the workman will use about three quarters of a pound of lead in a week; in cutting the large three-square files, more than a pound will be used in the same period. The lead may be collected from the bed on which the files are cut in large quantities; it is then in the form of a very fine black powder. The files are cut with a small chisel; and the hammers which are employed will vary in weight from one ounce to eight or nine pounds.

Nature and Symptoms of the File-Cutters' Disease

The File-Cutters' Disease, resulting, as it does, from the absorption of a portion of the lead employed in their trade, demands our attentive consideration. Colic and paralysis from the poison of lead exhibit a form of disease peculiar in a great degree to the industrious artisans of this and other countries, and, therefore, the whole subject is well worthy of the most serious notice of the guardians of the public health.

I think I shall be correct in stating that this disease manifests itself among all who are engaged in the manufacture or use of the compounds of lead..... It may also be added, that the other causes of lead poisoning are the use of food or drink impregnated with this metal; and so high an authority as Dr. Letheby has pointed out that the lead pigments so frequently employed for colouring are calculated to produce the disease in question.

It is certain that lead may be rendered soluble by any of the secretions of the body; and that, consequently, it may be introduced into the system by the lungs, by the alimentary canal, the vagina, the skin, and even by the conjunctiva. Dr. Alderson is of opinion (Lumleian Lectures, delivered at the Royal College of Physicians, 1852) "that absorption by the lungs is more productive of deleterious consequences than any other mode of receiving the metal into the system."

The following cases, selected out of a very large number of file-cutters that have been under my care, exhibit many of the well known symptoms of poisoning by lead.

Dr John Charles Hall then gave a number of detailed studies of the health of file cutters. Only the first case study is reprinted.

W. Jenkinson, aged 36 in 1857.

He states that he has worked as a file-cutter since the age of 13. His father died at the age of 56, and his mother at the age of 53. He stands five feet two inches; his chest is well formed, and expands freely on taking a deep inspiration. His complexion is of a peculiar yellowish hue. He was tolerably well, with the exception of suffering from indigestion, till two years ago, when he was attacked with violent pain at the umbilicus, and vomiting. His bowels are always more or less constipated; he has cut large files, using a hammer of about five pounds in weight. The gums are spongy, and bleed if touched. The blue line is very well marked, both around the upper and lower teeth; there is also partial "wrist drop" on the left side.

Prevention of the File-Cutters' Disease

One of the most simple and at the same time one of the most effectual means for preventing the attacks of poisoning from the employment of lead is the daily use of the bath, so as thoroughly to purify the skin, and to remove from the surface of the body the particles of lead which have been collected during the day. If the file-cutters object to the daily use of the bath, then, on leaving work, the neck, face, hands, arms, and arm-pits, should be well washed with soap and warm water, and the shirt and clothes be changed, keeping one set for the house, and another for the workshop.

Dr John Charles Hall published a number of studies of trade based diseases. These may interest some readers. The editor will consider reprinting extracts in future issues of *NEWS*. The study of Sheffield Grinders is equally hallowing.

All readers can appreciate the high quality of old tools but few would want to see a return to these working conditions.

At present there are two classes of tools available, these two classes of tools being very high quality expensive tools and very cheap tools of unpredictable quality.

The cheap tools are made in the developing countries where working conditions are as bad, or worse than, working conditions in Sheffield in the 1850s.

Market forces have a human cost!

Joiner's Tools in Nicholson

Drawings of joiner's tools are in both American editions of Nicholson's ***Mechanic's Companion***.

The 1832 edition was published in Philadelphia, the 1831 edition New York.

The plate of Joiner's Tools from the 1832 edition was reprinted in the last issue of *NEWS* (*NEWS121*).

The 1831 New York edition of the Mechanics Companion has a similar plate, possibly not as well printed.

The 1831 edition has a section on New York building law but the technical terms included are the words used by the tradesmen working in the building trades in London.

The drawings of the tradesmen's tools may have been a little out of date even if they had been included in earlier text books by Peter Nicholson.

By 1810 these round top plane irons and round top plane wedges were on the way out.

The Planes in Nicholson

The 1832 Philadelphia edition of the *Mechanic*'s *Companion* contains a comprehensive description of the tools used by joiners in the first half of the nineteenth century.

NEWS 121 reprinted the text on saws.

NEWS 122 reprints part of the text on planes.

NEWS 123 will continue to reprint the text relating to planes.

Eventually the full text will be printed.

The Jack Plane

Is used in taking off the rough and prominent parts from the surface of the wood, and reducing it nearly to the intended form, in coarse slices, called shavings; this plane consists of a block of wood called the stock, of about seventeen inches in length, three inches high, and three inches and a half broad. All the sides of the stock are straight surfaces at right angles to each other.'

Through the solid of the stock, and through two of its opposite surfaces is cut an aperture, in which is inserted a thin metal plate called the iron, one side of the plate consisting of iron, and the other of steel. The side of the opening which joins the iron part is called the bed, which is a plane surface, making an angle of forty-five degrees with the hind part of the underside of the plane.

The end of the iron next to the bottom is ground to an acute angle off the iron side, so as to bring the steel side to a sharp edge, having a small convexity. The sloping part thus formed, is called the basil of the iron. The iron is fixed by means of a wedge, which is let into two grooves of the same form, on the sides of the opening; two sides of the wedge are parallel to each other, and to the vertical side of the plane, and consequently to two of the sides of the groove; the two sides of the grooves, parallel to the vertical sides of the plane are called cheeks, and the two other sides inclined to the bed of the iron are called the abutments or abutment sides: the wedge and the iron being fixed, the opening must be uninterrupted from the sole to the top, and must be no more on the sole

side of the plane, than what is sufficient for the thickest shaving to pass with ease; and as the shaving is discharged at the upper side of the plane, the opening through must expand or increase from the sole to the top, so as to prevent the shavings from sticking. In conformity to analogy, the part of the opening at the sole, which first receives the shaving, is called the mouth. In order for the shaving to pass with still greater ease, the wedge is forked to cut away in the middle, leaving the prongs to fill the lower parts of the aforesaid grooves. On the upper part of the plane, behind the iron, rises a protuberance, called the tote, so formed to the shape of the hand, and direction of the motion, as to produce the most power in pushing the plane forward.

The bringing of the iron to a sharp cutting edge is called sharpening. The cutting edge of the iron must be formed with a convexity, and regulated by the stuff to be wrought, whether it is hard or soft, cross grained or curling, so that a man may be able to perform the most work, or to reduce the substance most, in a given time. To prevent the iron from tearing the wood to cross grained stuff, a cover is used with reversed basil and fastened by means of a screw, the thin part of which slides in a longitudinal slit in the iron, and the head is taken out by a large hole near the upper end of it. The lower edge of the cover is so formed, as to be concentric or parallel to the cutting edge of the iron, and fixed at a small distance above it, and to coincide entirely with the steel face. The basil of the cover must be rounded, and not flat, as that of the iron is. The distance between the cutting edge of the iron, and the edge of the cover, depends altogether on the nature of the stuff. If the stuff is free, the edge of the cover may be set at a considerable distance, because the difficulty of pushing the plane forward becomes greater, as the edge of the cover is nearer the edge of the iron, and the contrary when more remote.

The convexity of the edge of the iron depends on the texture of the stuff, whether it is free, cross grained, hard or knotty. If the stuff is free, it is evident that a considerable projection may be allowed, as a thicker shaving may be taken: the extreme edges of the iron must never enter the wood, as this not only retards the progress of working, but chokes and prevents the regular discharge of the shavings at the orifice of the plane.

To Grind and Sharpen the Iron

Nicholson's describes the sharpening process in common use in the nineteenth century. The text is hard to follow so the editor has reduced it to the essential steps.
#Grind the bevel on a grind stone. The Grind stone is fed with water to prevent the edge over heating. The blade is held in two hands in a free hand manner. There is no mention of any form of tool rest.
#Hone on a Turkey Stone
#When the edge is getting thick rub on a Rub Stone and finish the edge by honing on a Turkey Stone.
#When the edge is too thick for the Rub Stone then grind a new bevel.
Nicholson instructs the reader to use Sweet Oil on the Turkey Stone.

Is Sweet Oil Neat's-foot Oil?
Writers copying old text book still recommend Neat's-foot Oil for use on oilstones. Neat's-foot Oil will rapidly clog an artificial oilstone.
The editor welcomes informed reader comment but for the moment warns readers not to use Neat's-foot Oil on their oilstones.
Kerosene is good, lamp oil is better.

To Fix and Unfix the Iron

In fixing the iron in the plane, the projection of the cutting edge must be just so much beyond the sole of the plane, as the workman may be able to work it freely in the act of planing. This projection is called iron, and the plane is said to have more or less iron as the projection varies: when there is too much iron, knock with the hammer on the fore end of the stock; and the blows will loosen the wedge, and raise the iron in a certain degree, and the head of the wedge must be knocked down to make all tight again: if the iron is not sufficiently raised, proceed again in the same manner, but if too much, the iron must be knocked down gently by hitting the head with a hammer: and thus, by trials, you will give the plane the degree of iron required. When you have occasion to take out the iron to sharpen it, strike the fore end smartly, which will loosen the wedge, and consequently the iron.

Using the Jack Plane

In using the jack plane, lay the stuff before you parallel to the sides of the bench, the farther end against the bench hook: then beginning at the hind end of the stuff, by laying the forepart of the plane upon it, lay hold of the tote with the right hand, and pressing with the left upon the fore end, thrust the plane forward in the direction of the fibres of the wood and length of the plane, until you have extended the stroke the whole stretch of your arms; the shaving will be discharged at the orifice: draw back the plane, and repeat the operation in the next adjacent rough part: proceed in this manner until you have taken off the rough parts throughout the whole breadth, then step forward so much as you have planed, and plane off* the rough of another length in the same manner: proceed in this way by steps, until the whole length is gone over and rough planed; you may then return and take all the protuberant parts or sudden risings, by similar operations.

The Trying Plane

Is constructed similar to the jack plane, except the tote of the jack plane is single, and that of the trying plane double, to give greater strength; the length of this plane is about twenty-two inches, the breadth three and a quarter, and the height three and an eighth. Its use is to reduce the ridges made by the jack plane, and to straighten the stuff: for this purpose it is both longer and broader, the edge of the iron is less convex, and set with less projection: but as it takes a broader though finer shaving, it still requires as much force to push it forward.

The Use of the Trying Plane

The sharpening of the iron, and the operation of planing is much the same as that of the jack plane; when the side of a piece of stuff has been planed first by the jack plane, and afterwards by the trying plane, that side of the stuff is said to be 'tried up', and the operation is called trying.

When the stuff is required to be very straight, particularly if the broad and narrow side of another piece is to join it, instead of stopping the plane at every arm's length, as with the jack plane, the shaving is taken the whole length, by stepping forwards, then returning, and repeating the operation throughout the breadth, as often as may be found necessary.

The Long Plane

Is Used when a piece of stuff is required to be tried up very straight; for this purpose it is both longer and broader than the trying plane, and set with still less iron; the manner of

using it is the same. Its length is twenty six inches, its breadth three inches and five eighths, and depth three inches and one eighth.

The Jointer

Is still longer than the long plane, and is used principally for planing straight edges, and the edges of boards, so as to make them join together; this operation is called shooting, and the edge itself is said to be shot. The length of this plane is about two feet six inches, the depth three inches and a half, and the breadth three inches and three fourths. The shaving is taken the whole length in finishing the joint, or narrow surface.

The Smoothing Plane

Is the last plane used in giving the utmost degree of smoothness to the surface of the wood: it is chiefly used in cleaning off finished work. The construction of same with regard to the iron wedge and opening for discharging the shaving, but is much smaller in size, being in length seven inches and a half, in breadth three, and in depth two and three quarters, and differs in form, on account of its having convex sides, and no tote. There is also this difference in giving the iron a finer set, that you may strike the hind end instead of the fore part.

The TTTG Joiner's Box

The TTTG Committee has a dream to have a tool box full of useable traditional joiner's tools.

TTTG already has the nucleus of this collection of tools.

More tools will be acquired by donation and prudent purchase.

IT WILL HAPPEN!

The jack plane, the trying plane, the long plane, the jointer and the smoothing plane, are denominated bench planes.

In Summary

The bench planes are:

The Jack Plane, The Trying Plane

The Jointer Plane, The Long Plane

The Smoothing Plane

Nicholson describes the bench planes in the sequence in which they are used to prepare timber. The use of each plane is clear and well defined.

Sharpening is discussed at length. The nineteenth century sharpening operations were:

Grinding on a Grind Stone

Preliminary sharpening on a flat stone

Sharpening on a Turkey Stone

The lubricant for the Turkey or Rub Stone was Sweet Oil.

NEWS 123

The other planes in Nicholson 1832 treatise will be reprinted.

These are

The Compass Plane

The Forkstaff Plane

The Straight Block

The Rebate Planes

The Fillister Planes

NEWS 124 will continue the reprints.

Disston's Best Saw

Masterpiece D-95

In 1934 Henry Disston & Sons Inc. released a redesigned handsaw with a streamlined handle made from a new modern material.

The saw was called Masterpiece D-95.

The leaflet below describes the plastic used in making the two colour handle.

In 1960's Henry Disston & Sons Inc. introduced another modern saw.

This saw was called the D-100.

The modern styled handle was made from aluminium with a 'no decoration' simplified hardwood hand grip.

Possibly Disston developed the D-100 to compete with the plastic handled steam lined modern saw made in the 60s by the Swedish maker Sandvik.

By the 1960s Sandvik saws had won a reputation equal to Disston saws.

Popular Mechanics January 1935

No Plastic ever did this Job Before

A saw handle molded of plastic material is unique. It will catch and hold the attention of every workman who is "looking at saws." Thus Disston's new "Masterpiece" saws with Tenite handles are sure to get special consideration.

But Disston didn't select Tenite for its eye appeal alone. As Disston's mailing folder says, the new handles are made of the

> "toughest, strongest molded material ever developed for practical industrial purposes. Perfect in feel. Will not chip, shrink, or swell ...New, rich permanent colors ...Blade can never work loose... 'Hang' and balance are always right."

Hardly a day passes without Tenite finding a new unusual job – doing it so well that some product has a striking new sales advantage. Tenite has qualities widely sought in industry and never before combined in one raw material. It can be formed into finished articles at the fastest speeds ever attained in plastic molding. Its use has lowered production costs and increased the serviceability of hundreds of familiar products – steering wheels, door knobs, radio and refrigerator parts, faucet handles, costume jewelry, combs, typewriter keys and toys.

Tenite Book on Request

Tenite is a tough, practically unbreakable plastic made of Eastman cellulose acetate – in every color, plain or variegated, transparent or opaque. Custom molders will gladly tell you about the suitability of this plastic for your product. You are invited to consult them, or write us direct for a 52-page book on Tenite and its uses.

TENNESSEE EASTMAN CORPORATION
(subsidiary of Eastman Kodak Company)
KINGSPORT, TENN.

Disston's Best Saw

Masterpiece D-95
or D-100

To the right is a photograph of the Disston D-100 saw handle.

This handle has classic *modern* 60's lines combined with *new* modern materials.

The manufacturing quality is as high as expected from Disston but is it as comfortable a saw to use as the pre 60's Disston saws?

To the left is a photograph of the Masterpiece D-95 saw handle.

The saw is as well made as any of the Disston D series saws.

The stream lined handle is a departure from the style of the previous D series handles.

The manufacturing quality is as high as expected from Disston but is it as comfortable a saw to use as the other D series saws?

By the 1960's Sandvik saws with stream lined one piece plastic handles rivalled the D-8 saws.

The editor has a number of D-8 saws and a Sandvik plastic handle (Nordic) saw the same size as a D-8 as well as a Masterpiece D-95 and a D-100.

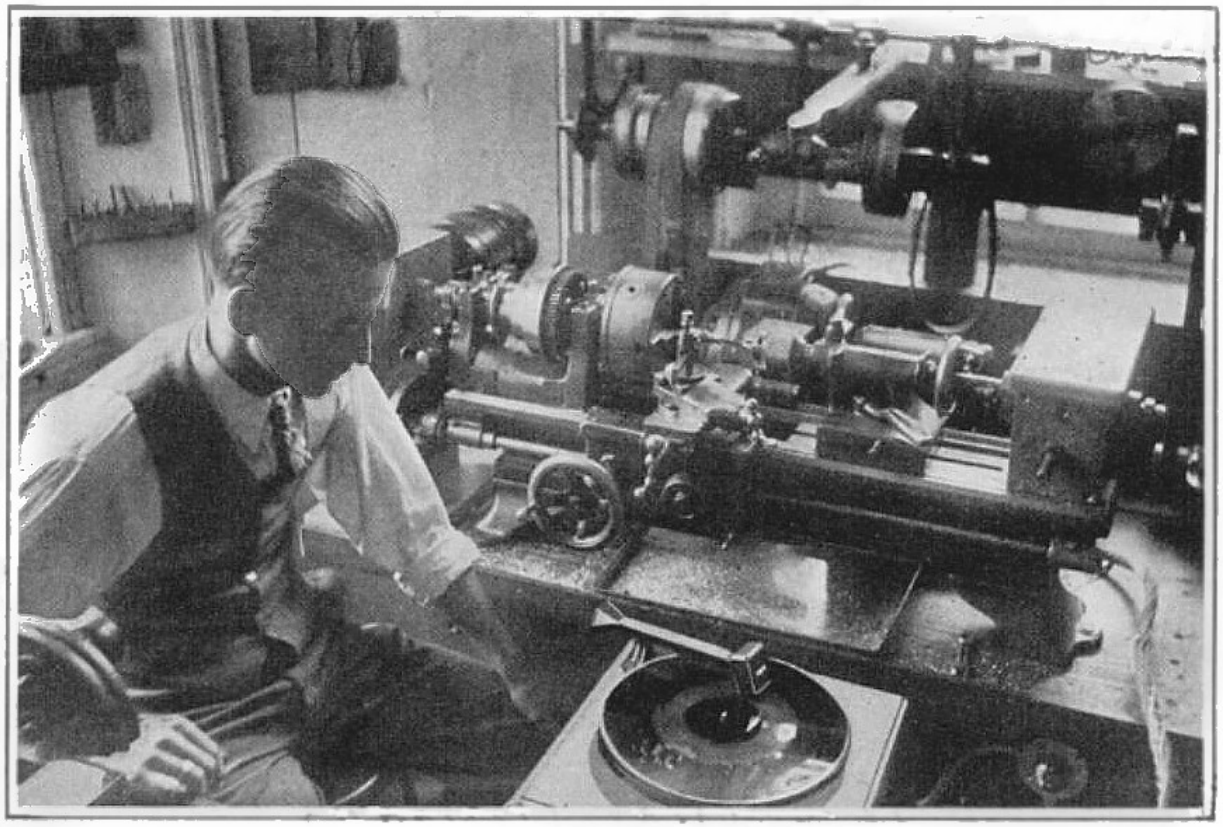
The blade of the Masterpiece D-95 is badly rust pitted in several places but when sharpened it cut as well as any Disston D series saw. The handle is very comfortable to hold.

At the last Saw Sharpening workshop the editor decided to sharpen a D-8, a Masterpiece D-95 and a Sandvik saw. All three saws were 8 TPI and three saws all were filed for cross cutting.

All three saws cut equally well.
The D-8 and the Sandvik were the most comfortable saws with a light touch. The D-100 handle felt heavier.
The best saw comes down to opinion!

Before CNC

Phonograph Disk Directs Automatic Machine



Wax record in foreground of picture is controlling lathe in turning out steel tools and parts after patterns set by human workman as he guided lathe while original operation was recorded on master record

Popular Mechanics June 1936

The editor would like to know how this worked. Hopefully a reader will write an account of the technology!

These experiments were carried out in the General Motors plant in the US.

Finishing Saw Cut Veneer

In cleaning off veneers, after the glue has been removed from the surface, let it be toothed in a diagonal direction, and in proportion as the surface is rendered even, give the plane less hold; and, finally, use a plane with very fine teeth; then remove the tooth-marks with the scraper, and finish the surface with glass-paper, or pumice-stone and glasspaper. Veneers are scarcely ever of so soft and porous a nature as to require raising the grain.

The instructions opposite are from
P N Nicholson
Practical carpentry, joinery, and cabinet-making. 1826

The quotation shows that hot hide glue was applied to both sides of the veneer before laying the veneer. This made the veneer more pliable and also lubricated the veneer hammer. The veneered surface was then finished by using a toothing plane and scraper. Note the use of a coarse toothed blade followed by a fine toothed blade.

Titan Chisels

In the 1960s the two most highly rated chisels in Australia were Swedish **BERG** Chisels and locally made **TITAN** chisels.
Titan chisels were very close to Berg chisels in appearance.

Thomas McPherson & Son Pty. Ltd. Catalogue 264 page 268 illustrates the full range of **TITAN** chisels.
This catalogue was probably issued in 1964. By 1970 **TITAN** had introduced green colored plastic handles.

268 THOMAS McPHERSON & SON PTY. LTD. WOOD CHISELS

T378—FIRMER — WOOD HANDLE
PLAIN EDGE No. 131. BEVEL EDGE No. 136.
Sizes (in.): ⅛, ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½, 1¾, 2.

T379—FIRMER — PLASTIC HANDLE
No. 146 BEVEL EDGE ONLY.
Sizes (in.): ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½.

T380—FIRMER BUTT — WOOD HANDLE
No. 306. BEVEL EDGE ONLY.
Sizes (in.): ⅛, ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½, 1¾, 2.

T381—FIRMER BUTT — PLASTIC HANDLE
No. 346. BEVEL EDGE ONLY.
Sizes (in.): ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½.

T382—REGISTERED — WOOD HANDLE
PLAIN EDGE No. 101. BEVEL EDGE No. 106.
Sizes (in.): ⅛, ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½, 1¾, 2.

T383—HEAVY SOCKET — WOOD HANDLE
PLAIN EDGE No. 201. BEVEL EDGE No. 206.
Sizes (in.): ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½.

T384—LIGHT SOCKET — WOOD HANDLE
PLAIN EDGE No. 231. BEVEL EDGE No. 236.
Sizes (in.): ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½.

T385—LIGHT SOCKET BUTT — WOOD HANDLE
No. 316. BEVEL EDGE ONLY.
Sizes (in.): ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½.

T386—LONG PARING — WOOD HANDLE
No. 326. BEVEL EDGE ONLY.
Sizes (in.): ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1¼, 1½.

T387—FIRMER GOUGES — WOOD HANDLE
No. 161 OUT CANNEL. No. 163 IN CANNEL.
Sizes (in.): ¼, ⅜, ½, ⅝, ¾, ⅞, 1.

SWEDISH BERGS CHISELS ALSO AVAILABLE

TITAN also made brace augers and plane blades as well as chisels.

TITAN high speed steel tipped plane blades were highly esteemed.

High speed steel tipped plane blades and chisels were made in the UK.

Did **TITAN** develop or copy these blades? Did **TITAN** make HSS chisels?

Joiner's Mallet

The November TTTG Joint Making workshop was followed by an email

Do you have a design of a mallet..? What angle do I need the face of the mallet, mine is a toy!

I had been using my old joiner's mallet during the demonstrations, making the point that all commercial mallets are useless! My mallet is the traditional British Isles design and I made it following the strict advice in George Ellis *Modern Practical Joinery.*

I could draw this mallet but it is made to suit me. I suggest anyone wanting a useful mallet digest Ellis's words and make a mallet to suit individual need.

That said I will give some guidelines. The first problem is finding suitable materials. My mallet has a European Ash handle and I strongly suggest this is the best timber to buy. American Ash available in Sydney. Maybe the better timber would be Hickory but it is not freely available.

The mallet head should to be made from a dense close grained hardwood. My first choice is Brush Box but the only suitable timber I had on hand when I made my mallet was Sydney Blue Gum. This second choice head has taking lots of punishment!

Any dry heavy Australian hardwood is a likely candidate, if you buy firewood there might even be a suitable piece in the fuel supply.

There is only one way to make a good mallet. The head must be mortised to fit the handle. The mortise must not be undercut, the handle must fit!

I cut the mortise in my mallet head on my Hollow Chisel Mortiser using a taper jig block to cut the angled ends.

Every component of the mallet, all two, is hand planed and fitted. If the parts don't fit perfectly the mallet is useless so work carefully.

I was curious to see if there are any useable commercially made mallets available. Before I start a controversy I'm referring to traditional joiner's mallets. A Google search brought up several makers of "traditional" style mallets. All are useless as real tools.

While in cyber space I had a look at the numerous blogs on traditional joiner's mallets. There is a great deal of self appointed expert advice but nothing of any real substance.

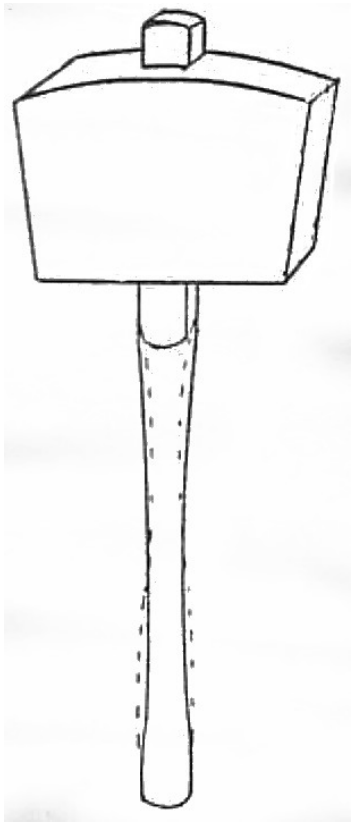
As a rough guide the following are the sizes of my mallet:-

Handle (Ash or similar)

465mm x 45mm x 24mm-16mm

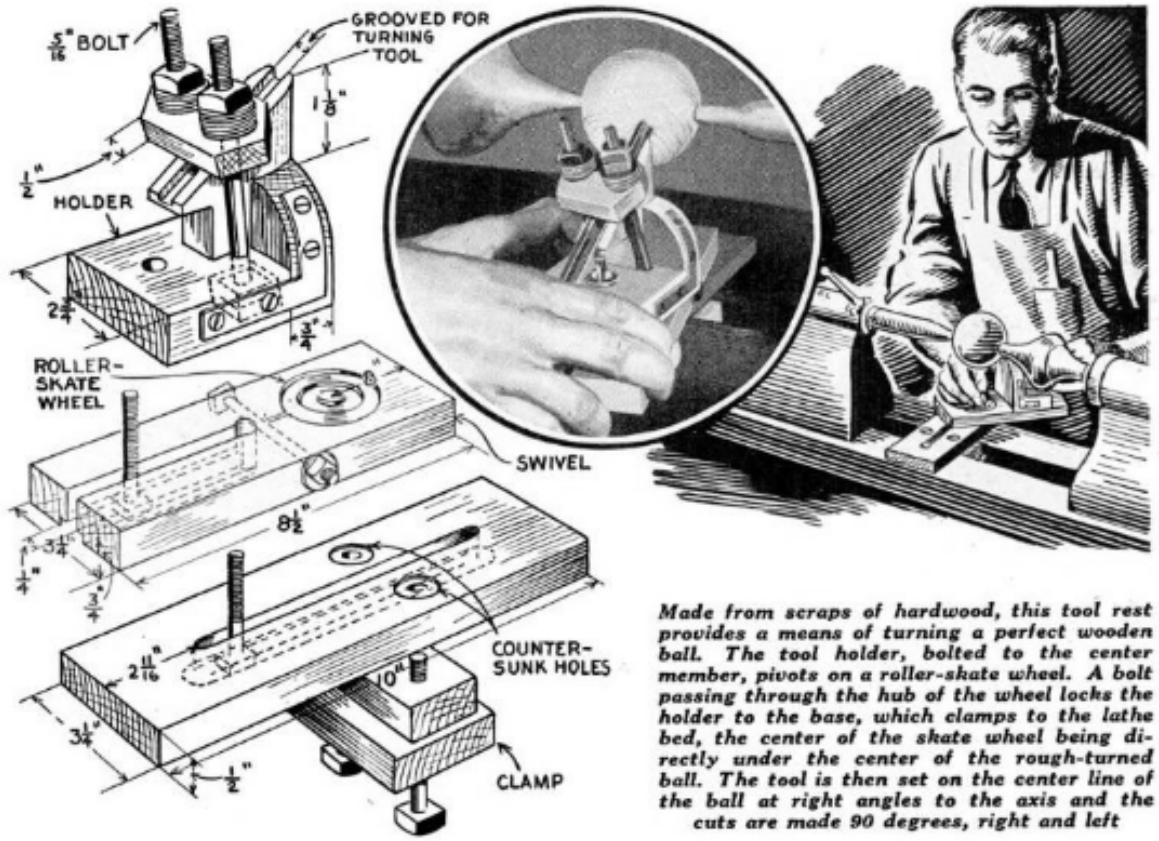
Head (Brush Box or similar)

195mm x 90mm x 70mm



Wooden Balls

Swivel Tool Rest for Turning Wood Balls

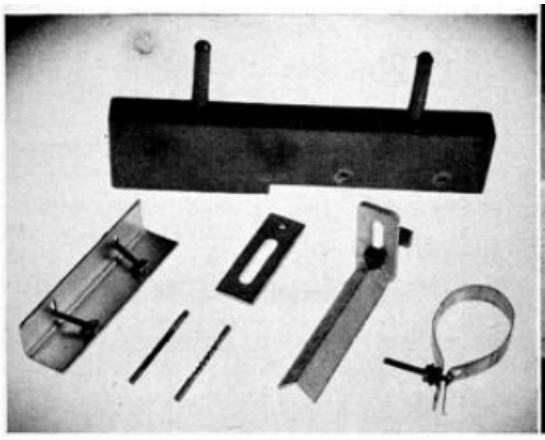


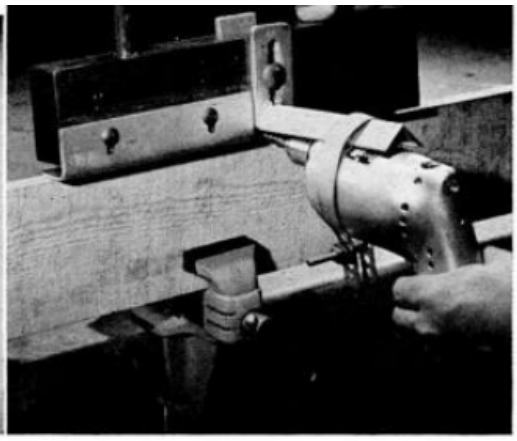
Made from scraps of hardwood, this tool rest provides a means of turning a perfect wooden ball. The tool holder, bolted to the center member, pivots on a roller-skate wheel. A bolt passing through the hub of the wheel locks the holder to the base, which clamps to the lathe bed, the center of the skate wheel being directly under the center of the rough-turned ball. The tool is then set on the center line of the ball at right angles to the axis and the cuts are made 90 degrees, right and left

Popular Mechanics December 1936

This jig would work well provided it is well made.

1952 New Power Tool





Drill Powers Planing Attachment. The parts shown in the photo at left above can be assembled to make the planing attachment for a ¼" electric drill as shown at right above. The two ¼" cutters—one for rough planing and the other for smooth—have a 2" cutting surface. You can also rip boards up to 2" in thickness with the attachment. *International Twist Drill Corp., Kansas City, Mo.*

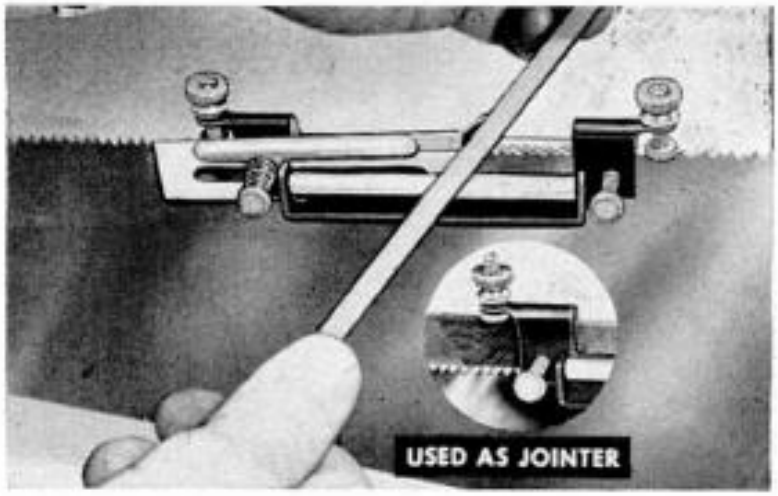
Popular Science February 1952

This is now as rare as Hen's teeth.

Rip 2"?

WOW!

Australian Tool in the US



3 Jig Sharpens and Joints Saws. Set-screws hold this jig to the saw blade, and two steel rollers limit the depth of cut that is made with the file. The jig is equipped with a depth adjustment and a bevel guide. The guide keeps the file at the correct sharpening angle. With a mill file clamped in the jig, the tool can be used as a jointer to even up the tips of the teeth.

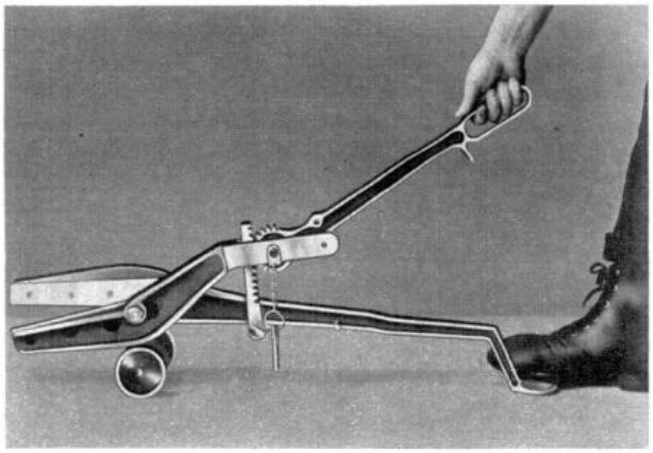
Popular Science
July 1952

The saw filing jig is well describes but the trade-name is not given. This was standard practice at the time and no doubt encouraged tool sellers to pay for an advertisement.

The photograph is very clear and the jig is in all respects identical to the Australian made saw jig that was also marked in Britain in the 1950s.

The jig was the ***FRASER.***

These jigs often surface but read the instructions. The jig is for sharpening and not for shaping teeth!

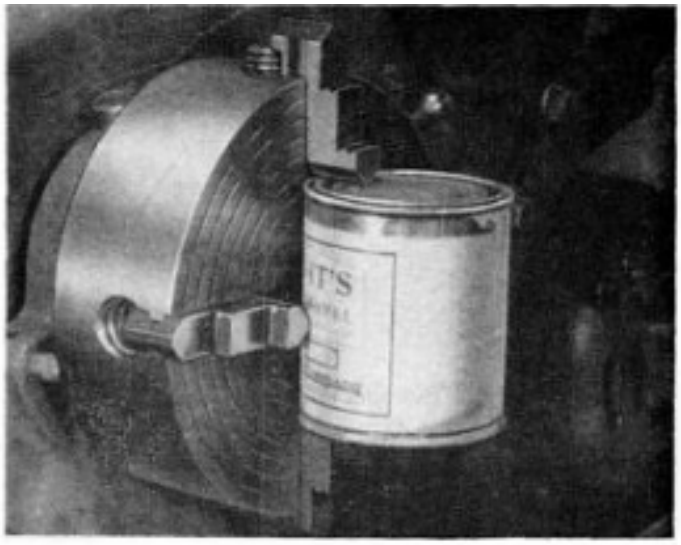


Super Scissors

Giant scissors employing compound leverage will cut metal stock in sheets, rods or bars up to ⅛ inch thick. Added leverage for the shears comes from a rack and gear mechanism. Only 60 pounds of pressure are needed to cut stock that requires 145 pounds of pressure with ordinary shears. One of the handles ends in a foot pedal which can be held stationary while both hands are used to apply leverage. The tool is 36 inches long, has 9-inch blades and weighs 27 pounds.

Popular Mechanics March 1950

Dumb and Dumber



Lathe Doubles as Paint Mixer

If you've ever tried mixing paint left-overs in which the pigment has settled to the bottom of the can, you know it takes a lot of shaking, and a lot of work with a paddle or putty knife to get the paint in condition to use again. One craftsman uses his metal lathe as a shaker. Add thinner as required, press the friction cover on tightly and mount the can in the 4-jaw chuck as shown. Then run the lathe at slow speed for a minute or so. Just make sure the lid is on tightly, otherwise you're in trouble.

The *NEWS* editor is always looking for suggestions on how to use tools or how to do a job in old publications.

There is a lot of really useful old stuff but there is also a fair amount of dubious material. Some of it could even be called just plain dumb.

This idea for stirring paint must have made a few good machinists a bit hot under the collar or maybe the editor of Popular Mechanics June 1959 had a really well developed sense of humour.

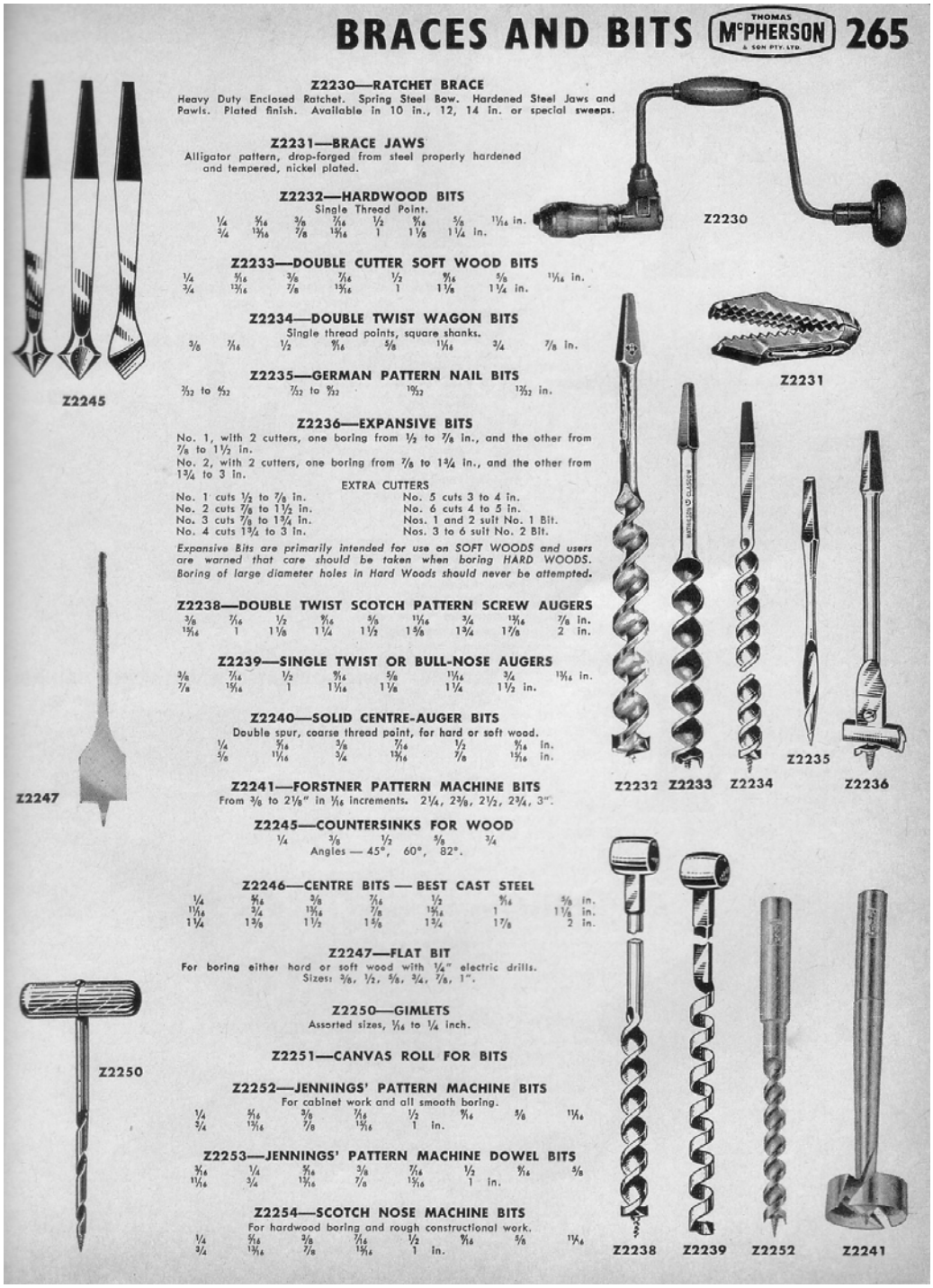
The Popular Mechanics editor did publish this cartoon so this editor will assume he did make publishing that may have been more than a little tongue in cheek.

Popular Mechanics July 1959

"For dessert, Bill's going to open these peaches I canned last year."

Bits and Braces

Thomas McPherson & Son Pty. Ltd.
Catalogue 164 (1964?) page 265



BRACES AND BITS — THOMAS McPHERSON & SON PTY. LTD. — 265

Z2230—RATCHET BRACE
Heavy Duty Enclosed Ratchet. Spring Steel Bow. Hardened Steel Jaws and Pawls. Plated finish. Available in 10 in., 12, 14 in. or special sweeps.

Z2231—BRACE JAWS
Alligator pattern, drop-forged from steel properly hardened and tempered, nickel plated.

Z2232—HARDWOOD BITS
Single Thread Point.
¼ 5/16 3/8 7/16 ½ 9/16 5/8 11/16 in.
¾ 13/16 7/8 15/16 1 1 1/8 1 1/4 in.

Z2233—DOUBLE CUTTER SOFT WOOD BITS
¼ 5/16 3/8 7/16 ½ 9/16 5/8 11/16 in.
¾ 13/16 7/8 15/16 1 1 1/8 1 1/4 in.

Z2234—DOUBLE TWIST WAGON BITS
Single thread points, square shanks.
3/8 7/16 ½ 9/16 5/8 11/16 ¾ 7/8 in.

Z2235—GERMAN PATTERN NAIL BITS
2/32 to 6/32 7/32 to 9/32 10/32 12/32 in.

Z2236—EXPANSIVE BITS
No. 1, with 2 cutters, one boring from ½ to 7/8 in., and the other from 7/8 to 1½ in.
No. 2, with 2 cutters, one boring from 7/8 to 1¾ in., and the other from 1¾ to 3 in.

EXTRA CUTTERS
No. 1 cuts ½ to 7/8 in. — No. 5 cuts 3 to 4 in.
No. 2 cuts 7/8 to 1½ in. — No. 6 cuts 4 to 5 in.
No. 3 cuts 7/8 to 1¾ in. — Nos. 1 and 2 suit No. 1 Bit.
No. 4 cuts 1¾ to 3 in. — Nos. 3 to 6 suit No. 2 Bit.

Expansive Bits are primarily intended for use on SOFT WOODS and users are warned that care should be taken when boring HARD WOODS. Boring of large diameter holes in Hard Woods should never be attempted.

Z2238—DOUBLE TWIST SCOTCH PATTERN SCREW AUGERS
3/8 7/16 ½ 9/16 5/8 11/16 ¾ 13/16 7/8 in.
15/16 1 1 1/8 1 1/4 1 1/2 1 5/8 1¾ 1 7/8 2 in.

Z2239—SINGLE TWIST OR BULL-NOSE AUGERS
3/8 7/16 ½ 9/16 5/8 11/16 ¾ 13/16 in.
7/8 15/16 1 1 1/16 1 1/8 1 1/4 1 1/2 in.

Z2240—SOLID CENTRE-AUGER BITS
Double spur, coarse thread point, for hard or soft wood.
¼ 5/16 3/8 7/16 ½ 9/16 in.
5/8 11/16 ¾ 13/16 7/8 15/16 in.

Z2241—FORSTNER PATTERN MACHINE BITS
From 3/8 to 2 1/8" in 1/16 increments. 2¼, 2⅜, 2½, 2¾, 3".

Z2245—COUNTERSINKS FOR WOOD
¼ 3/8 ½ 5/8 ¾
Angles — 45°, 60°, 82°.

Z2246—CENTRE BITS — BEST CAST STEEL
¼ 5/16 3/8 7/16 ½ 9/16 5/8 in.
11/16 ¾ 13/16 7/8 15/16 1 1 1/8 in.
1 1/4 1 3/8 1 1/2 1 5/8 1¾ 1 7/8 2 in.

Z2247—FLAT BIT
For boring either hard or soft wood with ¼" electric drills.
Sizes: 3/8, ½, 5/8, ¾, 7/8, 1".

Z2250—GIMLETS
Assorted sizes, 1/16 to ¼ inch.

Z2251—CANVAS ROLL FOR BITS

Z2252—JENNINGS' PATTERN MACHINE BITS
For cabinet work and all smooth boring.
¼ 5/16 3/8 7/16 ½ 9/16 5/8 11/16
¾ 13/16 7/8 15/16 1 in.

Z2253—JENNINGS' PATTERN MACHINE DOWEL BITS
3/16 ¼ 5/16 3/8 7/16 ½ 9/16 5/8
11/16 ¾ 13/16 7/8 15/16 1 in.

Z2254—SCOTCH NOSE MACHINE BITS
For hardwood boring and rough constructional work.
¼ 5/16 3/8 7/16 ½ 9/16 5/8 11/16
¾ 13/16 7/8 15/16 1 in.

Z2245 Z2230 Z2231 Z2247 Z2235 Z2232 Z2233 Z2234 Z2236 Z2250 Z2238 Z2239 Z2252 Z2241

The best known Australian made braces were manufactured by **TOUGH** and **MIT A MIT.**

TITAN manufactured an extensive range of Brace Bits.

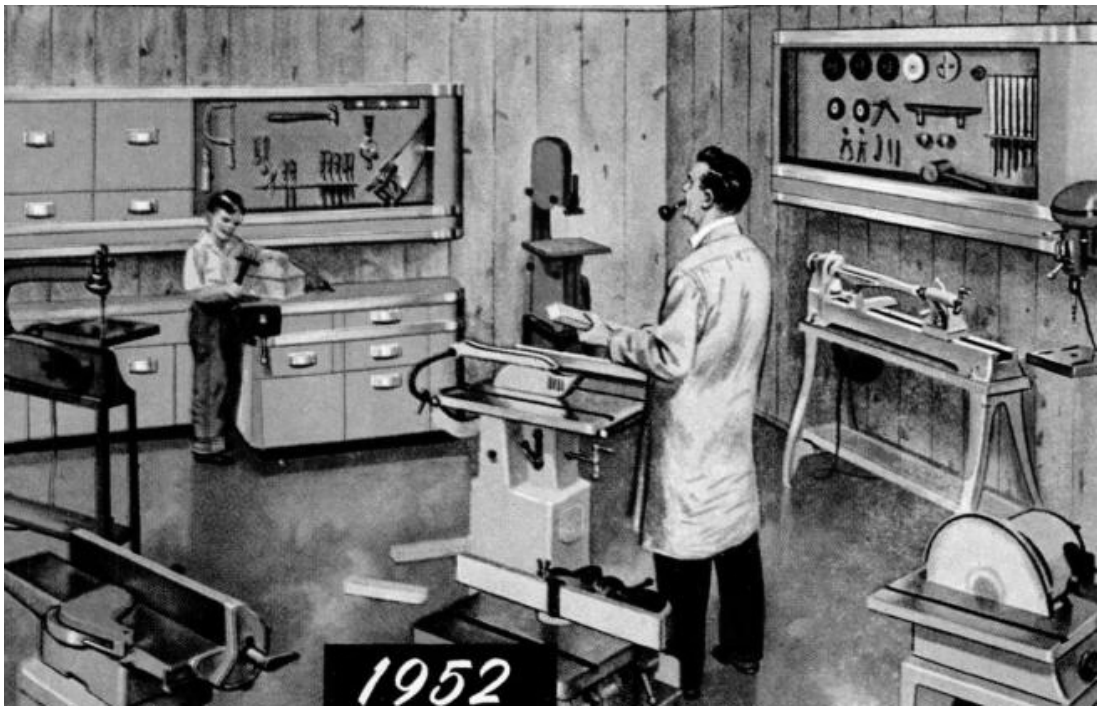
There will be more on Braces and Bits in *NEWS* 123

Two Workshops

Popular Mechanics January 1952

1902 and 1952

Perhaps both images are idealised.



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Hand tools to suit Tradesmen, Amateurs and Collectors
Hand Tools for all Traditional Trades

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