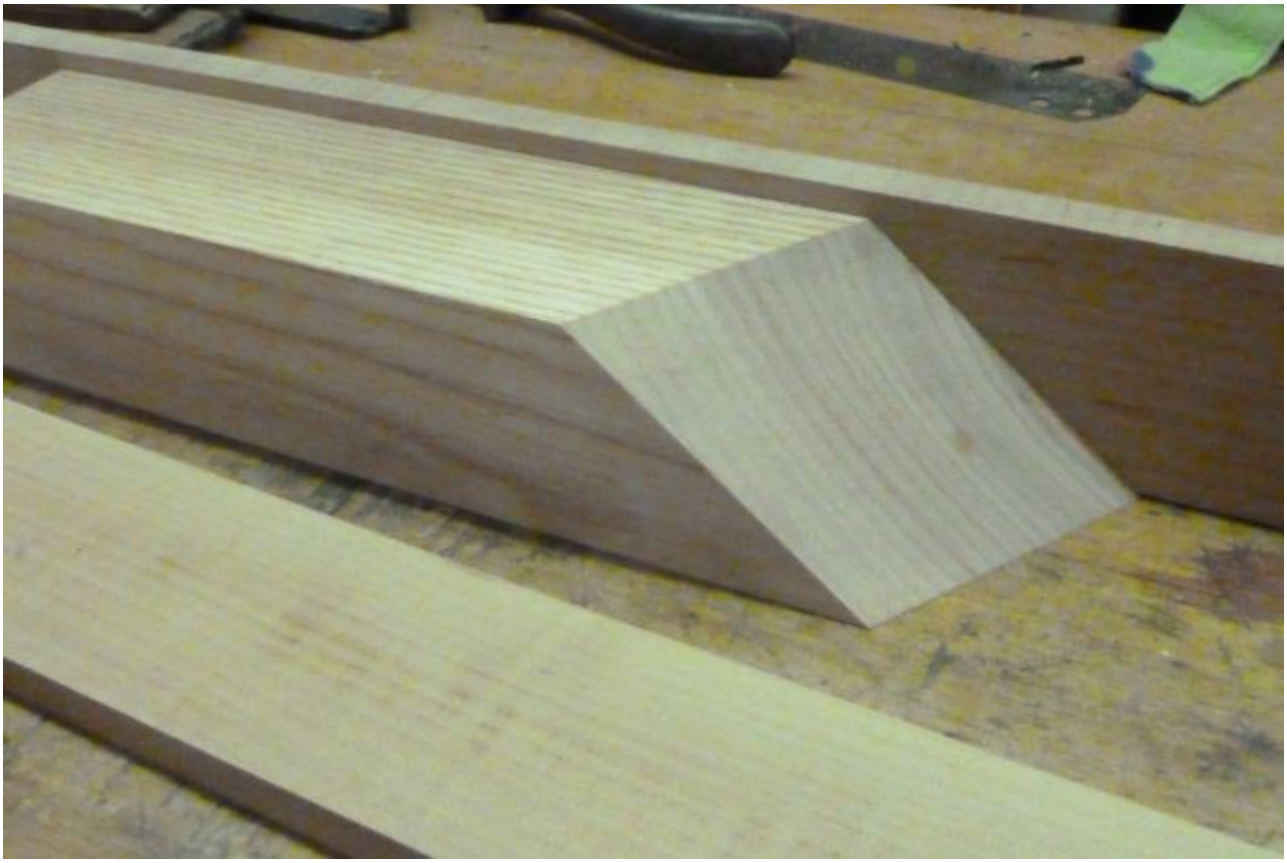
Hi Handtoolers,

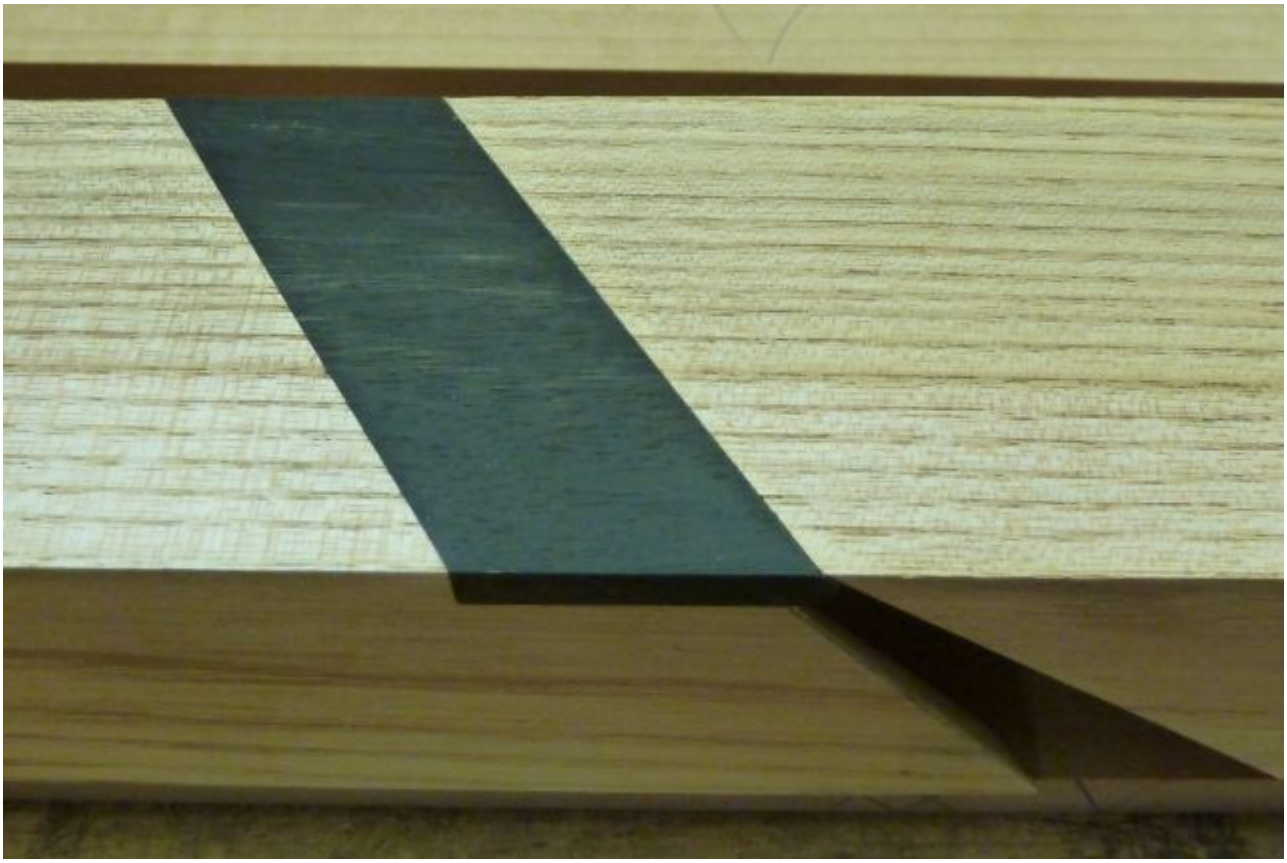
2 years ago I've made an attempt of a wooden mitre plane. It didn't work to my liking. I didn't try it again until 2 things happened at the same time. Timo, a woodworker friend, asked me if I'd like to get a shooting board from him and at SMC there started a great woodie build off. Now or never I thought.

It should be a mitre plane made especially for shooting end grain. A woodie but a heavy one  And it should get a skew blade and an end grain optimized cutting angle of 37 deg. Further it needed to be a Krenov style plane, you'll see, why.

The body was made out of a piece of straight grained QS Ash. The sides were made of Swiss Pear.

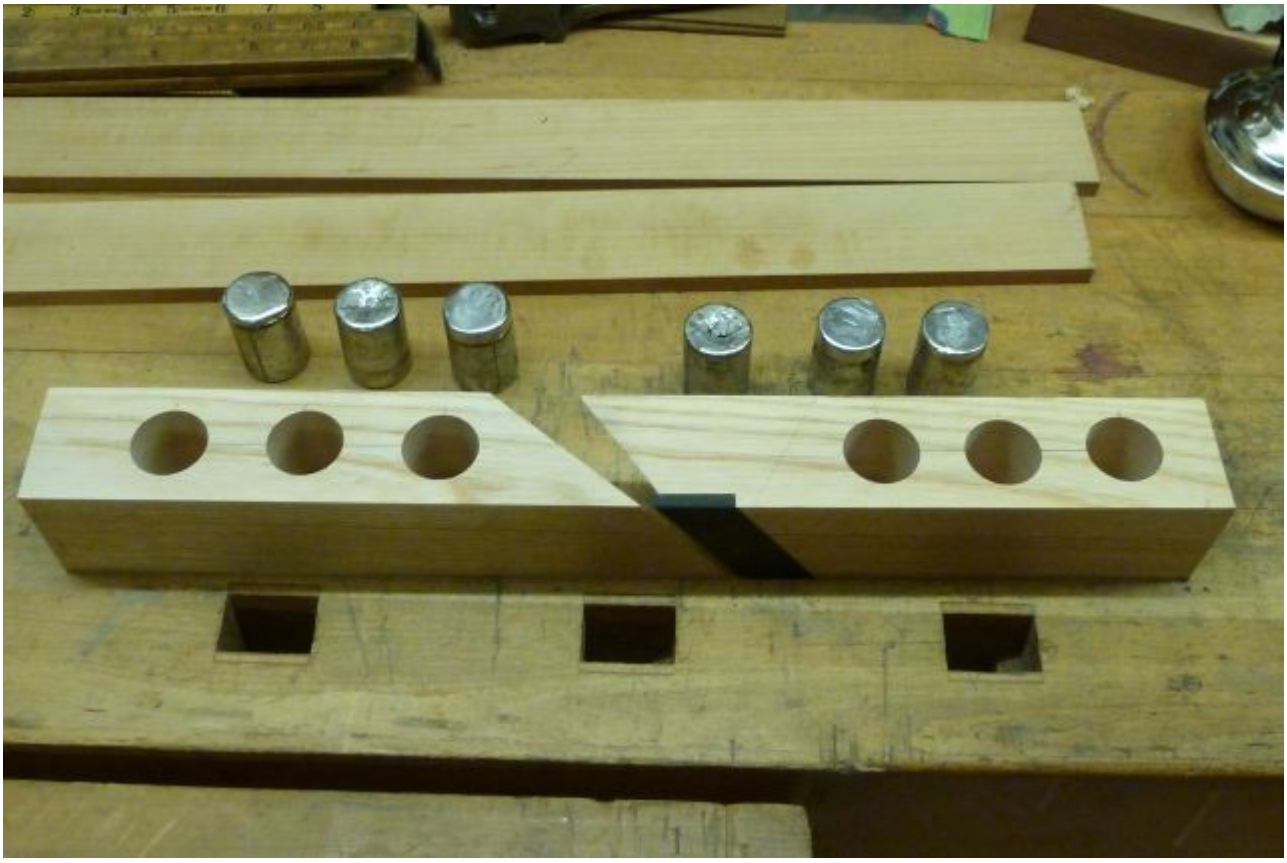


The front of the mouth was reinforced with a piece of Ebony I had laying around.



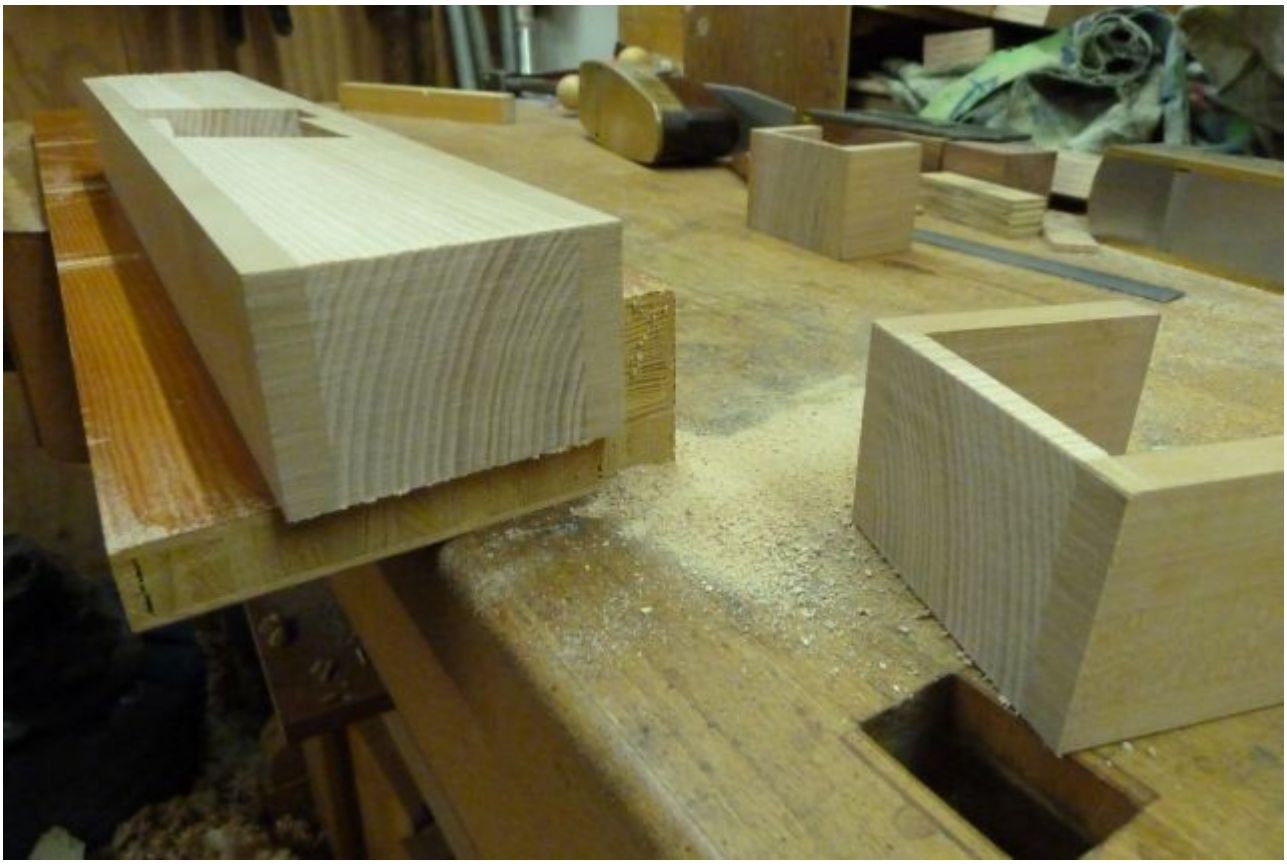
To make the plane heavy and to give it the authority a shooter should have, the body was loaded up with about 2 kilograms of lead. At first I casted the lead into handy pieces.

Then the plane body was loaded up.

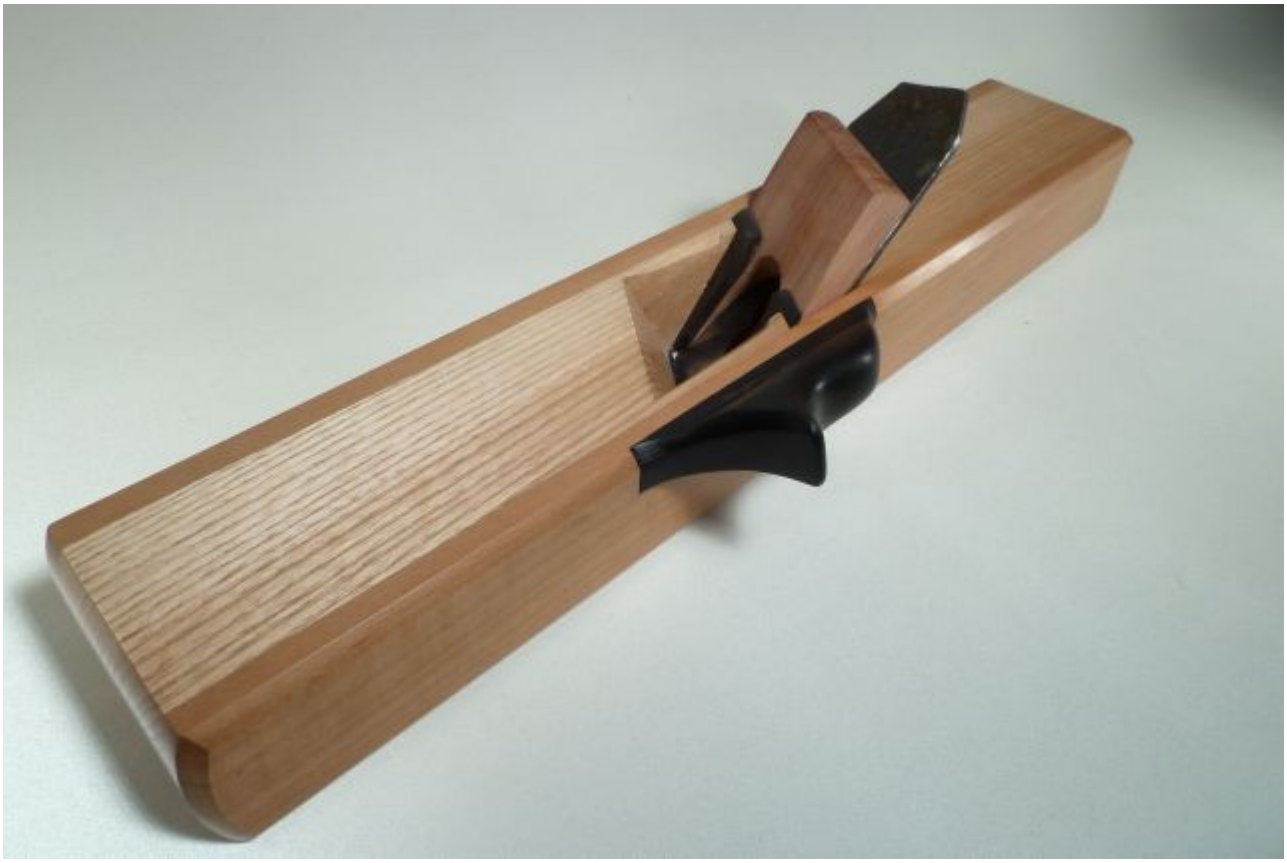


All parts were glued up.

Then it got some shape. The ends were cut off with a sash saw, the top of the plane got champers, the front was rounded a little bit and it got an Ebony handle.



The finished plane:



Now it was time to make the shooting board for the plane. Those were the materials, Timo sent me. Beech MPX and a fine made fence of Oak. I added some pieces of Pear.

Before the 2 MPX boards were glued up, there were some threaded inserts mounted to hold the fence and other parts properly.

Then both MPX boards were glued together.

Then I made some octagonally shaped knobs for the board.

After that a 45 deg. mitre fence was done and a 45 deg. donkey's ear. Both are attatched to the main fence. They have a steel nib that fits into a hole in the fence and are fastened with one of the octagonal knobs,

Those octagonal knobs still need to be turned. They shall get a mushroom shape similar to the knob of a Veritas plane but with an octagonal head.

The main fence allows to be fine adjusted. While the hole for the right knob is sized exactly as the screw is, the left hole is oversized by about 1/8". That's a feature that shines when the mitre fence or the donkey's ear are attatched. They can be adjusted very precisely.

At last a few pics how it works. I just played with a few pieces of scrap. You will see the mitered scrap pieces laying in the shavings, they produced.

It works rather prcicely and produces nice shavings. The main advantage is the fun this plane makes. It is running through the wood really amazing. The weight of the plane (more than 3,200 grams) gives it the authority one enjoys while shooting. And since it is a woodie, it runs very smoothly. It's something very enjoyable to use it.

Thanks for looking.

Klaus

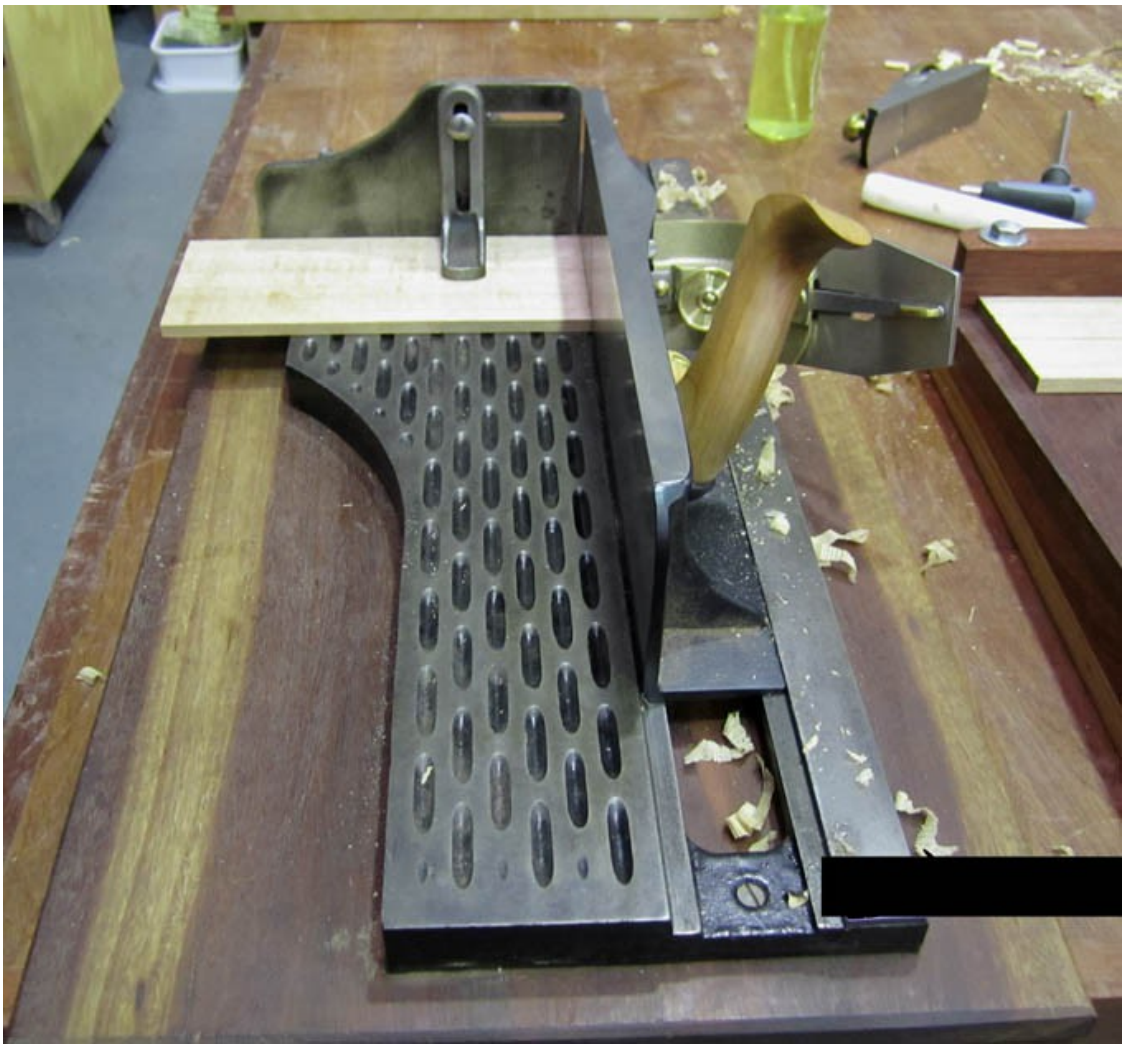
Edit: Shooting Bubinga

Running Fence for the Shooting Board

The details of this article are a partial repeat of another, but here focus on the running fence I built for my ramped shooting board. Note that this project is appropriate for any shopmade shooting board. The running fence prevents any lateral movement of the shooting plane, and this increases control. Attention can now be given 100% to controlling the feed of the work piece.

The mod adds a rail, ala the Stanley #52, to prevent the plane moving away from the edge of the work piece. Shooting square edge is fairly straight forward since the main fence shares the impact and braces the work piece. However anything that is not square – such mitres and bevels, where any inaccuracy shows up as a gap in adjoining corners –creates difficulties in holding the work. It is a further complication when the plane moves away from the workpiece.

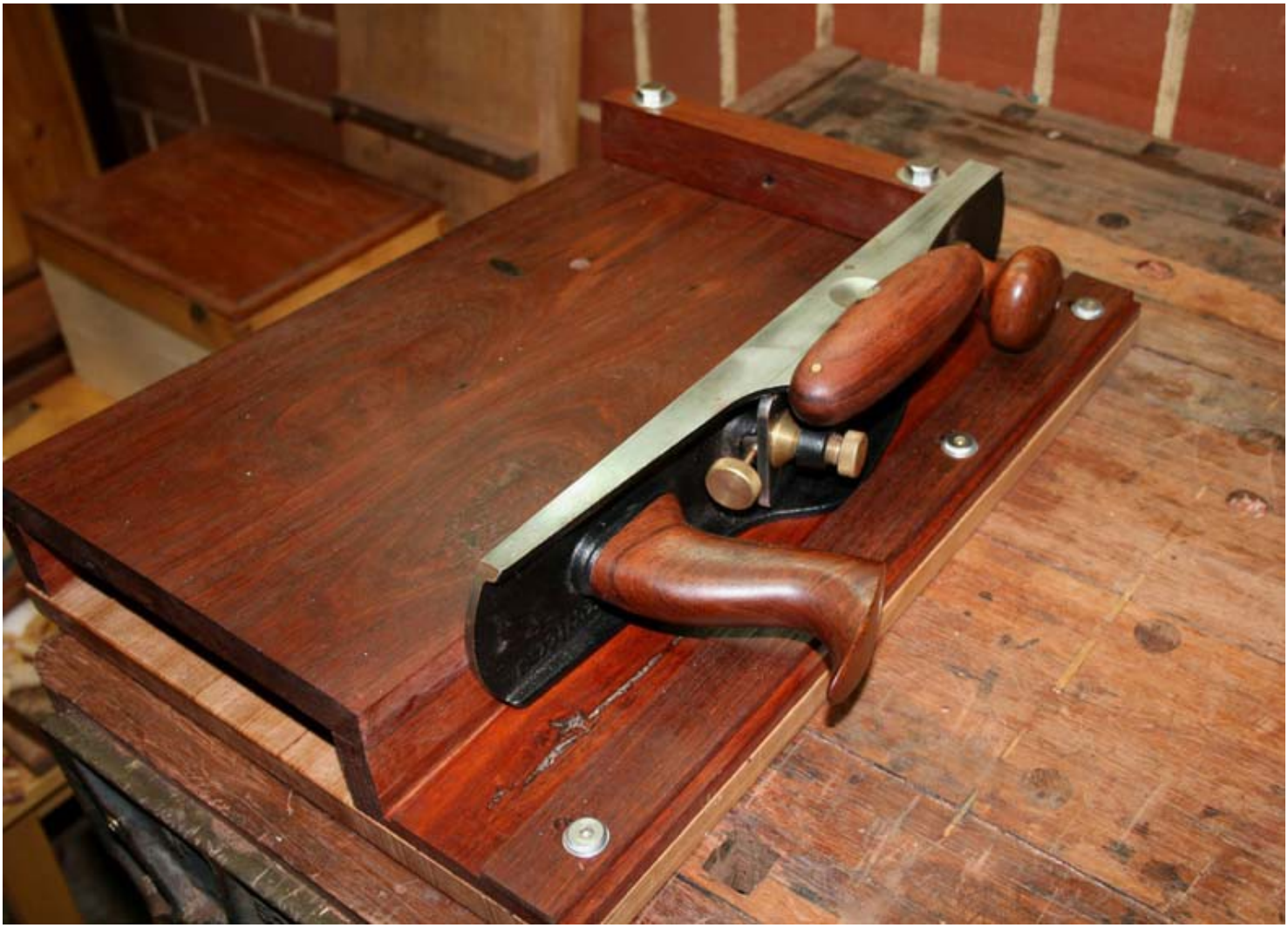
The idea is borrowed from the Stanley #52 Shooting Board. Here it is set up with the LN #51 Shooting Plane – look at the rail on the right side of the plane …



So this is my version ...

Set up with the LN #51:

Set up with the LV LAJ and hotdog handle:



It is adjustable .. 

Used with a Donkey's Ear ...

A few details about the Donkey’s Ear …

Note that the fence has non-slip (salt sprinkled over varnish).

Dovetailed support at rear (for fun), and secured to the main fence with a bolt.
The fence has micro-adjustability, the board has levelling feet underneath, so the Donkey's Ear is adjustable in 3 dimensions.


In use ..

I deliberately did this the long way as I was enjoying shooting the mitres. Generally I first saw the mitre with a mitre box, then fine tune it on the Donkey’s Ear.

So how does the running fence perform? In a word, *total control*. OK, that's two words ☺. Make one – it will revolutionise your shooting!