

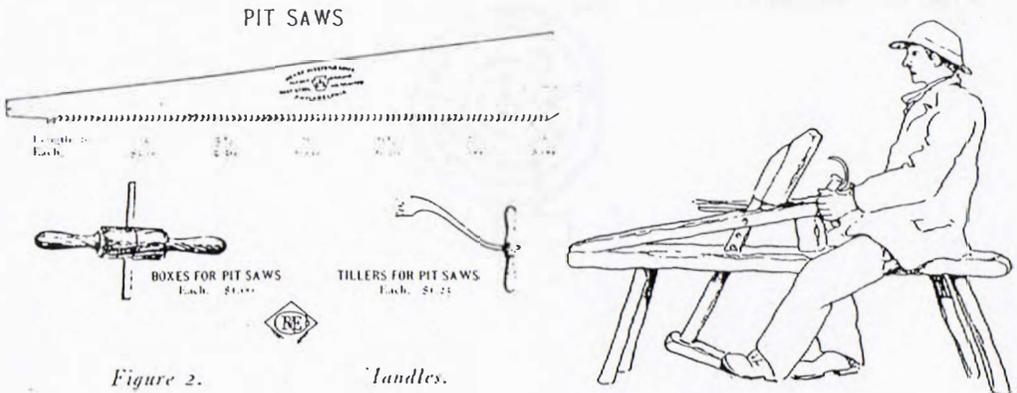
PIONEER SKILLS OF AUSTRALIA

This rather grand sounding title is the front for a rather ad hoc group of individuals of disparate interests but with the common aim of preserving the skills of earlier times.

The skills practised, tend to concentrate on rural activities and cover occupations such as sleeper - hewing, shingle splitting, adzing, coopering, bullock driving, ploughing with horses, blacksmithing, wheelwrights, whip making and other leather crafts. The range of skills is really governed only by the abilities of the members. The popularity of 'pioneer park' and museums has encouraged the preservation of many skills and a resurgence of interest in horse drawn vehicles ensures the future of wheelwrights, carriage builders, harness makers and farriers.

Gulf Station, a National Trust property at Yarra Glen, is the centre for many of the groups activities, with a major event taking place over the Anzac day weekend each year. Local branches of the group organize work shops and displays in country districts throughout the year. The efforts of a member from Orbost has led to the re establishment of sleeper-hewing as a competitive event at the Royal Melbourne Show. Other skills are demonstrated on 'Farm Sunday' as an adjunct to the sleeper-hewing competition. 1989 also saw the introduction of horse shoe making on a competitive basis. Information about future events, and other aspects of the group, may be obtained from the president Ralph McDonnell

Alan West



THE ADZE

Like most basic woodworking tools, the adze has had a development period of many thousands of years, and the present form of the tool has changed little in the last 200 years. It is virtually an axe with the cutting edge at right angles to the handle. The earliest form of the adze had a stone blade and was probably used as an aid to hollowing logs to transform them into boats or bowls.

The modern adze is a steel forging with a tapered socket or eye, usually rectangular but occasionally round. The tapered eye allows the handle to be removed to facilitate sharpening of the cutting edge. The basic adze is numbered from 00 to 5 with weights ranging from 3 1/2 to 4 3/4 lbs and cutting edges from 3 to 4 1/2". Over 50 varieties of adzes are listed with many specialized types outside the basic range. General purpose carpenter's adzes can still be purchased new, and clearing and garage sales will occasionally produce an older type. Unfortunately, these old adzes have usually been used as garden mattocks (The Cyclone catalogue even suggests that an adze can be useful in the garden!) However, a bit of work will restore the cutting edge to its correct shape (flat on the back and bevelled on the opposite side as in a plane blade). A well worn adze can have its cutting edge restored to a usable size by welding on an additional piece of suitable steel and grinding to shape. One theory has it that the modern mattock developed from the double sided mortise axe which was developed to enable both the sides and ends of a mortise to be cut from the one operating position.

Adzes are used for removing heavy waste, levelling, shaping and trimming surfaces. This sees the tool now being used mostly in traditional areas such as boat building, furniture and house construction and restoration.

In use, the adze swings like a pendulum with one hand fixing the top of the handle to the hip and the other guiding and controlling the direction of the cut. To be effective the cutting edge needs to be very sharp and care must be exercised to avoid accidents.

Alan West

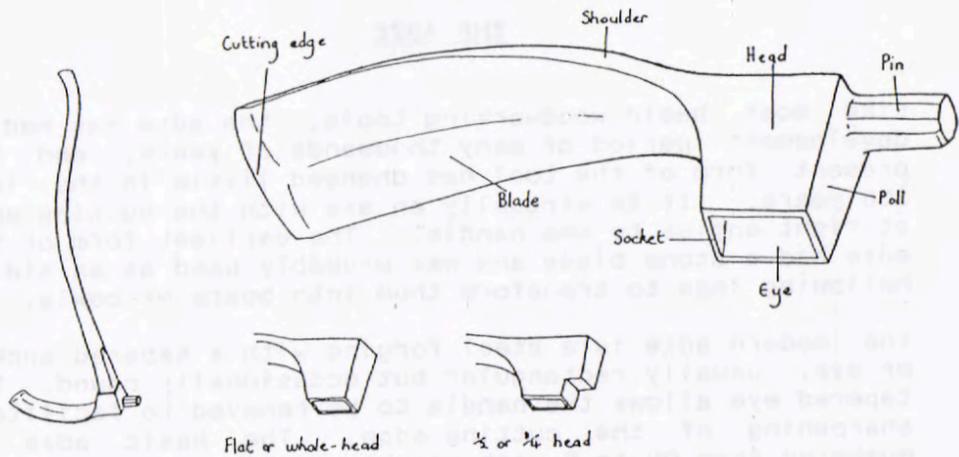
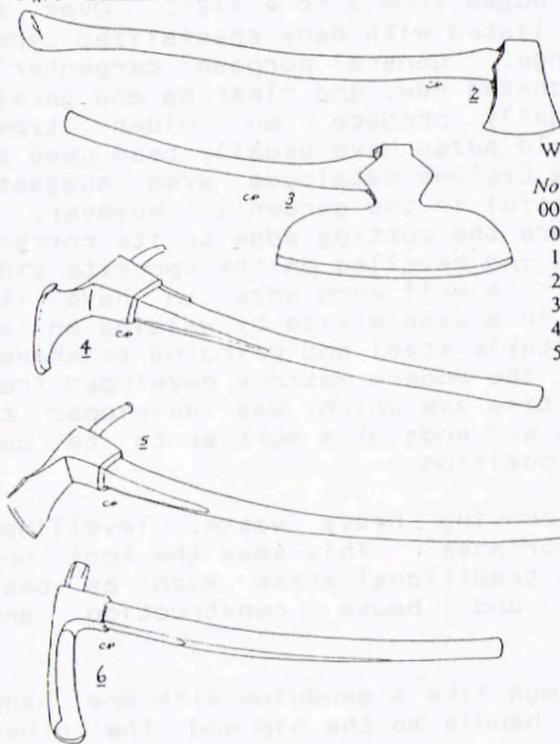


Fig. 1 Diagram of an Adze blade



Weights and widths of blade:

No.	Weight (lb)	Cutting Edge (in)
00	3½	3
0	3½	3½
1	3½	3½
2	4	3½
3	4½	4
4	4½	4½
5	4½	4½

Fig. 2 No. 2 - felling axe. 3 - broad ext. 4 - lip adze.
5 - Plane adze. 6 - Colt's wool adze.

PIONEER SKILLS: SLEEPER HEWING

Sleeper hewing as we know it didn't become established in Australia until 1860. Before that time broadaxes were of a medieval type with long pointed blades. These dated as far back as 2000 B.C. Until 1860 sleepers were squared from small round logs on two sides only, and were little more than fence posts. With the production of better quality tools after 1860 such as modern broadaxes and steel wedges, larger trees were able to be worked. Logs were split into billets using a wooden maul to drive the wedges. Some mauls weighed as much as 20lb or more and were made from 6" to 10" logs of red gum or red box. With the manufacturing of steel sledge hammers in about 1910 the use of wooden mauls slowly died out and by 1930 they were rarely seen.

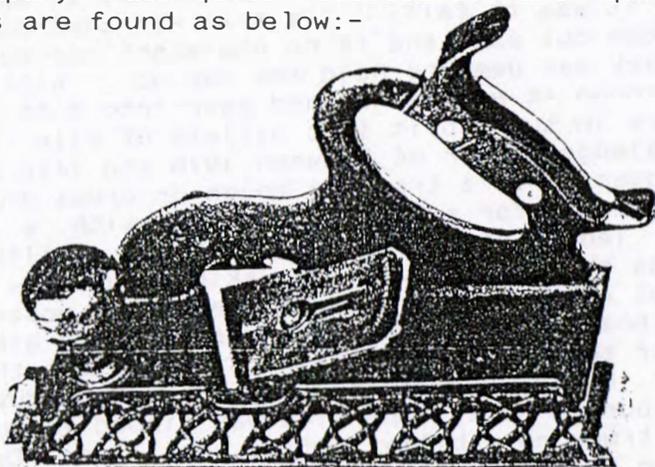
Sleeper hewing is a highly skilled profession, and it was necessary to serve an apprenticeship. Sleeper hewing was mostly a family concern where fathers taught their sons who were registered as assistants and were usually granted a licence to work on their own when they reached 21 years of age; although some received their licence as young as 17 years. A sleeper hewers tool kit consists of a chopping axe, broadaxe, sledge hammer, wedges, cross cut saw, sleeper hook, cant hook and bar, a 10" by 5" board, chalk line, blue pot and branding hammer. Trees for sleepers were selected and sounded for wood depth by driving a chopping axe into the side of the tree trunk and listening for the thud of solid wood to echo back or the drumming of a hollow. A suitable tree was ring barked, then a scarf was cut with an axe to ensure the direction it was to fall. The tree was then backed down with a cross cut saw, and if no assistant was available a forked stick was used to hold the saw up. With the tree on the ground it was barked and sawn into 9 ft lengths. These were in turn split into billets of size 10" by 5" using a sledge hammer of between 10lb and 14lb to drive steel wedges. If a tree was tough or cross grained it was not unusual for a groove to be cut with a broadaxe the full length of a log to assist the splitting. A billet was then rolled onto two skids, usually stringy bark about 4 ft in length and as level as possible. A 10" by 5" board was then used to mark off the sleepers on each end of the billet and a line struck along the two 5" sides. A billy was used to hold blue chalk dust or ink made from burned bark, the line was dipped in the billy and when struck on a billet left a neat line. The billet would then be scored in with a chopping axe after which the excess wood was squared off with a broad axe. The billet was then turned up onto one squared edge and the same procedure repeated on the two 10" sides.

INTERESTING FINDS

Always on the lookout for old, and unusual tools I was at a friend's place helping him restore an old oak table. He decided to square off the leg ends, and out came this unusual plane which had a skewed cutter and could be used on a shooting board. Trying not to be too enthusiastic I asked to have a look at such an interesting plane; he said it belonged to this grandfather. I asked would he consider selling, and he said that he wouldn't as it had sentimental value.

Twelve months went by and I thought I would give him another try, so I made him an offer which was my starting price and he accepted. Going home with a plane that I thought was something special was a great thrill. I thumbed through the few books I had and found no reference to this particular plane. I took the plane to the next H.T.P.A. meeting to see if someone could identify it. Frank Ham found the plane listed in 'Patented Transitional and Metallic Planes in America' which we discovered had a scrolled cast fence which I did not have. Feeling deflated because of the plane being incomplete, I went armed with the reference book to my friend's, and to my delight he said he thought he had something like that. Sure enough there it was in all its glory. I later acquired 'The Antique Tool Collectors Guide to Value' which refers to this plane under Filesters.

Plane made by Metallic Plane Co 1867 - 1880. It appears this company was quite successful and quite a few specimens are found as below:-



Metallic Plane Co, Iron Filetster Plane, 10 1/2" lg. x 3" w. Single Skew Iron, 2" w., marked Excelsior Cutter Metallic Plane Co. Rosewood Knob & Handle. Variation with decorated fence & iron held with a screw. Patents Unknown.