

Is this the bench that launched a thousand lutes? A possible workbench and tools of Northern Italian and South German string instrument makers of the late 1500s.

In the Museo Civico in the Italian town of Bolzano/ Bosen there is a guild table and chest, shown in Fig. 1, (1)



Fig. 1. Guild table and chest

This table has inlaid around its edge the date 1561 and the name Hans Kipferle - presumably the maker? But what makes the table really interesting are the many detailed intarsia representations of the tools of the wood worker, and in particular of the intarsia worker, which cover the rest of the table top shown in Fig.2.

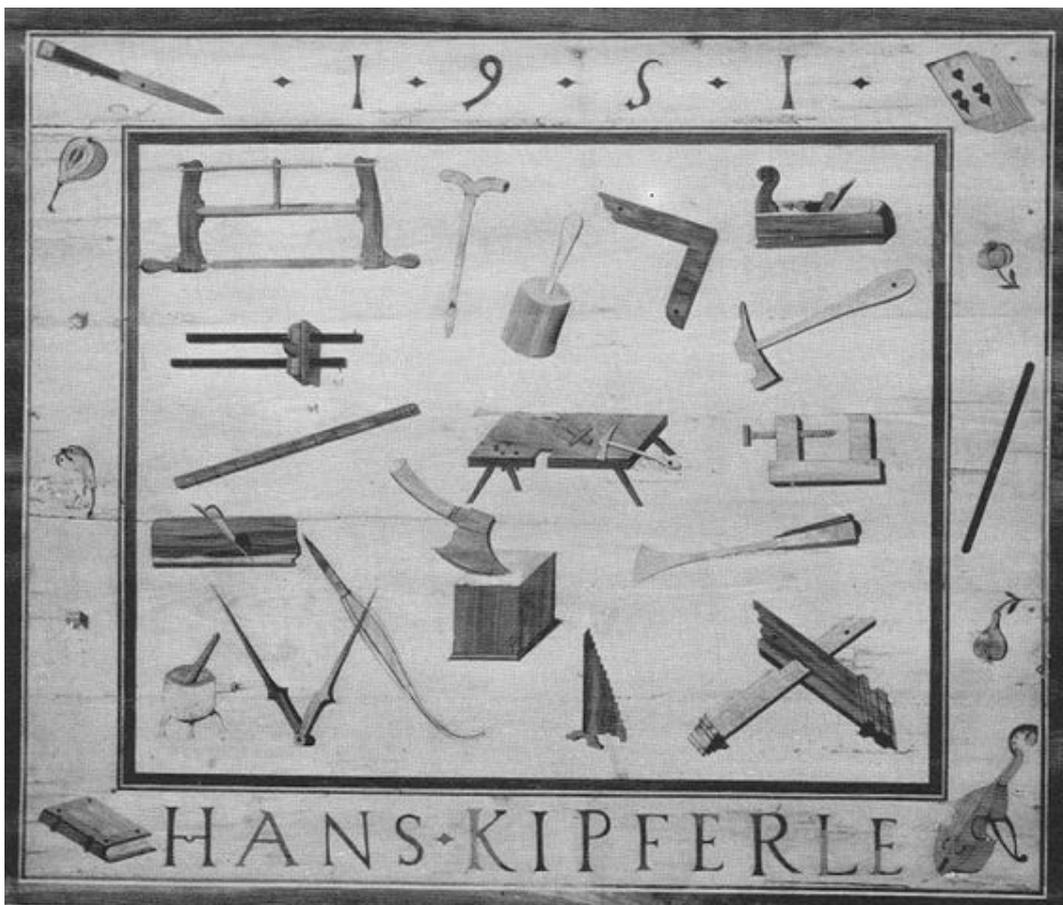


Fig. 2. The top of the Guild table in the Bolzano museum.

Walnut, maple, and other woods were used for the intarsia and the table top measures 125 x 108 cm. The tools depicted on the table top are (clockwise): a frame saw, an auger, a mallet, a try square, a plane, a hammer, a wooden screw-clamp, a chisel, two interlinked wooden squares?, a bench support, an axe, a shoulder-knife, a compass, a gluepot, a moulding plane, a rule, a double marking gauge and finally in the middle the work bench on which another hammer and chisel are shown.

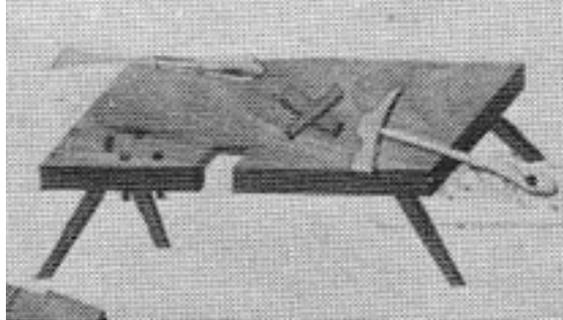


Fig. 3. Enlarged view of Hans Kipferle's bench of 1561

The bench is of particular interest to me as I am interested in attempting to recreate and investigate past instrument makers' tools and techniques. As you can see in the enlargement (Fig. 3.) it has not got a screw operated vice but instead it has a notch cut out of its front edge which is used, in conjunction with wedges, to act as a vice. What I believe are a pair of wedges are seen on the bench next to a hammer, which would be used to tap and tighten the wedges to grip a work piece placed in the notch. Also to the left of the notch, pegs in holes can be seen, the holes are positioned, to be used with wedges again, to hold material being worked on top of the bench. (A similar triangular arrangement of hole and pegs are used by green woodworkers today on their 'bodger's benches'.)

The location of Bolzano near important instrument making centres

The table, as I have already said is in a museum in Bolzano and I am presuming it was made locally. (I would welcome any information on the provenance of the table if anyone has any more details)

Bolzano, located in South Tyrol, Italy is on the way to or from several important string instrument making centres of the renaissance. (See Fig.4.) and seems to me to be on a main trade route across the Alps between Italy and Germany and Austria.

Bolzano; to Fussen Germany is 224 km north over the Alps,

to Mittenwald is 153km,

to Nuremburg is 431km,

to Cremona Italy is 236 Km South,

to Brescia Italy is 190 km,

to Venice Italy is 221km,

to Absam Austria 129 km.

Bolzano is located on a main trade route taken in the past by craftsmen and tone woods and tools across the Alps. It is likely that ideas were also transmitted along this same route. Instrument making ideas, tools and techniques would have travelled over the Alps along with the goods and people who passed through Bolzano. I believe Hans Kipferle's table of 1561 is so interesting because it is a rare record of tools and ideas that were being disseminated along the route through Bolzano between Fussen

and Venice or between Cremona and Absam? It seems likely to me that the violin makers of Cremona and Lutemakers in Fussen in 1561 would have known of and probably used tools and benches very much like those illustrated so well on this table top.

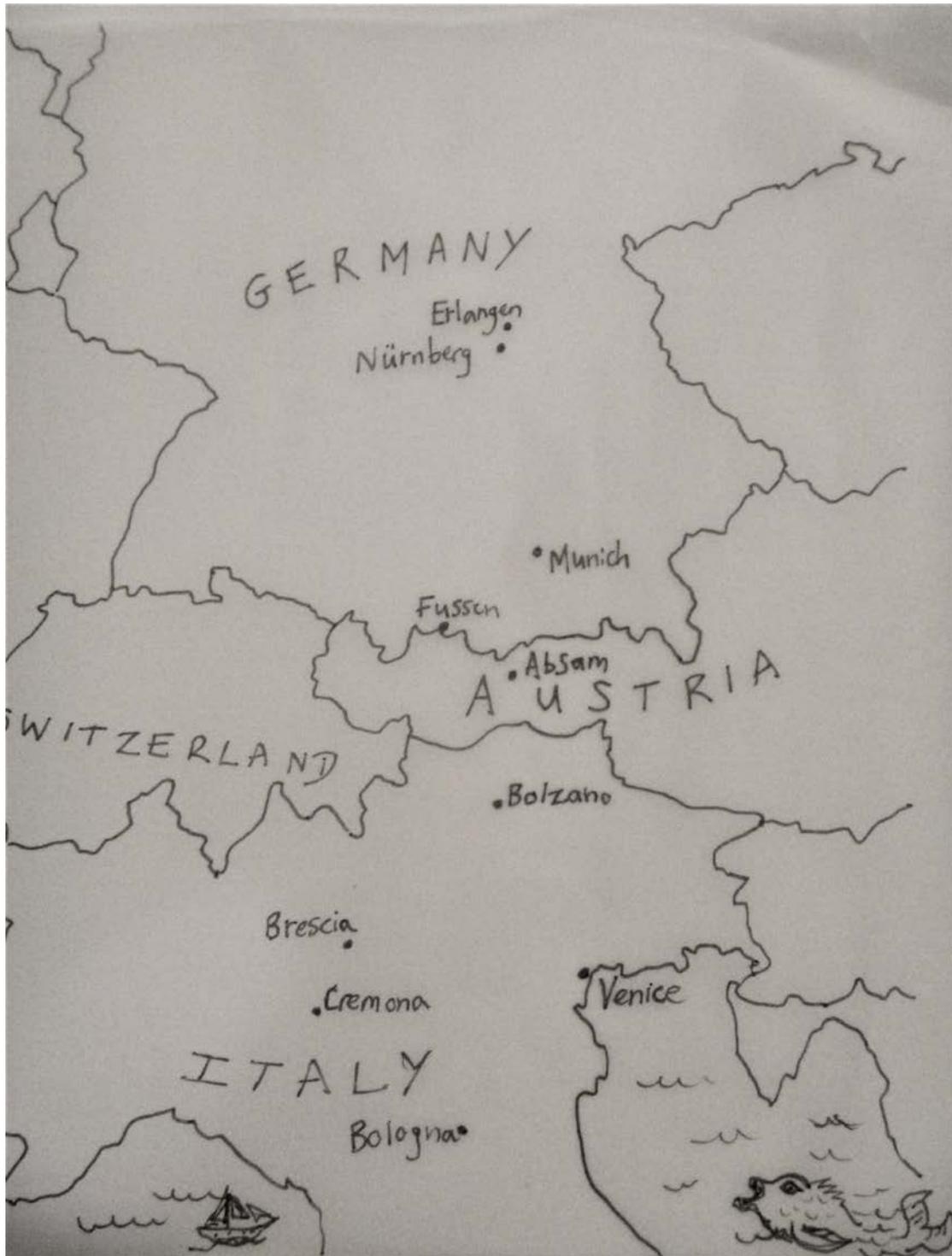


Fig. 4. Map showing the location of Bolzano and important instrument making centres

An instrument maker's bench of 1561

I have attempted to recreate the features of this bench and find that it works quite well. I constructed a small bench top to be used fixed to my modern bench. Fig. 5. Shows the small experimental bench top with its vice notch and pegs along with a flared chisel, wedges and hammer as shown on the table top.



Fig.5. Small experimental Hans Kipferle bench top.

Fig.6. Shows a piece of wood, a violin Scroll, wedged into the vice notch while being sawn. I strongly believe in the great value of attempting to physically recreate historical techniques as I find that practical information and ideas tend to present themselves and can be gained quite readily. Looking at historical pictures and documents provides a starting point for practical recreations a bit like the way a holiday brochure and postcard may give you an idea about a destination but you find out different information by actually going there? When I first tried wedging a work piece in the notch it didn't grip well. I soon discovered the vice notch worked much better the work and wedges didn't slip if it was undercut a small amount, preventing the wedges and work piece from being easily pulled outwards when horizontal force was applied such as when sawing or chiselling. Also moistening the wood surfaces improve grip. I would not have worked these things out as easily without actually making and trying the vice notch out.

Fig. 7. Shows pegs and wedges used to hold work on the top of the bench. The pegs work quite well and can be used as bench stops or as here with wedges to hold objects of many shapes and sizes.

My experiences with my Hans Kipferl style bench top over the past few years have proved to me that it is a versatile bench with features that work well and some of which could be useful even in a modern workshop. Ideally I would like to make a full sized version but I haven't the space at the moment.

I am continuing to experiment with and learn from this small bench top, I have already used parts of it for much of a project where I made a lute from the instructions given in Arnaut of Zwolle's manuscript from about 1440 (2) and am slowly attempting to use it to make some violins using historically informed methods and I plan to write a bit more about this as the instruments progress.

I believe trying to recreate the methods of the makers of the past may help us understand how they worked and maybe help us understand their work a little better or differently? Last but not least I also find attempting to recreate past methods very enjoyable.



Fig. 6. The vice notch in action. A violin scroll being sawn. (Apologies for the historically inappropriate tea mug in the background.)



Fig. 7. The pegs and wedges in action, chiselling work on top of the bench

Notes.

1. Fig 1. And 2. Taken from <http://thomasguild.blogspot.co.uk/2013/04/woodworkers-guild-chests.html>
2. For my historical lute building project using parts of the above bench, other benches, historical sources used and attempts at re-creations see <http://www.lutesociety.org/pages/building-lute-original-methods>