December 2016

Crosscut

Newsletter of the Witwatersrand Woodworkers' Association

◄ WWA Chairman Clive Stacey showing off a prize at the annual toys for charity braai.

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Next Turners Meeting on **Monday, the 5th December 2016** from 18h00 at the Living Link Hall – Part 2 of the video by *Jean Francios Escoulen*, using the bedan for fine spindle turning.
No Turner's meeting in January 2017. Next Turner's meeting in 2017 is on the 6th Feb 2017.

Next Meeting on **Wednesday, the 14th December 2016 – General meeting** from 18h00 at the Albertskroon. Featuring a Hand Plane display with planes on Sale as well as a Swop Shop. Members attending will enjoy Lamb Roll on the house!

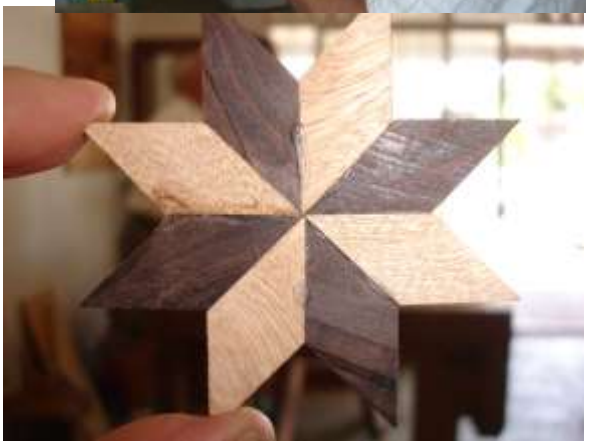
News

7th November 2016 - Turner's meeting. Part 1 of a video on the use of the *bedan*. *Jean Francios Escoulen*, who runs a turning school in the south of France, was showing how to use the *bedan*. He showed the use of two *bedans* – one with a cross-section of 12 x 12mm and the other of 9 x 5mm for more delicate work. His *tour-de-force* is what he calls a "*Trembleur*" which is a long and impossibly thin turning which he shows how to make in the video. Part 2 will follow at the December Turners meeting. See more on Escoulen at **www.escoulen.com**

Wood of the month: Macadamia Integrifolia – Originally from Australia, the wood is quite similar to our local Protea with the same rays visible. The trees are widely grown in the lowveld, as South Africa is a major source of nuts in the world.

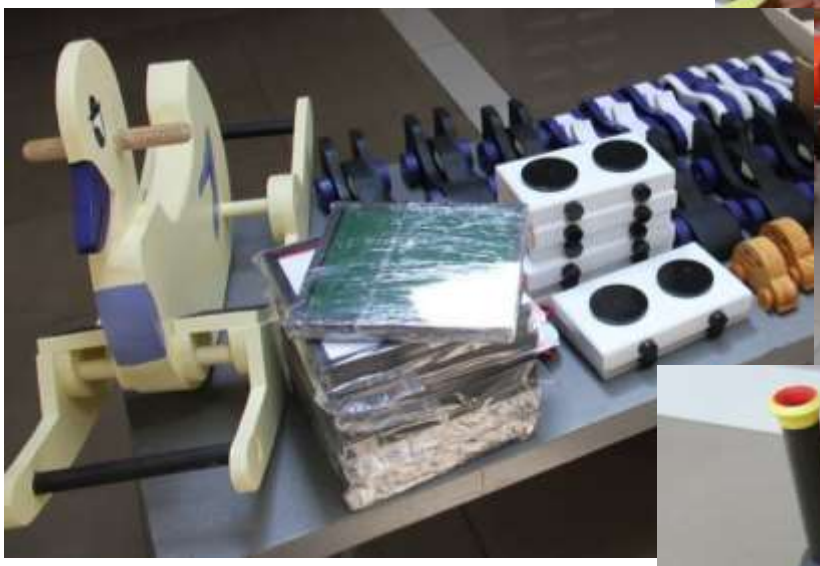
9th November 2016 - General Club meeting. Demo by Greg de Villiers from Vermont tools. Greg showed how to make a dowel making fixture ontop of a table saw. (Thanks to Rudi for the move clip posted to Facebook.)

Saturday workshop presentation – 12th November 2016 at the workshop at Albertskroon at 9h30. Talks by the winners of the milking stool competition on the construction of their stools, ranging from basic to sophisticated joinery and inlays. Trevor Pope started by introducing the making of a stool from scratch, using a minimal set of tools to make a rough and ready stool. He explained how with increasing skill and better tools more sophisticated stools can be made. Bobby Bezuidenhout explained the process he follows to make the inlays in the seat of his stool. He constructs the rosette using



segment turning techniques, before insetting the rosette into the seat of the stool. Roger Matthews' talk was held over to a future date, due to time pressure.

Toys for Charity – end of year braai. This took place on Saturday, 19th Nov 2016 at the Gereformeerde Kerk, Randburg. The pictures below show some of the toys made and prize-winners. Thanks to Alistair for the photos.



Club Notices

The bedan used by Jean Francios Escoulen is not commonly seen for sale in South Africa. Those who wish to, can easily make one using a high speed steel blank available from engineering suppliers such as Toolquip (www.toolquip.co.za) They offer blanks in various sizes, such 12 x 12 x200mm long which could be used to make a replica of the larger bedan used by Escoulen. A rectangular blank 10 x 6 x 200mm long could be used to make the smaller tool. The larger (stock number STB12x200C) is about R194- from Toolquip, and the rectangular blank (RTB10x6x200C) is about R105-. These prices may vary a bit depending on where you buy – Lionel may be able use his buying power to get you a discount on them as well.

These HSS blanks are very hard, high quality steel and make excellent wood turning tools, based on a few that I have used. If you attended my recent talk on making handles you should be confident enough to make your own. HSS can be safely shaped on a high-speed grinder without losing hardness, so you can use your normal sharpening set up to grind the end to the required profile.

Regular Events:

Toymakers. The toymakers meet on the first and third Mondays of every month, at 09h00 till 12h00 at the Albertskroon workshop. Meetings will be cancelled if they coincide with a public holiday. Contact Eddie Marchio on 011-678-8062 or rm22 AT mweb.co.za for more information.

Toymakers meetings stop for the remainder of 2016, and will resume on the first Monday of 2017

Wednesday workshop. 1st and 3rd Wednesdays, from 17h30 to 20h00 at Albertskroon. Contact John Allen on 083 457 4801 or Clive Stacey (See below)

Ken's Saturday Workshop. Ken Bullivant holds a Saturday workshop at his house in Boksburg. The location is 13 Franklin Avenue, Comet, Boksburg on the first Saturday of the month from 09:00 to 12:00. They decide on an annual project and work throughout the year making it. Individual projects are discussed and problems solved. Ken also offers private lessons too. Contact Ken on 082 809 0020 if you wish to take part.

Friday Morning workshop - Winston Klein will be convening a workshop at the Albertskroon work shop on the 1st and 3rd Fridays monthly from 09:00 t0 12:00. Contact Winston at 072 553 5045 or kleins AT iburst.co.za

No more meetings this year. We will resume on Friday, 03rd Feb 2017, subject to confirmation as Winston is presently incapacitated with a broken knee cap.

SPIRIT OF THE WOOD - WOODTURNERS

Offering Woodturning lessons, One-on One Training, Classes and Club, Willing to assist persons with limited physical/intellectual abilities. Contact Johan Kramer on 083 251 0183 or Johankramer300@gmail.com

Saturday meetings

Saturday Morning workshops will recommence in Feb 2017, subject to confirmation

Cheap No-name planes – Issues?

By Trevor Pope

Steven Barrett recently asked me if I could assist with sorting out problems he had with a hand plane. This example is branded MTS #3 and is equivalent in size to the Stanley #3. Steven had followed the usual steps of flattening the sole and the back of the blade before sharpening it. He was unable to get the plane to cut properly and the lever cap would jump out after a few strokes.

I have included this diagram of the cross section of the Record #3 plane for reference, in case you are unfamiliar with the technical names for the parts of a hand plane.

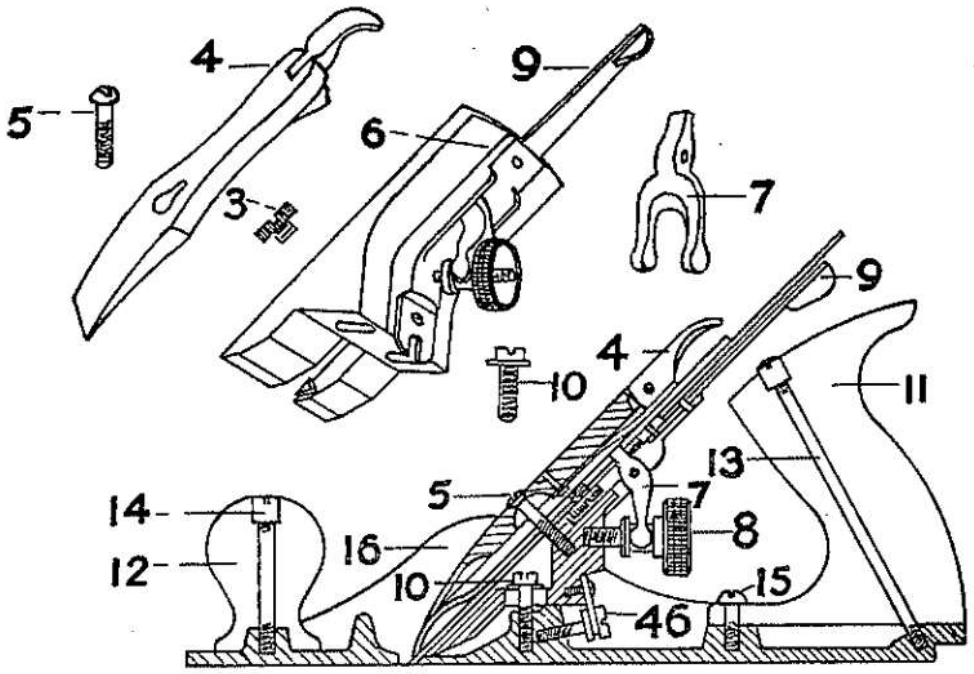


Fig. 22.—Parts of Record Planes.
3—Cap Screw. 4—Lever Cap. 5—Lever Cap Screw. 6—Frog, complete. 7—"Y" Adjusting Lever. 8—Adjusting Nut. 9—Lateral Adjusting Lever. 10—Frog Screw. 11—Plane Handle. 12—Plane Knob. 13—Handle Bolt and Nut. 14—Knob Bolt and Nut. 15—Handle Toe Screw. 16—Plane Body. 46—Frog Adjusting Screw.

On inspecting the plane, we identified a number of issues:

- The MTS #3 iron is too narrow, at 45.5 mm, compared to the cap iron which is 46.7mm. Compare these with a Record #3, where the iron and cap iron are both 44.5mm. The MTS cap iron is plated with some sort of chrome plating, which is unnecessary, and just looks cheap. The cap screw (3) is too long, but fortunately doesn't foul the lever cap. Interestingly, the sole is significantly wider (59.6mm vs 54mm for the Record #3). The MTS plane is also heavier at 1626g vs 1408g for the Record #3 – the blade is a very

loose fit in the mouth laterally, which turns out to be a good thing.

- The MTS' lateral adjustment lever (9) protrudes too high above the frog, so it fouls the slot in the bottom the blade. The mounting point protrudes by about 1mm, so even bending the lever downwards, will not correct the restricted movement - the lever cannot perform its lateral adjustment function over the required range. Fortunately, with the wide mouth, there is enough play to make the necessary lateral adjustment, but I don't think this was intentional.
- The depth adjustment wheel (8) on the back of the frog is brass, but the tolerance of the thread on the stud is such there is excessive play, showing up as a disconcerting wobble. This also manifests itself as extra backlash and uncertainty in the cutting depth adjustment setting.

- The bottom was reasonably flat, and didn't require too much effort by Steven to flatten to a reasonable degree. Testing the sides for perpendicularity to the sole showed both sides out of true, spreading at the top, by 0.5mm on the one side and 0.8mm on the other. The sides were not flat either. This means the plane can't be used with a shooting board, without compromises.
- The most significant flaw appeared when the lever-cap (4) was inspected. The lever-cap is too short, so at the bottom end, it presses down on the upper part of the cap iron. The photo shows the MTS cap iron and blade on the left, next to the genuine Record #3 items on the right. You can clearly see how much shorter the MTS lever cap is compared to the record. You can also see that it contacts the cap iron too high up.

- The lever cap screw (5) that holds down the lever cap and cutting iron assembly onto the frog (6), has a flat surface under the head, rather the more common conical shape seen on the Record. This means that it doesn't positively locate the lever cap in position.
- The toggle lever that the user presses down to secure the lever cap also has a strange shape, so it is stiff and doesn't engage properly. You can see the differences between the two in the picture. The MTS lever cap is at the bottom.

The combination of these latter three flaws means that when the plane is used, vibrations from the cutting forces can cause the lever cap to move backwards and pop off, as Steven has experienced.

Some minor fettling of hand planes is generally accepted by most users. Only exceptional hand planes don't require some tuning out of the box. Examples from Veritas and Leigh-Nielsen are reported to only need a slight touch-up of the edge of the blade before being fully usable.

(I don't have the pleasure of owning one of these.)

Most users understand and accept that some fettling will be required out of the box, in return for a substantial cost reduction.

For example, the sole can be flattened; the blade back can be flattened and the blade carefully ground and honed; the cap iron can be fitted to the blade to remove any gap; and the mouth can be cleaned up. The frog fit and flatness can be checked and adjusted with a file if need be. The action of the lever on the lever cap can be improved with a file.

However, the following flaws in this particular example are probably not salvageable.

- The lever cap cannot be lengthened,
- the blade cannot be widened,
- and the shape of the lever cap hold-down screw can't be corrected without replacing them,
- and the lateral adjustment lever can't be lowered.

Even if spare parts were available, that actually fit (Do standard Stanley or Record bits fit?) – this would be uneconomical.

So the verdict? Proceed with caution, if offered an MTS or Stanley Handyman series plane. (See a previous Crosscut – August 2016 for an explanation on the issues with the Stanley Handyman series.)

Should you be offered one of these units, bear in mind these potential faults to look out for, and which may be difficult to solve. As an educated user, you can then make the right decision. My real concern is that a lay person may buy one and then face these problems, without knowing how to solve them, and be put off trying to use hand planes.

If you can't afford a new premium plane, then the advice still stands - find an older Stanley or Record (or similar) plane in good condition, at a reasonable price and tune it up to fully working order.

Subsequent to discussing these issues at the October meeting, Ken Bullivant offered to see if he could to make plane more workable. He did the following:

- Reshaped the cam on the lever cap to a better shape. To do this, Ken drove out the roll pin that the cam pivots on and then filed the shape of the cam. He then replaced the roll pin.
- Filed the key-hole slot in the lever cap to extend it to lower the bottom point of contact
- Lowered the lateral adjustment lever to flush with the top surface of the frog. He did this by drilling out the rivet to remove the lever, filing down the bearing surface and then riveting the lever back onto the lever cap.
- Adjusted the frog to properly line up with the throat and the sole.

The work that Ken did requires considerable skill, and would not be within the capabilities of the average woodworker. Although the plane is now usable, it is not up to the standard that can be achieved with more suitable old plane.

The best use for this plane would be repurpose it as a scrub plane for roughing out, by opening out the mouth and grinding a significant radius on the iron.