

News 101

June 2008



THE TRADITIONAL TOOLS GROUP (Inc.)

www.tttg.org.au

THE TRADITIONAL TOOLS GROUP (Inc.)
TTTG Newsletter Number 101 June 2008

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Subscription \$30

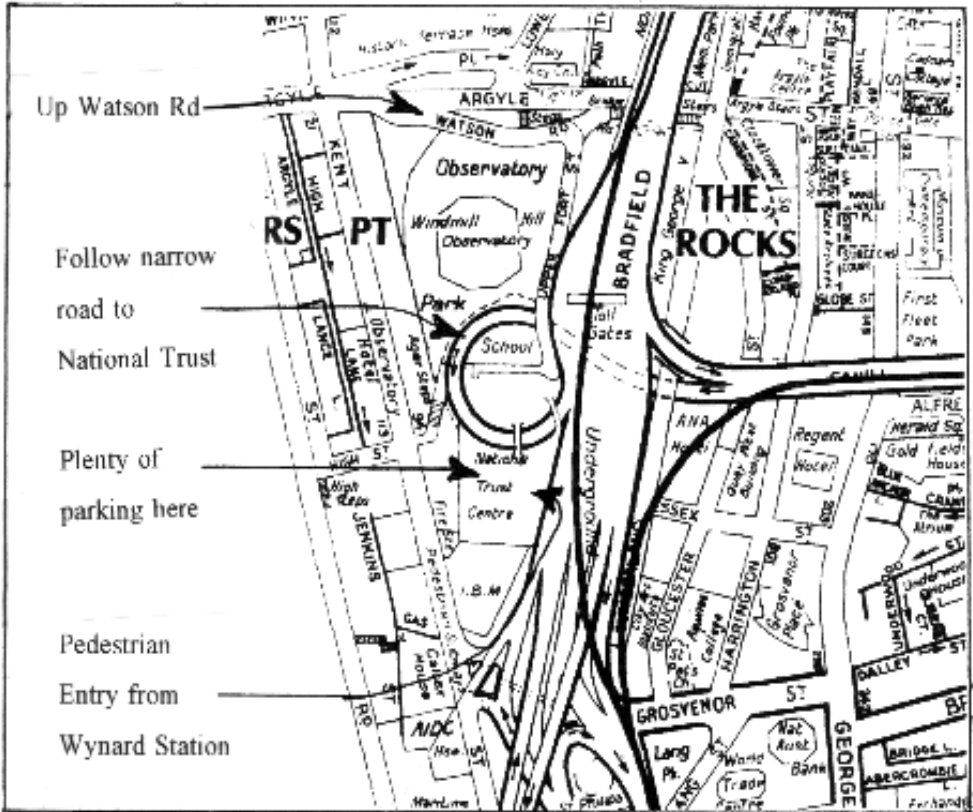
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Next Meeting

Tuesday, June 10

National Trust Centre, Observatory Hill

Annie Wyatt Room
"Doors Open" at 7pm



Programme

- 1) **Presentation. Jim Windschuttle on explosives.**
- 2) **TTTG Auction**

Catering by Mario Dato

Next Meeting

When we normally think of Traditional Tools, we think of hand tools or at least some sort of traditional cast iron machine but really any traditional method of getting the job done should grab our attention.

Explosives have been used in the West for mining, quarrying and warfare ever since the formula for gunpowder was smuggled across from the far East. So explosives are a traditional “tool” with a long history of use and abuse.

Unlike most other tools, explosives have always required a regimen of safety measures in their use and many hours (and lives) have been expended in perfecting explosives which were safe to store and transport.

Jim Windschuttle has a background in explosives; how to handle them and more importantly, how to remove and defuse them when they are no longer required or pose a real danger to personnel, buildings or shipping.

Jim has agreed to talk to us on this subject on June 10th and it should be a fascinating evening , something quite different from the usual “tool talk”. Make sure that you don’t miss it.

The Auction

The ***Presentation*** will be followed by ***The Auction***.

The TTTG Auction continues to offer a great variety of tools and related ironmongery at unbeatable prices. No absentee bids and no reserves.

The changes in the structure of the auction have resulted in better quality lots and greater satisfaction to both the buyers and the vendors.

Remember to try and have the exact money ready. TTTG only gets the commission on sales so every cent counts.

Last Meeting

The last meeting was a presentation and discussion on Sydney Made Tools. As predicted Carter Tools dominated the evening so in retrospect it would have been better to have used the words Parramatta Made Tools.

Carter Precision Tools always generate lively debate and this meeting witnessed an entertaining exchange of views on Carter. The usual consensus was reached, namely interesting if a bit agricultural.

Carter Precision Tools was discussed in the context of the immediate post World War Two period. The audience readily acknowledged the vast quantity of tools produced by Carter in such a short period of production.

The meeting has encouraged TTTG to pursue the study of Carter Tools with the ultimate objective of presenting an exhibition of Carter Tools in Parramatta. The tools are available from the TTTG members. What is needed is more printed material.

TTTG believes all the Carter promotional material and advertisements have been located. Do any members have any Carter invoices or sales dockets or original packaging? These bits of paper or cardboard breathe life into displays.

Treasurer Clynt has walked the streets of Parramatta locating the sites of the Carter factories. He has photos of these sites as they are now. What we are now looking for are old photos of the Carter factories.

The challenge goes out ***“Find photos of the Carter factories”***

If you grew up in, or had family or friends in, the Parramatta or North Parramatta area in the 40s, 50s or 60s have a look at those old snap shots in family photo albums or just have a talk about Carter.

This reminds me of an old friend who grew up in North Parramatta in the 50s who sometimes tells stories about the great days he had at Macquarie Boys High and how he and a friend accidentally burnt down the Goodlet and Smith Timber Yard. Never sure what to believe!

News 101 Cover

Front: Demco advert from The Practical Householder. Sydney 1957
Back: The Tools and Rules For Precision Measuring
The L S Starrett Company Athol Massachusetts 1965

TTTG Publications

Two TTTG CDs are now available.

The CDs are available at the Meetings or Workshops from Clynt.

-TTTG CD Number 1

Anthony Horden's Sydney

"Tools for Tradesmen" Catalogue, 1913

W S Friend, Sydney Catalogue Undated, circa 1920

Ironmongeries Ltd. Brisbane Catalogue June 1930

-TTTG CD Number 2

Alexander Young & Co. 1901 Machine Tool Catalogue

McPherson's Home Workshop Guide (1940s)

Hardware and tools pages from Sears, Roebuck and Co. 1947

T. S. Kaye & Sons Tool List (1930s) (70? pages)

plus explanatory notes and notes on the different companies

CDs are \$10 each

\$5 each plus

-Carter Tools Leaflet

postage

-1932 Record Tools Catalogue

-Stanley UK Catalogue 1950

postage

\$5 each plus

-Chandlers Catalogue

\$8 plus postage

-Stanley Planes and Screw Threads John Bates **Parts 1 & 2**

All copies sold

-GUIDE TO SHARPENING. Australian Abrasives.

\$5 each plus

postage

Please Note: the remaining stock of publications and old copies of News will be on sale at the Sydney Working With Wood Show.

Second half 2008 TTTG Workshops

22 June

PLANE TUNING & SHARPENING

TTTG is planning a further number of workshops for the latter half of the year on subjects that have proved very popular in the past and ones that members have requested to be repeated and extended. The **blacksmithing workshop** proved very popular and will be repeated on a date to be advised. Members who attended the last blacksmithing workshop will be encouraged to attempt more challenging projects but beginners are always welcome. Due to the fire, smoke and fumes, as well as finding sufficient forges and anvils, this workshop requires quite a bit of organisation so watch this space for the date.

A chisel handle workshop will also be held but equipment for this already exists at Asquith and it will be held indoors so we are not subject to the vagaries of the weather.

For further details of the workshops ask for a Workshop Leaflet or log on **www.tttg.org.au**

All workshops are on a Sunday and are held at Asquith Boys High School.

Why TTTG Workshops?

TTTG workshops are arguably the best available.

Our workshops offer the lowest cost, quality teaching and excellent facilities.

Want a specific skills based workshop?

If we think others might be interested we can tailor a workshop.

Please Note:

The new Workshop Leaflet will be available at the Sydney Working With Wood Show

Correspondence

The latest news from our Southern Correspondent.

I want to tell you about a marvellous book I recently acquired. It is a copy of **Australasian Hardware and Machinery Business Handbook and Diary 1914.**

The first 160 pages are devoted to firms advertising their products. These are mostly English, some with agents in Australia and others working for agents. A few European companies are listed as well as some from the USA. Quite a large number of advertisers and names were unknown to me. There are some familiar names! The copy is in mint condition.

There are several pages devoted to Wages and Conditions, mainly shop assistants in Hardware Stores. There is also a chapter on Ticket and Showcase Writing for beginners.

The information on Postal Services and the house prices suggest interesting comparisons. For example Queensland houses were on average half the price of Sydney houses.

Terry Butcher

Fettle, Fertle or Fetish?

Terry has also replied to the information published on the word *fertle* in the previous issue of News. The editor includes this but reminds the readers that “opinions expressed are those of the contributor”. However my well intentioned advice to Terry is to let it go before it becomes an obsession.

*“I think you have left yourselves wide-open. **Fertle**: to fiddle, improve, mess about with, fix, to adjust. I’m sure Jim Davey would be happy to make the substitution FULLY FERTLED. Leave Fettle to the Foundry boys.”*

Terry Butcher

Sub-editor’s note: *fertle* is an obsolete dialect word. Both it and the word *fettle* come from the Old English word *fetel* which in turn comes from Old Teutonic and means to hold or “gird up”. *Fettle* has an Australian dialect use which applies to railway line workers making good the tracks and it is this meaning of “putting right” or restoring to “fine fettle” that Jim is using.

News 100

Terry Butcher's perspective.

Yes I also remember the early issues of News because I was the editor for the first six issues. I was also the Secretary and Henry Black was appointed President by the new Committee.

News of course was only meant to inform the membership of current events and to report on previous meetings. Now it is, thanks to the current Editor and 94, issues later, a very professional publication.

I'm lucky to have all 100 issues and it makes interesting reading to peruse through some of the early issues. For interest all members are given a membership number when the person's name is registered in the membership book.

The first ten members received their numbers by ballot. We placed numbers in a hat and each drew out a number which was entered in the book. I remember Henry drawing number 1 which was pretty appropriate and I drew number 8.

Future articles from Terry Butcher



Terry has indicated that the Bruny News was running a series of articles by John Davis ex Light House Keeper of the of the old Tasman Island Light House. If we can get permission, we will reprint these articles in future issues of the Newsletter.

Terry has also sent this image of a 16th century carved wood and Polychrome figure of St. Eligius, the patron saint of Smithies. He found the picture in an Art magazine and thought that it would be of interest to readers. Except for the haircut and tunic, the image could be from any time in the last 500 years. Very little of the blacksmith's art has changed over the years!

BOOFHEAD at Work

Where I grew up in the sixties smoking was virtually compulsory as was reading the Daily Mirror. Both were arguably as harmful. The one redeeming feature of the Mirror was the cartoon section and in particular Boofhead.



With the exception of the American cartoons, the other cartoon characters could have been from anywhere in Australia but Boofhead always seemed to be an essentially inner west industrial Sydney identity.

One image of Boofhead has been imprinted on my memory. Boofhead is standing by his work bench talking to his boss telling him that

“It’s no use boss I’ve tried everything. There’s not a man alive who can make that new tool. You’ll have to buy one after all.”

This editor has a dream of putting Boofhead on the front cover of News.

But this editor does not have the time to go to the State Library and search through

copies of the Mirror for suitable Boofhead images.

THIS IS A TASK A TTTG MEMBER SHOULD EMBRACE.

Never assume to have seen it all

When rehandling chisels I have never been disappointed in man's applied imagination in replacing damaged chisel handles. No doubt, quite often the original connection between the user and the blade (handle) had been flogged beyond recognition, so the replacement handle in most cases, bears no resemblance to the original. The "artisan" however, as long as he has something to hold and thump, seems to be quite satisfied with his work.

Photo 1



The variety of replacement handles is endless as shown in the cluster of recent discards in Photo 1.

Photo 2 shows a matched set of three defiant replacements challenging any enthusiastic worker to destroy them. The chisels on the left have obviously been taken up on the challenge, however, they survived the assault in spite of the good hammering, evidenced by the mushrooming.



they survived the assault in spite of the good hammering, evidenced by the mushrooming.

In the past, ingenuity seemed to go hand in hand with a survivor on a mission. All I can add is “one can never assume to have seen it all”.

John Daniel

Photo 2

Wiesener's Australian Patent Plumb Bob

Reg Eaton

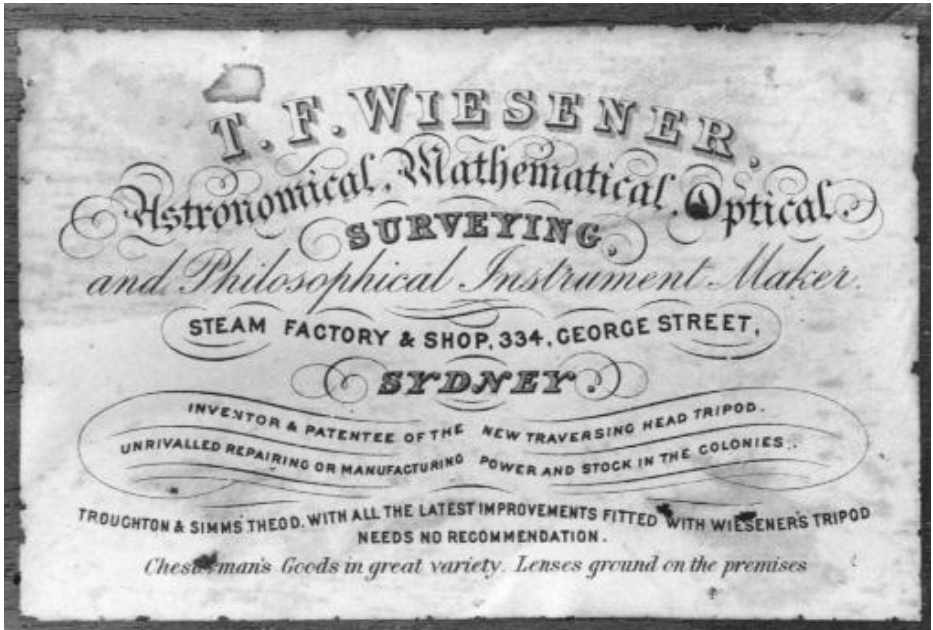
"Aren't you interested in mechanical plumb bobs?" My wife Jane rather facetiously enquired as we were walking through the lanes of hundreds of dealers' cars and vans parked ready for the "off" at Swinderby Antiques Fair. This massive fair boasting up to 4000 stalls is held 6 times a year on an old WWII airfield in Lincolnshire, and trades for 3 days mainly in the open, and in case this is not long enough, most of the casual dealers open up and sell from the back of their vehicles. Then there is the Wild West type stampede for pitches at high noon. "It was like a yo-yo," she continued. Retracing our steps I found this dealer demonstrating the bob to a prospective customer, and indeed the cord was returning into the body of the bob in a fascinating and magical way. For once my silent - but no less fervent - prayer was answered. On being told the modest price the other dealer rejected it out of hand.

Not believing my luck and after the briefest of negotiation I secured the bob. I had recognised it for what it was, a "Wiesener's Patent Improved Adjustable Plumb Bob". I knew these to be very scarce, only four having turned up at any of the English or U.S.A. international or other auctions in the last 20 years, and after 35 years as a tool dealer and collector I have only had one before. Of these five none have worked, as the delicate internal mechanism and external lever are much prone to damage. The only other example I know of is in Terry Butcher's collection. This had, fortunately, been rescued from the vigorous attention of a young man intent on opening up the internal "pocket" with the aid of a hammer, when he only had to give the knurled cap a turn, and it would simply slide out. This one, unsurprisingly, also didn't work! That is until Terry rebuilt it. However, the one I held in my perspiring hand was in almost mint condition with all the original lacquer, cord and hanging hook, and was in perfect working order. Unusually it was made of gunmetal, (all the others being brass) and undoubtedly manufactured later than most of the other examples. It was a pointed ovoid, rather than the more usual turnip shape, also the top screw was rather plain and not waisted, and with a rounded knurling, as shown in the original patent drawings.

William George Wiesener

William George Wiesener was born in 1879 in Sydney, the youngest of three children born to Theodore Frederick and Annie Wiesener

William's father was a German immigrant who arrived in Australia in 1871 already well practiced in the art of watchmaking, jewellery and optical instrument making.



He set up shop at No. 1 Hunter St., but by 1875 had removed to a more prestigious location at No. 348 George Street.

It was here that young William learnt his trade. When his father died in 1897, the not inconsequential firm of T.F. Wiesener was willed to his elder son Frederick, but it appears that William eventually ran the business, probably after he had gained his majority around 1900.

The patent

On the 3rd Sept. 1907 William applied for a British patent for "An Improved Adjustable Plumb Bob" and was soon granted patent no. 19687.

He had probably obtained his Australian patent no. 6427 previous to this, which is stamped on two of the bobs extant.



This was a fine piece of engineering more fitted to his trade as a clock and watchmaker, especially with the coil actuated winding drum and the close tolerances needed in the internal machining.

There was also a further refinement added later that differed from the original patent drawings, this consisted of inserting a tiny leaf spring to hold the pawl or lever against the toothed drum, obviously gravity (as specified) not proving adequate.

It is difficult to imagine that this superior plumb bob could have been much of a commercial success, mainly because of the considerable cost involved in production, for what, after all, was just a plumb bob!

The firm continued trading until 1918 when it was bought by Sidney Watson who founded the Precision Instrument Co. in 1920.

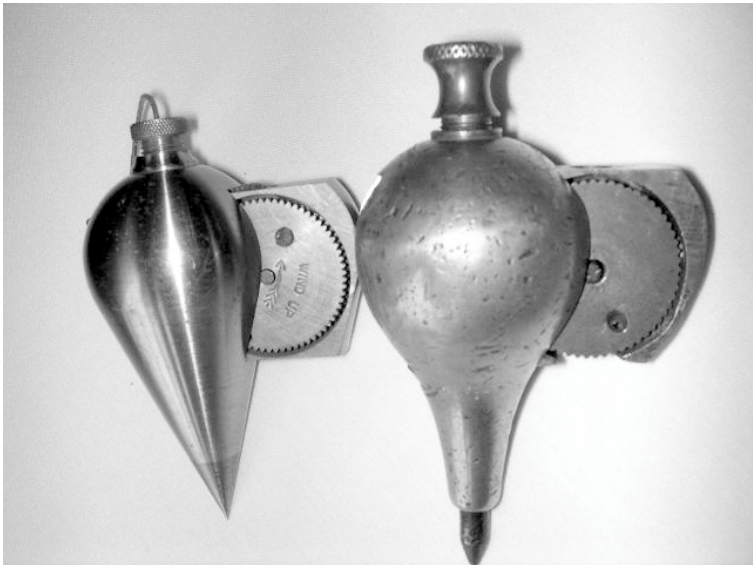
References:

T.F. Wiesener by Julian Holland, Macleay Museum
University of Sydney,
reprinted from Summer Hill edited by Chris Pratten
(Ashfield & District
Historical Society 1999) pp. 83-89

David Stanley Auctions, March 2001 and 2006

Tony Murland Auctions, July 1994 and 1995

Birmingham Free Library



THE LEDGER

New Members

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

Hedley Neil	M477
Chris Meier	M478
Ray Schroeder	M479
Stuart Jackson	M480

IMPORTANT NOTICE

2008-2009 TTTG SUBSCRIPTIONS ARE NOW DUE

TTTG subscriptions for the 2008-09 financial year should be paid before 30th June, 2008. See the Subscription Renewal Notice loose in this edition of the Newsletter. Listed thereon are also the membership numbers of members who have already promptly paid their 2008-09 subs (I thank these members; they should ignore that notice, as should members whose cheque has already been posted). If you have not yet paid, please put a cheque for \$30 in the mail now.

Following our policy of last year (and that of other similar clubs), if we have not received your 2008-09 subscription by 31st July, 2008 then you will not receive your August Newsletter. Should you subsequently pay your subscription, then receipt of your newsletter cannot be guaranteed as print runs are strictly limited in keeping with the club's economical policy (there has not been an increase in subscriptions since the club's inception in 1991).

PayPal Option

TTTG membership subscription payments for financial year 2008-2009 are due before 30th June, 2008. Payments may be made by cheque, by cash at TTTG meetings and workshops.....

AND

TTTG for the second year is offering members the **OPTION** to pay their annual membership subscription online by using PayPal. For those members who do not have a PayPal account and wish to sign up, please go to the PayPal website at www.paypal.com.au and follow the instructions.

For those members who do have a PayPal account: On the Membership page of TTTG's website (www.tttg.org.au) click on Membership near the bottom of the page, then on Subscription Renewal near the bottom of the page.

When you get to the Subscription Renewal page you will find a number of entry fields that need to be filled in. All entry fields are required and will be matched against the member database to ensure they are valid.

To correctly fill out the form you will need your mailing label to obtain your membership number and first and last name as registered by TTTG. From the mailing label enter your membership number WITHOUT the leading 'M', i.e. 'M9999' should be entered as '9999'. The first and last name need to be separated and should be entered as shown on the mailing label including those members that include a partner on the label, i.e. Jane & Joe Bloggs should be entered as 'JANE & JOE' in the first name entry field, and the 'BLOGGS' in the last name entry field. The E-mail address is required to give you notification of payment being made.

Pressing the 'Check Details' button will confirm your details and notify you of any errors that need correcting. If you do encounter an error, they will most likely be:

'The Membership Number must be numeric', to correct this, enter your membership number without the leading 'M'.

'The E-mail address must be in a name@domain format', requires that a valid E-mail address be entered.

'First Name, Last Name or Membership Number do not match any existing member', please re-check you details against the mailing label, if you still have a problem contact the webmaster at webmaster@tttg.org.au.

Once the details have been verified, the page will be updated to show the additional information provided from that which is currently stored in the database, so please verify that the information is correct before proceeding to PayPal.

Please note that if the 'Currently Paid Until dd-mmm-yyyy' information is not showing, it indicates that you are not a current member and after payment is made this information will be updated to reflect your membership status.

To make the actual payment, press the 'Proceed to PayPal' button and you will be taken to the PayPal site to complete the transaction. Once at the PayPal site carefully follow the instructions taking note that you are purchasing a 'subscription renewal' for 'The Traditional Tools Group, Inc.'. When you have completed the transaction, you will re-directed back to the TTTG website and should expect an E-mail from PayPal on your transaction and an E-mail from TTTG indicating your membership status.

Membership Subscription Rates for 2007-2008

The general subscription rate of \$30AUS per annum remains unchanged as it has since 1991. This rate applies for members living within 50 km of the GPO, Sydney and for overseas members. If you live in Australia but more than 50km from Sydney or you are an Australian pensioner, then you MAY CHOOSE to pay only \$25 per annum; however if you can afford to pay \$30 then it would be appreciated.

Postal Address for subscription payments:

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AUSTRALIA

There is a new member application form at TTTG's website (www.tttg.org.au); click on TTTG Membership Application (Application form is a PDF file of 200 KB.)

Subscription Renewal Online option in conjunction with PayPal: See our [Subscription Renewal](#) page on our website to proceed.

Joining TTTG online: This facility is currently under development.

Workshops

There was a very satisfying roll-up at TTTG's Saw Sharpening Workshop on Sunday, 25th May, 2008. The next all-day Workshop is the ever-popular Plane Tuning & Sharpening Workshop to be held on Sunday 22nd June, 2008 commencing at 9:30am at Asquith Boys' High School, Jersey Street (Nth.), Asquith. You can also learn to sharpen any other tool at this workshop. The cost of these Workshops is a staggeringly inexpensive \$20 for TTTG Members or \$40 for non-members. (Non-members may join on the day.) Details from Peter Evans 0419 245 699 or Bob Crosbie 9869 7487 or just turn up.

Clynt Sheehy

Common Tools Explained

Here's something interesting that George Bolliger (the member who CAN file and use a hacksaw) sent Clynt.

As a point of clarification the editor is always anxious to observe that TTTG is the association that never takes itself too seriously.

To the initiated, the workshop can be an intimidating place, full of tools that some people may not know what to do with. To help, here's a helpful explanation of common tools and their uses.

DRILL PRESS: A tall upright machine useful for suddenly snatching flat metal bar stock out of your hands so that it smacks you in the chest and flings your beer across the room, denting the freshly-painted job which you had carefully set in the corner where nothing could get to it.

WIRE WHEEL: Cleans paint off bolts and then throws them somewhere under the workbench with the speed of light . Also removes fingerprints and hard-earned calluses from fingers in about the time it takes you to say, "Oh sh*t!"

ELECTRIC HAND DRILL: Normally used for spinning pop rivets that you're trying to drill out in their holes until you die of old age.

SKILL SAW: A portable cutting tool used to make studs too short.

PLIERS: Used to round off bolt heads. Sometimes used in the creation of blood-blisters.

BELT SANDER: An electric sanding tool commonly used to convert minor touch-up jobs into major refinishing jobs.

HACKSAW: One of a family of cutting tools built on the Ouija board principle. It transforms human energy into a crooked, unpredictable motion, and the more you attempt to influence its course, the more dismal your effort becomes.

WISE-GRIPS: Generally used after pliers to completely round off bolt heads. If nothing else is available, they can also be used to transfer intense welding heat to the palm of your hand.

WELDING GLOVES: Heavy duty leather gloves used to prolong the conduction of intense welding heat to the palm of your hand.

OXY-ACETYLENE TORCH: Used almost entirely for setting various flammable objects in your workshop on fire. Also handy for igniting the grease inside the wheel hub you want to get the bearing race out of.

TABLE SAW: A large stationary power tool commonly used to launch wood projectiles for testing wall integrity.

HYDRAULIC FLOOR JACK: Used for lowering a car to the ground after you have installed your new brake discs, trapping the jack handle firmly under the bumper.

EIGHT-FOOT LONG FOUR BY TWO: Used for levering an automobile upward off of a trapped hydraulic jack handle.

EASY-OUT BOLT AND STUD EXTRACTOR: A tool ten times harder than any known drill bit that snaps off neatly flush in the stud thereby ending any possible future use.

BAND SAW: A large stationary power saw used in workshops to cut good aluminum sheet into smaller pieces that more easily fit into the trash can after you cut on the inside of the line instead of the outside.

TWO-TON ENGINE HOIST: A tool for testing the maximum tensile strength of everything you forgot to disconnect.

1/2 x 24-INCH SCREWDRIVER: A very large pry bar that inexplicably has an accurately machined screwdriver tip on the end opposite the handle.

AVIATION METAL SNIPS: See hacksaw.

PHILLIPS SCREWDRIVER: Normally used to stab the vacuum seals under lids and for opening old-style paper-and-tin oil cans and splashing oil on your shirt; but can also be used, as the name implies, to strip out Phillips screw heads.

STRAIGHT SCREWDRIVER: A tool (which like the wood chisel) is for opening paint cans. Sometimes used to convert common slotted screws into non-removable screws.

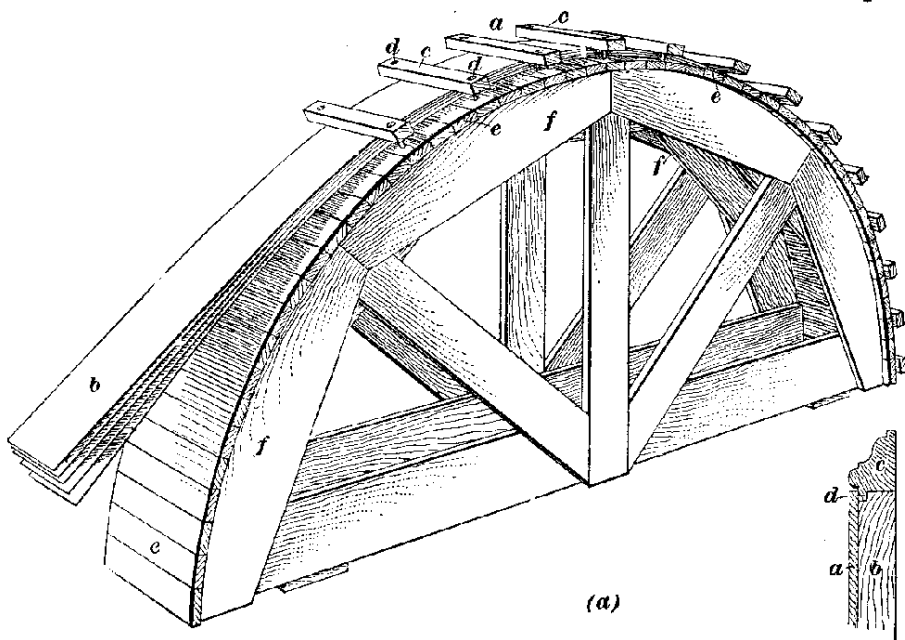
PRY BAR: A tool used to crumple the metal surrounding that clip or bracket you needed to remove in order to replace a 50 cent part.

HOSE CUTTER: A tool used to make hoses too short.

HAMMER: Originally employed as a weapon of war, the hammer nowadays is used as a kind of divining rod to locate the most expensive parts adjacent to the object we are trying to hit.

MECHANIC'S KNIFE: Used to open and slice through the contents of cardboard cartons delivered to your front door; works particularly well on contents such as seats, DVDs, liquids in plastic bottles, collector magazines, refund checks, and rubber or plastic parts. Especially useful for slicing work clothes, but only while in use.

DAMMIT TOOL: Any handy tool that you grab and throw across the garage while yelling "DAMMIT" at the top of your lungs. It is also, most often, the next tool that you will need.



Laminae thickness

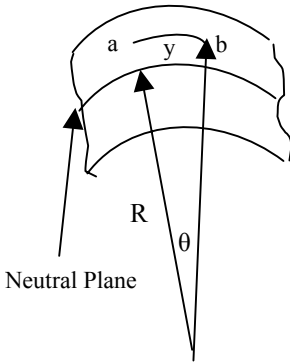
“Before commencing work, it is necessary to determine the thickness of the piece that can be bent round the cylinder; this thickness in inches is, according to the rule generally used, equal to the radius of the curve in feet multiplied by .05. If in the present case the radius of the curve is 4 feet, the thickness will be $4 \times .05 = .2$ or $1/5$, inch. Hence it will take five pieces to make up a thickness of 1 inch.”

The drawing and description comes from ICS Reference Library London.

The book is undated but I think it is immediately after World War One.

I don't have much maths but I do understand the above. I can follow how the answer of $1/5$ inch thickness will bend around a 48 inch radius was derived. My mechanics is pretty basic but I do know that different timbers have different bending moments. So will every timber follow this rule?

Can one of TTTG's Engineers please explain?



The Explanation: The mathematics is not really difficult as we are talking about a circular arch. The sketch is meant to represent a small piece of the lamination, the top of which is in tension and the bottom in compression. In the middle is the neutral plane. We examine a small tension element *ab* which is *y* inches above the neutral plane. The length of *ab* is then $(R + y) * \theta$ where θ is the small angle subtended by the piece. Before it was bent, the small piece was the same length as the corresponding piece on the Neutral Plane or $R * \theta$ so the strain of *ab* is the increased length divided by the original length or:

$$\text{Strain} = \frac{(R + y) * \theta - R * \theta}{R * \theta} \text{ which simplifies to } \frac{y}{R}. \text{ Now according to Hooke's}$$

$$\text{Law, Stress} = E \times \text{Strain where } E \text{ is Young's Modulus so Stress in } ab = \frac{E * y}{R}.$$

Now the stress in *ab* will be at a maximum the furthest it is away from the Neutral Plane so:

$$\text{Maximum stress} = \frac{E * t}{2R} \text{ where } t/2 \text{ is half the thickness of the lamination. Putting}$$

this another way and using feet instead of inches for *R* we get

$$t = \frac{24 * R * \text{max. stress}}{E}$$

We now need to look at typical values for both Young's modulus and maximum stress for different timbers.

Timber	Young's Modulus <i>E</i> (x10 ⁶ lb/sq in)	Maximum Stress (lb/sq in)
Ash	2.3	8700-16000
Beech	2	8700-16000
Oak	1.6	8700-16000
Teak	1.9	8700-16000
Mahogany	1.7	8700-16000
Scots pine	2.3	5800-11600

Now if we look at minimum strength Scots Pine with a radius of 4 ft, the outside fibres will fail if the lamination thickness exceeds 0.24 inches. The rule of thumb says 0.2 inches which gives a small factor of safety of 1.2. If we had used the minimum strength for Ash, the laminations would have to be 0.36 inches before they failed at the surface, a factor of safety of 1.8, so the rule of thumb seems to give the right answers. Sub-Editor

Old Files

TO SHARPEN A FILE.

The files must be thoroughly cleansed in warm water containing a small quantity of potash, which readily removes any grease or dirt from them. After the files are thus cleansed, they must be washed with warm water and dried by artificial heat. Next, place 1 pint warm water into a wooden vessel, and put into it as many files as the water will cover. Then add 2 ounces blue vitriol (sulphate of copper) finely pulverized, and 2 ounces borax, well mixed, taking care to turn the files over, so that each may come in contact with the mixture. To the above mixture now add 7 ounces sulphuric acid and $\frac{1}{4}$ ounce cider vinegar, which will cause the files to assume a red appearance at first, but they will in a short time resume their natural color. Then they must be removed, washed in cold water, and dried by artificial heat. When dry, they must be sponged with olive oil, wrapped in porous paper, and laid aside for use

Sharpening Old Files

Bob Crosbie

The instructions for sharpening old files reproduced above are from Dicks Complete Log and Lumber Measurer New York circa 1900.

Numerous similar recipes can be found in old publications.

All recipes detail four steps:-

- a) Clean the file
- b) Immerse the file in strong acid
- c) Remove the file and neutralise the acid
- d) Dry and oil the file

Some also remind the reader to remove the oil before using the file.

It is common knowledge that strong acid will recut file teeth but few are aware that any acid will sharpen files. The only difference is the time taken and the risk reduction. Strong acid takes minutes, weaker acids take days. If I had to write a risk assessment for sharpening files with say nitric acid it would be a lengthy document. The risks involved are simply too great to consider.

In contrast the alternative of using weaker acids is safe and simple. The two freely available weak acids are acetic (vinegar) and citric. Both have advocates.

The author has been experimenting with citric while Jim Davey has been using industrial cleaning vinegar. Both have selected the cheapest option in their circumstances. Both have had good results.

Jim is more meticulous in that he cleans the files before immersing them in vinegar. I tend to put them in hot citric acid solution dirt and all. Don't ask how much citric acid powder I use in how much hot water because I cannot tell you. This seems to be one of the few cases where near enough is good enough.

We wash, neutralise and dry the files after soaking in the acid. My files often take two soakings before they are sharp because I don't clean them first. Some things I never learn!

About old files

All files aren't equal some are better than others. Look at the bottom of the tang. Look for what? Words like Cast Steel, Disston, Nicholson spell quality. The key is Cast Steel, this means that the file is probably pre 1914 and has no alloys added. However there are dozens of top quality brands of files and the only real guide is experience. You only pay a dollar or so for any old file so you can afford to make some mistakes.

The best use for an old file is to keep on filing! So try resharpenering it first. When I amass a handful of old files I soak them in a drum of citric acid. The ones that come out with sharp teeth I clean and oil for future use. What happens to the others?

If the files come out with teeth missing or other damage I never throw them out. Good files were made from the best steel and can be recycled into other tools. This is where you need some metal working skills.

Suggested Uses for Old Files

Files are of course too hard to cut with other files. But the teeth can be ground or lapped off a file. You only do it this way when the temper of the file is perfect for the new use of the file. If you intent to use the file in its hardened state pick a file with fine teeth. Second cut or smooth have less hard metal to remove. A dead smooth file could easily be resurfaced on a diamond plate. Second cuts and smooths often come with parallel sides or useful shapes. Here are a few examples.

Long Paring Chisel (for wood)

These chisels don't need a tang and can have a high temper. A hand smooth or second cut file is perfect for conversion. Grind the teeth off free hand, if you are up to it, and lap on a diamond plate.

Metal Scrapers

The older generation of engineers routinely made flat and bearing scrapers out of old files. A triangular scraper made from a large saw file, "three square" is one of the most useful tools you can make. Grind and lap, abrasive paper and oil give the best finish. Be careful of the edges.

Reamers

Excellent reamers for wood and soft metal can be made from square and triangular files. See instructions for Scrapers.

Annealing old files

In most cases you will need to soften old files before reshaping. One thing needs to be said ***“do not use old files as wood turning tools”***.

That is without softening the file, removing all the teeth and hardening and tempering the new tool correctly.

To soften an old file heat it above cherry red and cool it slowly. Sounds easy but the file needs to be soaked in the heat and the cooling slowed down. I use our slow combustion fire when my wife isn't looking. Even so she always caught me out as I rarely clean out the ashes. Such a dying fire is ideal but burying the heated file in a bucket of lime or sand also works well.

The softened file will have some scale on the surface. It needs to be pickled. Again the old way was to use strong acid. Vinegar and citric do the job just as well. Once the scale is off you should have a nice soft piece of top quality carbon steel. If it is a modern file examine it for cracks at the root of the tooth. The alloyed hardeners may have cause stress fractures during annealing. This is the file you throw out.

The steel can now be hack sawed, drilled or filed. Cross filing will quickly remove the teeth and then draw file give a well finished surface.

Do not go beyond the filing up as you now need to heat treat the tool. Teach yourself or attend the next TTTG Blacksmithing workshop.

Tools to make from softened files

This is really a huge menu. In the past screw drivers were often made from softened files. The most useful screw that you can't buy without taking out a bank loan is a plane-iron screw driver. Use the end with the tang. At the workshops students often admire the handle on my plane iron screw driver but I'm most proud of the blade I haven't hardened it and it works well and the well finished surface fights rust.

In truth what you can make from a softened file is determined by your metal working skill. I've even seen saw sets made from files. This is a great low risk way to learn metal working. I once had a problem student who wanted to make a knife. After a few weeks filing up a softened file he decided he didn't need a knife and morphed into a nice person.

HANS BRUNNER TOOLS

A few weeks back Hans changed the format of his web page and made the following announcement;

Over the next weeks and months I'll turn my web site into Australia's largest tool auction site. I will try my hardest to list the rare, the odd, the unusual and the outstanding. 15 years of quality tool sales to be continued..... keep coming back for more surprises.

A week after the initial new listings some superb tools started to be posted at really attractive prices. For example several potential buyers missed this plane



Very nice English scroll front mahogany infill smooth plane dated 1848. Plane has a brass lever cap and brass decorations to the back infill. Unique.

Hans is attempting to provide an alternative to Ebay.

The tools are offered with estimated prices. If you want the tool immediately just pay the highest estimate. If you want to chase a bargain enter a bid. Hans is now providing Paypal as well as other payment options. This is how he describes the new the changes.

If you use the paypal shopping cart you have to pay with credit card or linked bank account

My use of the paypal cart is driven by necessity only. The majority of my customers prefer it and just about all my suppliers demand it. I absolutely don't endorse the business practices of eBay or paypal but I simply can't do without them. I'm sorry that this can cause a disadvantage for those of you who want to pay outside the paypal system. I have to stress that it's most unusual that several people want to order the one tool at the same time, as it happened with lot 50. So please just email me asap if you're thinking about buying a lot using another payment method.

I'm still looking for a real live auction venue and an auction date of early September.

The editor emailed Hans with a few questions. The reply indicates the potential of the new sales approach.

“The new format is almost too good, at this rate of sales I will never have an auction or worse, end up with an auction of the leftovers. There will have to be more lots marked for auction only but as long as only the planes sell I have no real concerns. I'm thinking of using a country auction up here (most probably Toowoomba) and planes never do well in those auctions and usually go to absentee bidders anyway. The other stuff, however, is simply made for live auctions”.

To have a look at Han's site go to Google and enter Hans Brunner Tools.

When you visit the site have a browse at *Stanley by Numbers*.

The editor is impressed with the new format. Hans is providing a safe buying option. The venue provides opportunities for risk taking, putting in a bid, and for certainty, putting your hand in your pocket and paying the asking price for something you really want.

Hans Brunner's Stanley by Numbers

My eyes tend to glaze over when I'm asked “What's it worth? Valuing tools is really difficult. There are simply too many variables to give an accurate estimate. This is particularly true with planes. Everyone thinks Stanley planes are rare and valuable. Everyone has seen one in an antique shop at a huge price. The best guide to Stanley planes is still Patrick's Blood and Gore. That said the estimates are in US dollars and Patrick is a bit quirky at best.

To give him credit Hans has been bold enough to put his opinions on the public record.

Stanley by Numbers is a user friendly guide to Stanley planes. The estimates are in Australian dollars and the text is brief and readable.

Some of the descriptions may be too brief. For example the description of the 5 ½ doesn't mention the earlier narrower blade. Such criticisms would be petty point scoring. The important thing is that the price estimates seen very close to the reality of the market.



PLANES
FULLY FETTLERD
TUNED AND SHARP
STANLEY BAILEY
STANLEY BLOCK PLANES
FETTLING SERVICE

REPAIRS
TRADE PRICES ON:



THE LEADER IN
DIAMOND SHARPENING

DMT DIAMOND PLATES

DIA-SHARP PLATES



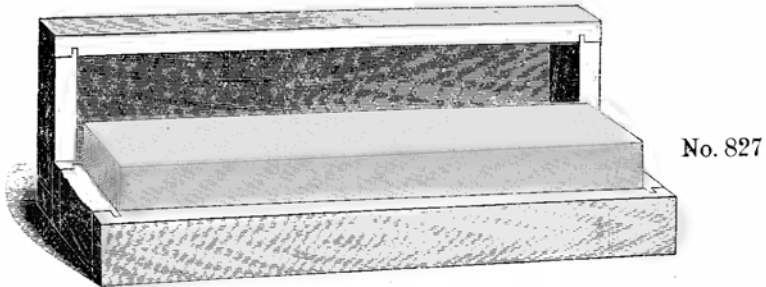
ICE BEAR WATERSTONES
M2 HSS ACADEMY BLADES
LEATHER CHISEL ROLLS

Jim Davey

Ph 02 4447 8822 PO Box 967 Nowra NSW 2541
JDAVEY@bigpond.com

Mounted Oil Stones

Most oil stones are fitted into case or boxes by the owner. Stones in ready-made boxes have always been available. These commercially fitted stones were called mounted stones. The commercially available wooden boxes were pretty basic such as the one below from the 1925 Osborn & Co Southampton Catalogue,



827 No. 1 Washita Oil Stone, mounted in case. $8 \times 2 \times 1$ in., 4/6 each

The commercial boxes were often built up whereas user-made boxes were usually cut out of the solid.

As well as wood commercial oilstone boxes were also made of cast iron and at a later date of aluminium.

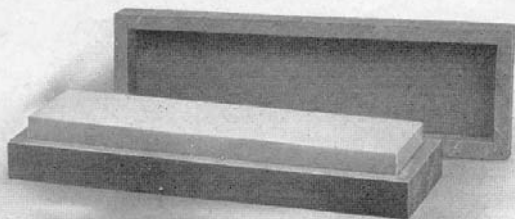
Norton Abrasives offered India and Crystolon Stones mounted in Polished Wooden Cases and mounted in Iron Boxes.

The illustration is from

Grinding Wheels and Machinery
Norton Products
Norton Company USA 1912.

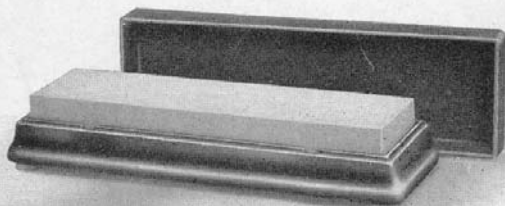
Norton really could sell their products as even after nearly one hundred years the description of the Iron Boxes with felt pads and the stone resting on felt has me thinking

“where can I get one?”



**India or Crystolon Stones
MOUNTED IN POLISHED WOOD CASES**

Shape	Dimensions	Price Each Coarse, Medium or Fine Including Case	Approximate Weight per Dozen Complete
0	8 x 2 x 1	\$1.25	25 lbs
1	8 x 1 $\frac{3}{4}$ x 1 $\frac{1}{4}$	1.25	25 "
1 $\frac{1}{2}$	7 x 2 x 1	1.00	20 "
2	6 x 1 $\frac{5}{8}$ x $\frac{3}{4}$.75	11 $\frac{1}{4}$ "
3	4 x 1 x $\frac{1}{2}$.55	3 $\frac{1}{2}$ "
29	6 x 2 x 1	.85	15 "



**India or Crystolon Stones
MOUNTED IN IRON BOXES**

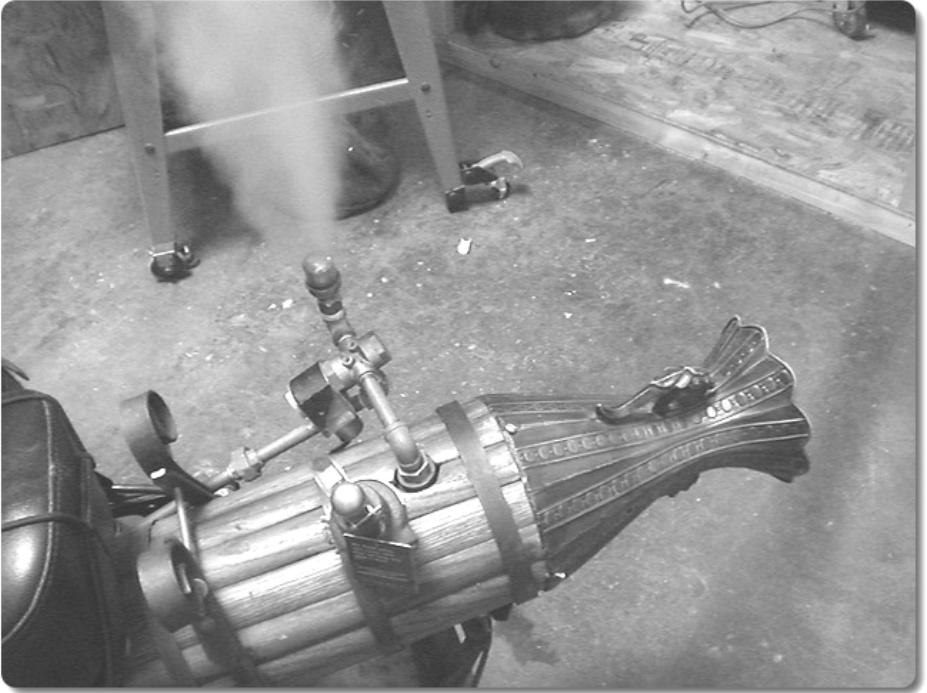
Shape	Dimensions	Price Each Coarse, Medium or Fine Including Box	Approximate Weight per Dozen Complete
0	8 x 2 x 1	\$1.50	58 lbs.
1 $\frac{1}{2}$	7 x 2 x 1	1.25	50 "
2	6 x 1 $\frac{5}{8}$ x $\frac{3}{4}$	1.00	36 "
29	6 x 2 x 1	1.10	40 "

The iron boxes are fitted with four cork feet which will, to a great extent, prevent them from sliding on bench while in use.

The stone rests on a piece of felt in bottom of box which, absorbing a quantity of oil, keeps the stone moist.

Polished wood cases, 25 cents each; finished iron boxes, 50 cents each.

STEAMPUNK



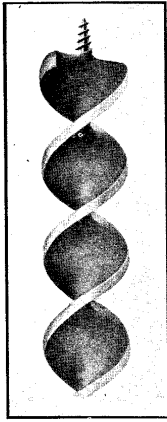
The picture shows the rear end of a steam powered motor cycle. Yes you are still reading TTTG NEWS. Maybe the editor has lost it but perhaps some readers might be interested in finding out about Steampunk.

The current Doctor Who series from the BBC incorporates some elements of steampunk. The interior of the Tardus is reminiscent of Victorian technology. Put simply steampunk explores the possibility of alternative histories, or futures, where nineteenth century technologies such as steam power have remained viable.

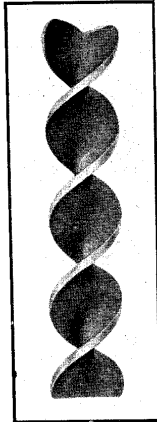
This is essentially a literary style which extends the gothic novel and also appropriates elements of science fiction and Hammer Horror. In some respects it can be a bit anti rationalist. I've read a bit of steampunk and some of it is very good. The genre has led to individuals making steampunk artefacts such as the steam motor cycle. Google steampunk and have a look.

There is a photo of a steam Shop Smith on the web. Steampunk tools?

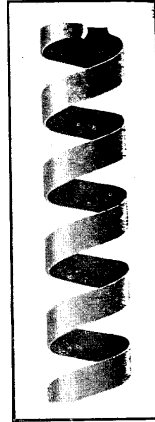
Explosives on the Farm.



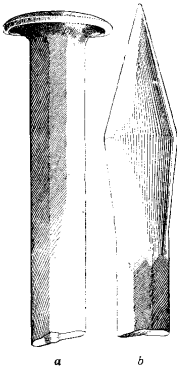
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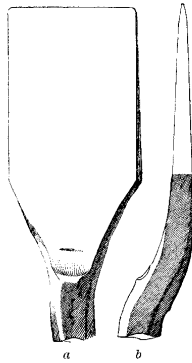
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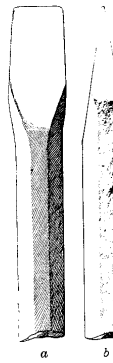
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4



5



6

Implements used in Clearing by Explosives

1 Mathieson Wood Auger. 2 Mathieson Wood Auger screw removed. 3 Bull-nose Auger.

4 Bull Bar. 5 Wide Chisel end of Cutting Bar. 6 Narrow Chisel end of Cutting Bar

Farmers' Handbook NSW Department of Agriculture 1941

LINNWOOD

The next Friends of Linnwood Open Day is Sunday 13th July.

American Independence

Car Display including:

Studebaker Car Club
Packard Car Club
Willys, Overland, Knight Register
The Hudson-AMC Car Club
NSW Coca Cola Collectors Club

And TTTG will be there with a display of American Tools.

The Open House starts at 11am and finishes by 4pm.

Linnwood is a fine old house and well worth a visit.

The address is

25 Byron Road
Guildford.

For information about Linnwood

phone
9632 9203

or

email
linnwood@optusnet.com.au

TTTG will be on the porch displaying rare American tools.

STANLEY,

SARGENT,

MILERS FALLS,

GREENLEE,

DISSTON

2008 Timber and Working With Wood Show.

TTTG was at the first WWW Show and TTTG will be at this one!

The large TTTG Stand will have a display of tools.

TTTG members will be demonstrating the use of old tools.

Jim Davey will be demonstrating sharpening.

He will also have a limited number of fine planes for sale
Also a select range of the best sharpening equipment for sale.

John Daniel will have some rare tools for sale.

Jack McQuillan will also have some fine tools for sale.

Bob & Pat Peak will have a vast array of quality tools on offer
at the fairest prices.

TTTG publications will be on sale at show prices.

Bring your old tools to get answers from Fred's "Old Tool
Question Corner"

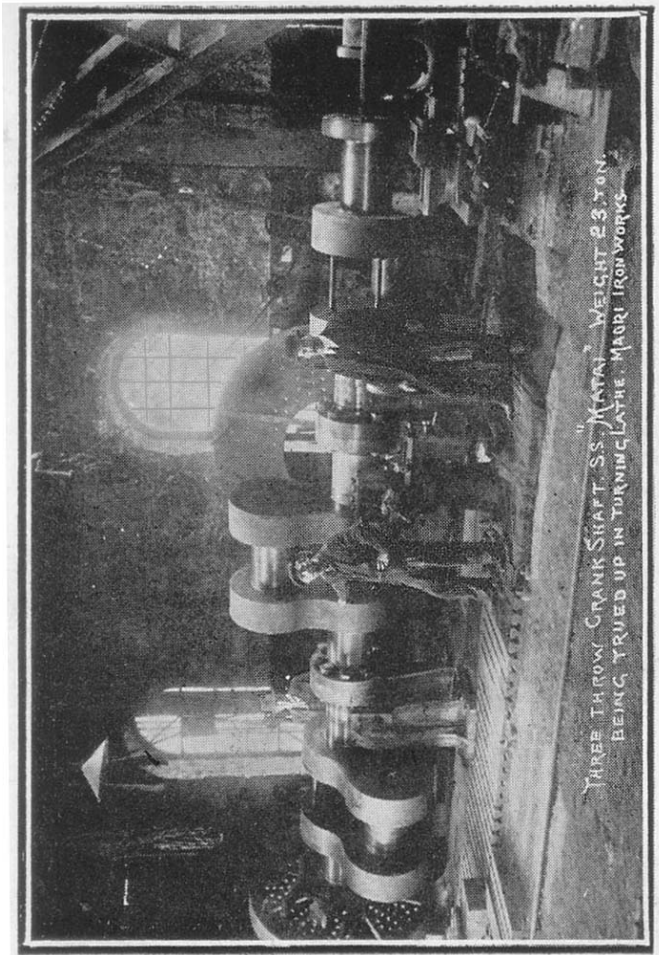
Tool chests made by railway apprentices in the 1920's - a
patternmaker, a coachbuilder, a cabinetmaker; and the tools
they used. The display comes from the Group collection, and
includes recent acquisitions.

Introduce yourself to the members manning the stand, and
kick around any old tool matters you are
interested in.

There may even be some tools for sale that finally adds the
missing rust to your collection.

THIS IS AN EVENT NOT TO BE MISSED

A Big Lathe!



This photo is from an untitled handbook by Stevenson & Cook Engineering Co. Ltd. Port Chalmers New Zealand.

The handbook is the fifth edition.

It was printed in Dunedin by "The Evening Star" Co., Ltd. In 1920
*Truing up a twenty three ton crankshaft
at T Maori Iron Works Port Chalmers.*

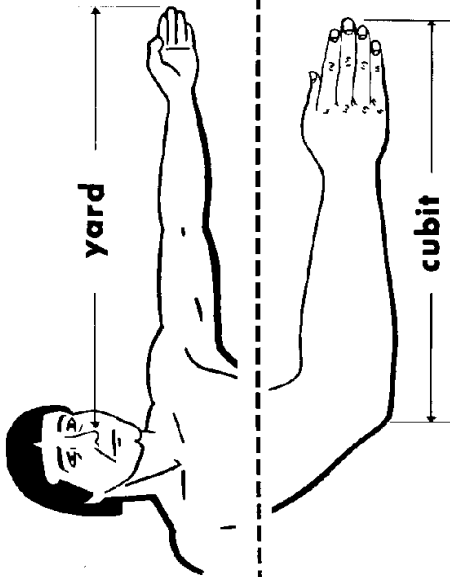


Fig. 1.—About 6000 B.C., parts of the body were used as the first standards of measurement.

