

5. TATHS (Tool and Trades History Society) Newsletter No 24 and Volume 5 of the Journal have arrived and are available from Kees Klep.

A list of TATHS members, names and addresses in the U.K. and around the world is available if any member wants this information.

6. New Library Books

- (a) Catalogue - James Howarth & Sons 1884
- (b) The Chronicle of the Early American Industries Association Volumes 12 - 26 1959-1973, 956 pages packed with information on all subjects on tools and trades. Both books are available from the Librarian Kees Klep.

7. Display Cases

Jock Watson and John Cairns have done a marvellous job on the cases which will be stored in the cottage at "Illawarra".

FRANK HAM

Club Meeting Program

Tuesday 25th July

A moulding and casting evening will be held at the Foundry School, Royal Melbourne Institute of Technology from 6.00 p.m. - 9.00 p.m.

Castings will be made of items in grey iron required by members, but arrangements should be made with Frank Ham or Kees Klep prior to this date. The Foundry School is on the corner of Cardigan and Queensberry Streets with the entrance in Cardigan Street.

Tuesday 26th September

No details as yet.

Tuesday 28th November

A visit to the School of Patternmaking at R.M.I.T.
6.00 p.m. - 9.00 p.m.

Club Meeting - Jock Watson's, March 28th, 1989

The March meeting was held at the home of our President, Jock Watson. Following an initial period of discussion centred on tools and collecting, most members settled down to a wandering inspection of Jock's collection. Inspiring even to those of us who have looked before, there seem always to be objects to be observed, rediscovered or which have been unseen on previous occasions.

This "warm-up" period is an important feature of our meetings. There is no need to be modest. We have within our group talents and skills which need to be cultivated. They provide many of the reasons for our Association and many of us do go home with new ideas and information gleaned from fellow-members.

Eventually, when our numbers had grown to twenty we were called to order by our secretary Frank Ham. Beginning with thanks to Colin Goldberg for the recently successful barbecue and to Kees for his fine efforts with a new Association banner which will grace our displays at future exhibitions, Frank also made reference to the ongoing possibility of a home for the Caine Tool Collection at Ripponlea.

With business out of the way we were then introduced to Mr Raynor Beilharz who gave an interesting explanation and demonstration of violin-making. We met with some special tools - some very ancient - and special woods and glues. The woods provided especial interest, not only because of their imported cost from Switzerland via Germany, but because of the tone which they hold. Those of us who are timber buffs (eccentrics?), prone to smell and scratch pieces of timber whenever the opportunity arises, have now added to our repertoire the new skill of tapping timber for timbre.

VIOLIN MAKING

Raynor Beilharz described some of his own training in Germany and the tradition he follows in.

Wood - European spruce and maple are the selected timbers. Some claim to even have discovered the source from which Stradivarius obtained his timber.

Construction - The backs of violins are usually two pieces which are quarter-cut and opened like a book. Timber should be at least eight years old and costs about \$150 to \$250 for a single violin. Basically, whilst timber selection is critical to the nature of the resultant instrument the maker is very dependent upon the suppliers of timber in terms of quality.

Joints - A clamped joint is used rather than a rubbed one. Sections are planed slightly concave before fixing with hot glue.

Ribs - These are made in the Cremonese tradition, (Cremona being the home town of Stradivarius). A mould is used for the shaping of the ribs.

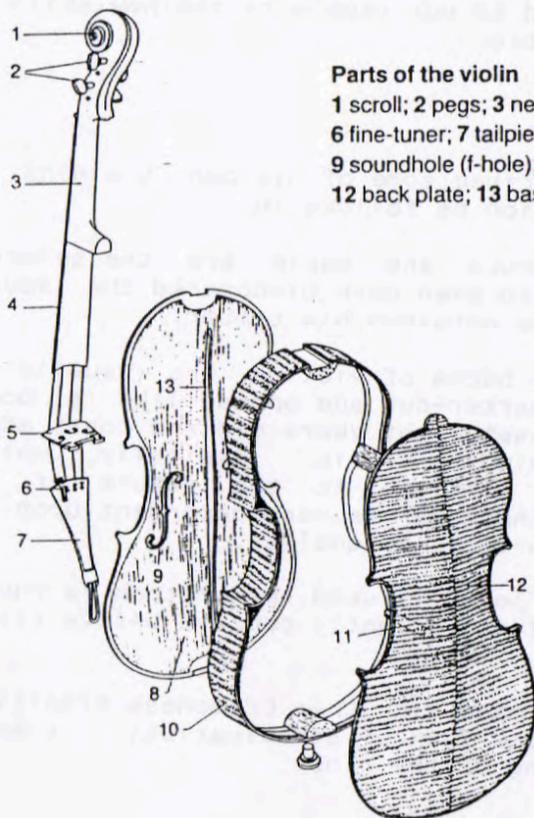
Back and Tops - The back is thicker at the middle and the top is thicker at the edges. This is the traditional approach and is important acoustically.

Purfling - This is the inlaying of the decorative strip around the edge of the top and back of the violin. Originally this purfling was to stop the checking of the timber as the instrument matured. The purfling is put in place using a bending iron.

Sound Post - This is the piece of wood like a dowel which is placed between the back and the front through the "f" hole. It is moved around and finally positioned where the best sound is achieved.

Tools - Traditional brass thumb planes, gouges, chisels, knives and scrapers.

Finish - This helps to make the instrument more resonant. The inside of the violin is sealed with albumen (egg white) mixed with sugar and gumarabic. This is always plastic. The varnish is an old recipe which is basically a gum varnish with shellac.



Parts of the violin

- 1 scroll; 2 pegs; 3 neck; 4 fingerboard; 5 bridge;
- 6 fine-tuner; 7 tailpiece; 8 top plate (belly);
- 9 soundhole (f-hole); 10 ribs; 11 soundpost;
- 12 back plate; 13 bass bar

VIOLIN - (Encyclopaedia Britannica 9th Edition p.242)

Violin, a stringed instrument employed in orchestral and chamber music. The body is a resonant box, composed of a belly, back, and six ribs, all shaped out of thin wood to various curves, the belly and back being scooped out of solid slabs, and the ribs planed and bent. The whole is glued together upon six internal blocks. Pine is used for the belly, maple for the other parts. The external surface is covered with a fine hard varnish of a brown, red, orange, or yellow colour, which renders the box more resonant. To this box is glued a solid neck or handle, slightly inclined to the plane of the box, and along the whole instrument four gut strings are stretched by means of as many pegs and a tail-piece. They are tuned in fifths, and set in vibration with a bow, strung with horsehair well rubbed with rosin, which is held in the right hand, the scale being completed by stopping the strings with the fingers of the left hand, in which the instrument is held, on an ebony finger-board glued to the handle, and projecting over the body of the fiddle. The movable bridge, across which the strings are strained, forms the spring or mechanical centre of the violin, and answers to the reed in wood wind-instruments. It has two feet, of which the treble or right-hand one rests firmly on that part of the belly which is supported by a sound-post resting on the back, thus forming a rigid centre of vibration, while the bass or left-hand foot, resting on the freely-vibrating part of the belly, communicates to it, and through it to the air in the box, the vibrations which the bow excites in the strings. The belly is strengthened, and its vibration regulated and increased, by a longitudinal bar glued inside it exactly under the bass foot of the bridge. Two incisions in the belly, called sound-holes, from their letting out the sound, also facilitate and modify the vibration. The middle pair of ribs on each side have an inward curvature, to afford the bow better access to the strings. The superficial area of the belly is divided by the bridge into two approximately equal parts, for an obvious acoustical reason; but the upper half is longer and narrower than the lower, which is relatively short and broad. This device gives greater length to the vibrating portion of the strings, and hence greater compass to the instrument. It also brings the bowing place on the strings nearer to the player.

Letters to the Editor

To the Club Secretary

One of the topics often mentioned in letters to the editor is an interest in home-built machines and tools.

Perhaps there are members of your group who have made their own machines or tools. If so, we would like to hear from them. Even if they cannot write a complete article, by simply providing us with a photo or two, a sketch from which we can produce drawings and constructional details from which we can write an article, they will be helping many readers of The Australian Woodworker achieve more enjoyment from their woodworking. Naturally, we pay for contributions which are published in the magazine.

Sincerely

Art Burrows
The Australian Woodworker

The Training of Tradesmen and Technicians.

Local members may have noticed two recent articles mentioning attempts by the Hawthorn Institute of Education to build a collection of artefacts and momentos relating to the training of our tradesmen. Ann Turner as head of the Institute's resource centre and Dr Michael Cigler, a part-time lecturer and archivist, are the two staff involved. They believe that much of our industrial past is in grave danger of being lost especially as the technology of even a decade ago is now superseded. Ann and Michael are not collecting for the sake of it but so that previous developments can give us understanding for future developments.

The Progress Press of 29th March, 1989 highlighted the working lives of two local tradesmen, one a coach-builder and the other a cabinetmaker. The former tradesmen have agreed to help Hawthorn Institute make a video about their trades. They also showed their working tools and outlined the various experiences they had in their respective trades during their working lives. Many of the timbers used then are now both prized and rare. Those interested in further information should contact the Institute on 810 3360.