July 2017

Crosscut

◄ Vicker #4 plane showing square boss for front knob.

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Next Turners Meeting on **Monday, the 3rd July 2017** from 18h00 at the Living Link Hall – Turning jigs and fixtures – please bring your examples to show and explain at the meeting.

Next General Meeting on **Wednesday, the 12th July 2017** from 18h00 at the Living Link Hall – Vermont Presentation – A Festool demo on all the new Domino Connectors and the new KS60 KAPES and the Edge Bander – Martin and Stefan will be the presenters.

News

5th June 2017- Turner's meeting. Colouring wood – video and demonstration. A video by Tim Yoder was shown where he demonstrated making and colouring wooden medallions. He showed how he cuts out, mounts and turns the medallions, followed by techniques for colouring that enhance the grain visibility.

Steven Barrett then showed some techniques using an airbrush to colour wood using inks. He showed how to use pearlescent inks to enhance plain colours. The project for next month is to make a coloured wooden object such as medallion made by Tim Yoder in the video. Best one by a show of hands on the day earns a bottle of wine.

Wood of the Month – Box. Chris van Heeswijk presented. Box wood can be found in about 70 varieties, but the most common, Buxus Sempervirens has traditionally been used for rules and measuring instruments. Box is a very dense wood with almost no discernible grain. It is very dimensionally stable, so it was used for a variety of measuring instruments and tool handles. Box is actually a shrub, so it is not usually available in larger sizes. It is widely distributed across Europe, the Middle East and North Africa.

The suggested homework project for the May meeting was to make a similar shape to that demonstrated by Herman in April. A number of three-cornered bowls were on display, and the best, by a show of hands was by David Smith, which earned David a bottle of wine.

14th June 2017- General Club meeting. Andre Oosthuizen showed his self-made stationary belt sander. He explained how he obtained plans over the internet (http://woodgears.ca/belt_sander/) from Matthias Wandel in Canada and used these to print out the templates he used to cut out the parts. The machine is made predominantly from Birch plywood sourced from Universal Plywood in Chloorkop. He used an old 250W open-frame induction motor running at 1400 rpm to drive a belt connecting a drive pulley. The sanding belt

is a standard size of 6" x 48", bought from Mike Pickering (083 659 1857 or mike@silvergoose.co.za) Andre laminated the sanding belt pulleys from plywood and coated them with silicone. The drive belt pulleys were bought off-the-shelf. Standard bearing sizes were used for the mild-steel shafts. Andre and 3 other East-rand Woodworking Association members built 4 units together, so some of the costs were shared, such as the plywood and the plans. Excluding the motor, he estimates he spent about R600-. Andre can be contacted on 083 6090 450.

Lynton Dennill says that birch plywood can also be bought from Eco Timber Traders, Unit 7, Citrus Park, Laser Park, HONEYDEW. Telephone: 011 794 6330, 086 648 2324.

Another source for sanding belts is Caldo Abrasives & Tools, Laser Square, Corner Zeiss & Liner Streets, Laser Park, HONEYDEW. Telephone: 011 794-5067/6067 (See caldo.co.za)

Club Notices

Raffle winners from last few months – one of the reasons to come to the monthly meetings are the raffle prizes you stand to win. Here are some of the winners from the last few months.

Spring Challenge –
This will take place on 02nd September 2017 at the Albertskroon clubhouse. There will be two competitions. One is a homework task to make a kitchen gadget out of wood. The turning challenge on the day will be a **Ring Stand** – to hold small jewellery such as rings. Prizes for the best items will be judged by the attending members. This will be followed by a bring-and-braai.

IMPORTANT DATE CHANGES

Due to public holidays the following changes will be made to meeting dates:

1. The Cabinetmakers meeting in August will take place on Thursday **10th August 2017**.

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. Winston will open up the workshop – see Winston's contact details below.

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

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

1. Second Saturday of month - Eddie will open the workshop – 011 678 8062 rm22 AT mweb.co.za
2. Third Saturday of month – Clive will open the workshop – 083 407 8008 stacey AT netactive.co.za Clive will also open the workshop during the week "BY ARRANGEMENT"

3. Fourth Saturday of month – Graham will open the workshop – 082 900 0242 grahamcr AT mweb.co.za

"SHOULD NO ONE ARRIVE BY 10h00 THE WORKSHOP WILL BE CLOSED."

Please can the conveners complete the attendance register on the bar counter, so we can gauge attendance?

Vicker No 4 Plane

Trevor Pope

Recently, I came across an unusual hand plane in a second-hand shop in Edenvale, with the Vicker brand. Curious to find more about it, I resorted to Google. There was only one hit – www.vicker-tools.com.

On their web-site was a picture of the plane. They make a variety of hand tools, but one of their mainstays has been a range of trowels for bricklaying.

About 30 years ago, I took a Saturday-morning brick-laying course at the old Corobrick premises in Meadowdale, Germiston. Included in the course fee was a starter set of brick-laying tools, including a trowel made by Vicker, which was recommended by the instructor.

This is the same company that made the plane. The interesting thing is that Vicker Tools is situated in Edenvale, just up the road.

From their web site:

Vicker Tools was started in the early 1940's by Isaac Mijon. As an engineer he made products based on a need in the market. Brick trowels were the first builder's tools that he made and from there the company has expanded the line. Currently the company is run by Vic Mijon (son) and Arnry Mijon (grandson), continuing the family tradition of innovation and excellence.

The main manufacturing facility is in Johannesburg , South Africa with a smaller manufacturing facility in Mbabane, Swaziland.

The company is focused on providing quality products for the building industry and specialized products for other industries.

Vicker only make one plane, their No4 model. It is an unusual design, having an aluminum body and frog. The sole has a strip of steel as a wear surface, which is riveted to the sole and ground flat.

I am not ordinarily a fan of aluminum and similar die-cast metals for hand tools, as these tend to be too light weight and usually associated with cheap tools. Stanley in The USA actually made an aluminum version of the #4 called the A4 from 1925 to 1935, weighing 2 ¼ lbs, but without the steel sole plate, so they reportedly left black marks on the planed surface. (http://www.supertool.com/StanleyBG/stan1.htm) The design of the Vicker #4 is very similar to a Bailey #4, with some obvious changes. The body is die-cast aluminum with a steel sole. The frog is also die-cast, with a steel thread insert for the blade assembly clamp screw.

Upon inspecting the plane, you will note a wooden front knob and a plastic tote at the back. One innovation is the fixing of the front knob, which has a square boss, presumably used to stop the knob rotating. The lever cap is rough cast and painted, not the usual chromed finish. I found it rather ugly, but it is perfectly functional. The locking cam on the lever cap needed a small amount grinding off to ensure it stayed down. The screw that clamps the lever cap and the blade to the frog was too long, as it bottomed in the hole without the lever cap being fully tight. Grinding a

couple of millimeters off the end allowed the screw to be turned in further to clamp the blade assembly tightly. The blade is not marked with any name, and the cap iron is black with what appears to be an oxide layer. The lower end of the cap iron was rough and needed to be ground down to prevent shavings packing into the gap between it and the blade.

Looking at the sole, you will notice the 8 rivets used to hold the steel plate to the aluminum body. These were mostly flush, with some being slightly recessed. The sole was not particularly flat, with the toe being about 0.25mm below the level of the mouth (looking down on the upside down sole). There were also some smaller bumps and depressions. 0.25mm was too much to be removed by hand, so other options were considered. The picture below shows the sole after some work was done on flattening it, but before major surgery was attempted as described below. The matt areas were significantly depressed. The steel rivets penetrate to the top of the sole, shown by the brownish rust patches around the 6 that are visible.

I was sufficiently intrigued by this plane, to contact the manufacturer. I spoke to Vic Mijon who is the son of the founder of the company and he kindly gave me some of the history of the plane.

Vic says they have been manufacturing the plane for 30 years now. Although demand is dropping off now, it is still available through their local distributors. It is made at their factory in Edenvale from locally sourced materials. He couldn't recall how many have been made over the years.

In manufacturing, the body and frog are diecast from aluminum alloy. The sole is punched out of steel and then riveted to the body using 8 steel rivets. The sole is then ground flat. The blade is made from carbon steel sourced from Iscor (now Mittal) and the other components are made or sourced locally. Vic couldn't recall the name or grade of the steel used for the blade. They decided to make the body from aluminum with a steel sole plate, as they felt cast iron soles were liable to be damaged. When I asked Vic about the lack of flatness of the sole of my example, he said that it had probably been dropped. He said that they are inclined to distort around the mouth and this can be fixed. He then told me how to correct it, by straightening it.

I removed the handles and supported the plane upside down on two blocks of wood at each end, where the handles were attached. Using a hard rubber mallet, I then carefully hammered around the mouth area, to try to bend the sole very slightly. Using increasingly hard blows, and measuring the straightness after each one, I was able to reduce the

bend close to zero. The bend was not uniform on both sides, so some careful positioning of the blocks and hammering was required. The remaining unevenness was small enough to remove it using a super-flat 220 grit diamond plate in a reasonable time.
Now the sole is not perfectly flat, but is flat where it counts – around the mouth, and at the toe and heel. Slight depressions are visible and can just about be felt in a couple of places, but these have no practical effect on the operation. The photograph below shows the sole in the process of being flattened. A marker pen was used to keep track of low and high spots. Some of the rivets are visible as well.

Comparing the weights of similar planes, I recorded the following:

- Vicker #4 – 1264 g
- Stanley Handyman - #12-204 – 1510 g
- Stanley Bailey #4 – 1740 g

The Vicker #4 is about two thirds of the weight of the Bailey #4. The Handyman #4 falls in between – the body is cast-iron, but pared down to save weight, and is probably as light as a cast-iron plane should be.

(The Handyman has other, serious problems that I have documented previously.)

Once the sole was reasonably flat, I fettled the cap iron front edge and sharpened the blade. The back of the blade was not too curved - it took about ten minutes of work on the diamond plate get it to an acceptable flatness. There was quite a significant wire edge when sharpening, so I suspect the blade is not quite as hard the Stanley blades I am used to.
I was able to adjust the plane to take as fine shavings as I needed on a reasonably hard wood. The adjuster has significant back-lash but operates quite smoothly. The light weight took some getting used to, but the plane proved to be very usable.
Like nearly all planes, it required some work, but there were no show-stoppers. If you come across one, I think it is worth considering, as it is made in South Africa. It is not often you can say that about tools these days!

(I should note that this technique to straighten the sole probably should not be undertaken with conventional cast-iron bodied planes – the casting is likely to crack and break, rather than bend.)