degrees facing forward to give maximum toughness and wear properties. A side bead made in the 1930s has the boxwood insert with its grain along the sole, and is thus not very effective. Complex moulders were made with "spring", and were designed to be used at an angle to the wood of anything from 15 to 40 degrees. In use, side pressures must be applied to keep the

Right angles marked on heel and toe show the angle to hold for correct use

A Moulding Plane With Spring

plane on track and this helps to prevent the plane from running off the moulding. In addition, the mould shape was cut across the sole rather than up the side, and this feature made it easier to cut a uniform mouth. The craftsmen recognised that wood varies enormously in its properties and developed a range of bed angles to meet the need for efficiency. Common pitch of 45 degrees was used for softwood, the York pitch of 50 degrees was useful for both softwoods and less-demanding hardwoods, regular hardwoods needed the middle pitch of 55 degrees, whilst difficult, curly grained woods took the Half pitch of 60 degrees or even higher angles to work them, this being more of a scraping than a cutting action. As machines took over the work of making mouldings a general purpose bed angle of about 52 degrees became common, except for match planes (tongue and groove), ploughs and beads, where 45 to 48 degrees seems to have been the norm.
If a complex moulding plane had no spring, the wedge and cutter cavity would create an uneven mouth. The mouth would widen as the shape of the mould rose into the plane and narrow again as it moved back towards the plane base.

Creating A Uniform Mouth On Moulding Planes
The blades were made from wrought iron with a thin piece of carbon steel swaged to the top surface of the cutter section. Steel was both expensive and in short supply in the 18th century. Laminated blades were still being used in the early 20th century, and I have an English Stanley #5 that has a laminated blade. The blades were tapered back from the cutting edge; this gave control over cutter positioning and increased the security of the wedging but suffered from enlarged mouth opening if the blade was shortened by resharpening.

**USE OF MOULDING PLANES**

Successful use of moulding planes depends upon proper adjustment and tuning. The sole must be uniform in shape along its length and it must be straight in both directions. A lateral bow will make it impossible to keep the plane on the developing moulding, and vertical irregularities, especially just ahead of and just behind the cutter will make proper setting of the cutter impossible. Patient work with scrapers, glasspaper and a straightedge will clean up low and high spots, but a lateral bow is probably not worth attempting to fix. To add to the problems, a plane that is straight in winter may develop a bow in summer.

The blade must be flat on top so that the correct cutting angle is attained. To achieve this, the shape must match the sole at all points and adequate relief must be provided at the back of the blade over the entire shape. The wedge must fit closely along its length and should extend almost to the cutting edge so as to direct the shavings out of the mouth of the plane.

Efficient use of moulding planes comes with practice - lots of it!
A

lthough I had visited the United States previously, I had never attended a tool collectors’ meeting there. The spring meeting of the Mid-West Tool Collectors’ Association was to be held at Decatur, Illinois 150 miles south of Chicago. This MWTC meeting from the 10th to the 14th of June would have a large number of tool collectors, dealers and authors present. A large number of tools would be on sale as well, so I arranged a tour with the Decatur meeting as a central focus.

We arrived in San Francisco where I contacted and visited John Wells, an architect who deals in Stanley planes. As well, he has an extensive collection of rare patented metallic planes, some of which are illustrated in Roger Smith’s book.1 After visiting Yellowstone National Park and the Grand Canyon we flew to Decatur via St Louis. Decatur is a town of 95,000 situated on the prairie, and the venue for the meeting was the Holiday Inn on its outskirts.

The day before the meeting officially starts the keen collectors and dealers have a “tail-gate” sale in the motel car park. This is like a tool trash and treasure market. It started at 5.30am and was still going strong at 4.00pm when I arrived! Wooden bottom (transitional) Stanley planes were in abundance at US$30 to US$40, but many rare and unusual tools were available at a price: for example a gunmetal Stanley plow (probably a #42) was priced at $3500!

Thursday morning commenced with the setting-up of displays by members. I took some miniature planes and rules together with information about the HTPA for my display, and I was lucky enough to be awarded a Judge’s Award (brass plaque). At 9.00am nearly 300 dealers and collectors started to set up the most incredible collection of tools you could imagine. The room probably measured 150 feet by 300 feet and was filled with 243 tables each 8 feet long and loaded with tools. I was overwhelmed. At least one third of the tools I had never seen before. The choice was almost infinite. Uncommon and rare Stanley planes were there by the dozen. I saw at least 8 Ultimatum braces! Norris and Spiers planes were available but mostly were not in fine condition. Well-known tool dealers Tom Witte, Roger Smith, John Walter and John Wells were there as well as Reg Eaton and Tony Murland from the U.K. I spent an interesting time with Reg Eaton getting a tutorial on Ultimatum braces. Another interesting collector-
was Bill Baader, a well recognised rule expert, who has started to sell his collection. I managed to afford a couple of English rules to add to my collection.

All types of tools were on sale: wrenches by the score, engineering tools, Stanley planes, rules and levels, axes and adzes, together with catalogues, books and reprints. Money and weight limited my purchases but when you have to carry your purchases for two weeks and then back to Australia, it was not too hard to pass by Stanley No 8 planes for US$ 50.

During the day and evening lectures were given on topics which included Defiance tools (a cheaper line of Stanley tools), Siegley planes, and ornamental lathes.

On Friday morning I dragged myself away from the tool room to go with the ladies to a herb farm, a Victorian mansion and a glass and furniture museum display. Friday evening was filled with an auction of tools. Each member could submit one lot and M-WTCA charged the seller 10% of the price. If the bidding did not reach the reserve and no sale resulted the owner was charged 5%.

Saturday afternoon at 1 pm was the conclusion of the tool selling. Saturday afternoon was free, but Elizabeth and I were taken to a nearby craft market, a flea market and a patchwork quilt shop on an Amish farm. The final function on Saturday night was a banquet with entertainment and speeches. Elizabeth and I were called to the dais as the members who had travelled furthest to attend the meeting. I was presented with a spiral screwdriver made by the Decatur Coffin Company which was designed to insert screws into the coffin lid but could not be used to remove them!

We flew from Decatur on Sunday to Washington DC to visit the Smithsonian Institute. This institution runs the largest, most complete and best presented museums in the world. We visited the Museum of American History, the National Aeronautical and Space Museum, and the National Museum of Natural History. However, perhaps the most unexpected find was the Museum of Art and Industry where they had reassembled a large number of the original exhibits from the 1876 Centennial exhibition. The displays included a brand new, unused “Casey Jones” steam engine, Victorian furniture, and engineering and woodworking machinery. Samuel Morse of the code fame had an original exhibit about the telegraph. The most interesting exhibit from a tool collector’s point of view were two large wall displays: one by Collins of Hartford showing tools such as axes, adzes and knives, and another woodworking tool distributor E. Mills & Co. of
Philadephia with a wide variety of mint tools including an unused Ultimatum brace, and a brass plated rosewood brace with an ivory head. I had some difficulty photographing these displays because of the reflections in the glass from other display cases.

From Washington we caught the Amtrak train to Hartford in Connecticut where we were met by Ken Roberts who drove us to his home in Fitzwilliam, New Hampshire. The next day we were taken to Portsmouth on the New Hampshire coast and visited an antique dealer who concentrates on antique tools. On the following day we visited Old Deerfield which is a village of preserved and renovated 18th and early 19th century houses decorated and furnished in the correct detail for the period. On the way home to Fitzwilliam we called to see Roger Smith in Athol, Massachusetts. Starrett tools are still made in Athol. Roger Smith showed us some of his uncommon and interesting tools including many in their original boxes. Roger is interested in visiting Australia and of course I am encouraging him to come.
From New Hampshire we travelled to Philadelphia. There we were taken to Winterthur which is a 200 room mansion converted to a museum of furniture and decorative arts. Unfortunately, the 18th century woodworking shop was closed. We also visited the Mercer Museum in Doylestown where 40,000 tools and implements are on display.

The number of museums in the United States with tool displays is surprisingly high and if combined with visits to restored or recreated 18th century buildings and villages quite a few weeks could be taken to see all that is available. Elizabeth and I enjoyed our U.S.A. trip and I certainly gained considerable knowledge and made many tool friends during our month away.
Ken Turner’s most welcome interest regarding my original article has spurred me on to greater effort. At the outset of this article let me say that neither Ken nor I are considered experts on this subject but we are somewhat more than intrigued and even fascinated with the derivation of English “craft” surnames. Of course this is no small wonder with names like CUTTER and TURNER. Our knowledge comes by extensive reading, and in due course, we give recognition to the various sources from which information has been derived. My primary interest is trying, ultimately, to ascertain what tools were used by each of the crafts and trades, although this is not easy. I thought that if I could share my interest with you, some of our HTPAA members (and others) may have, or come across, illustrations or other material which gives more specific details on how each craft and trade was performed, then share that with us and interested readers of the Tool Chest.

Firstly, there were a few misspellings/typographical errors in the April, 1992 article, and the following are confirmed: BUKBYNDER, PULTERER, ESCRIVENER, DUBBOR, TAILLYOURE, WADSMEN and ELENNAGER. I believe WYEDRAWER to be correct. You will remember that the April article posed the question “Where did the COBBLER come from?” A number of people contacted me