CANTERBURY MODEL ENGINEERS · C · S · M · E · E · CHRISTCHURCH N.Z.

Canterbury Tales

Vol.62 July 2022

New turntable under way

Over the last couple of months work has still been done around the track and grounds. We have been lucky with the weather, having to cancel only one day's work. Even that didn't stop the hardier souls from turning up - we had 16 for lunch! It actually turned out to be a fine day; who can believe the weather forecast?

With the new traverser 98 % finished, Keith Robson is going to finish the painting and with a only couple of small jobs still to do, its working like a dream. Great job team.

The next job on the list is the turntable. This has already been started, with Barry and Keith Schroder leading the way. Concrete is due any day. Let's hope it will be finished by the end of the year, and ready for Canmod 22.

We are planning on raising the coal shed, now that we have more time. There will be two rows of blocks put under the walls, which should save us from having to stoop to walk in. The plan is to lift it up, lay the blocks and drop it back.

There is a new sign on the water tank for Sunday running (see photo overleaf)

Our ten new club trolley-bodies are finished, and Phil Bellany and Don Moffatt are fitting the bogies and drawbars at the rate of one trolley per week. Another great job, team.

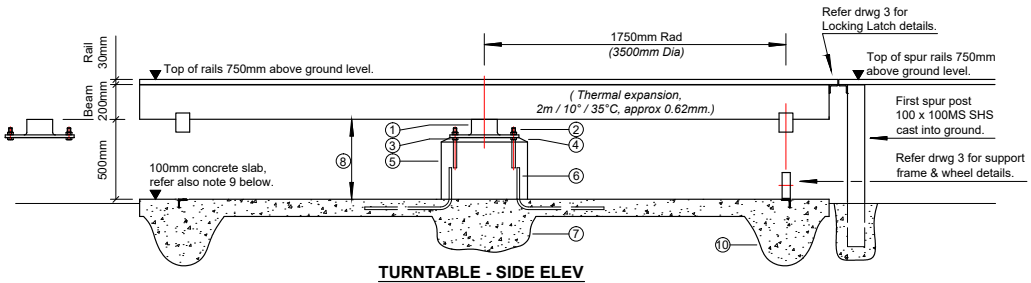
Andrew Hawke has been busy building new units in the boat department, - a very tidy job. Andrew has also cleaned up the buoys in the pond, giving them a new paint job and fitting new chains. Our overflow at the end of the pond is working well, and in spite of the rain we have had in the last week or so, it has performed perfectly

Our signals team have been working on the new lights at the NW end (the bit where you go into the trees and can't see around the curve. They are fitting a set of lights to warn if there is a train stopped in the section ahead. It's been a blind corner for years. They are also working on a new signal panel in the points box (see photo). This is also going to help when the new track is laid.

Finally, thanks are due to our gardeners for keeping tidy all things "woody" .

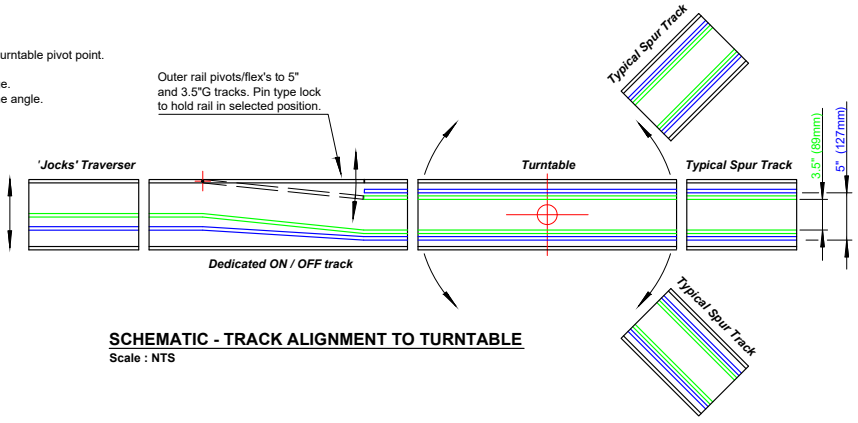
John Howie

Turntable Drawings



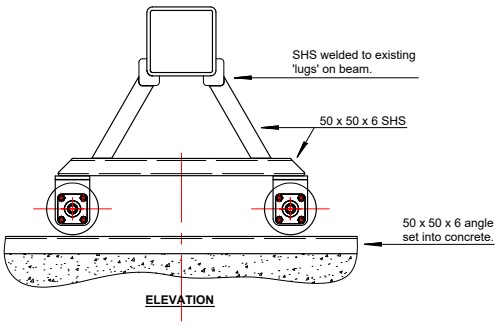
TURNTABLE - SIDE ELEV
Scale 1 : 20

NOTES
1) Existing bearing socket.
2) M20 galv holding down bolts cast into concrete base (to match PCD of bearing socket).
3) Leveling nuts under bearing socket.
4) Sand & cement compound grouted in after bearing socket is leveled.
5) Concrete base 500 x 500 x ** high (**refer note 8 below).
6) Reinforcing to tie base and slab.
7) Concrete under base area to be 350mm deep to ensure good footing for turntable pivot point.
8) 500mm, concrete slab to top of bearing socket, refer drawing.
9) Concrete slab 'falls' approx 20mm from centre concrete base to outer edge.
10) Concrete footing under 50 x 50 MS angle. Outer support wheels run on the angle.

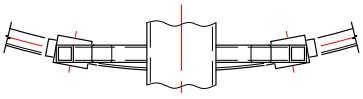


SCHEMATIC - TRACK ALIGNMENT TO TURNTABLE
Scale : NTS

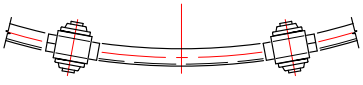
			EAST STEAMING BAY UPGRADE	Scale As Shown
B	June 22	Details added	**TURNTABLE DETAILS**	Drawn
A	March 22	For Discussion	**C.S.M.E.E. 2022**	Drawing No 2 of 3
Rev No.	Date	Amendment		Rev B



ELEVATION

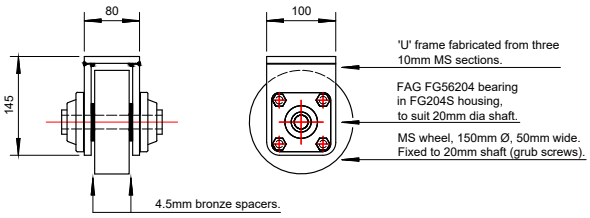


PLAN : WHEEL SUPPORT FRAME

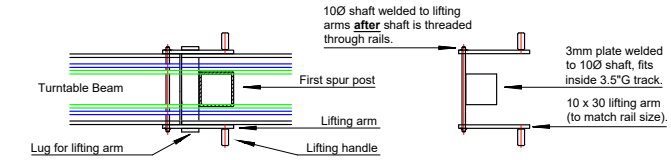


PLAN : WHEEL-SETS ON RAIL

SUPPORT WHEEL & FRAME DETAILS
Scale 1 : 10

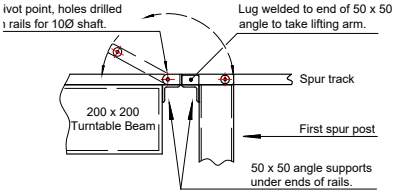


SUPPORT WHEEL DETAILS
Scale 1 : 5



PLAN - LOCKING LATCH
Scale 1 : 10

LOCKING LATCH DETAIL



SIDE ELEV - LOCKING LATCH

			EAST STEAMING BAY UPGRADE	Scale As Shown
			TURNTABLE DETAILS	Drawn
A	June 22	For Discussion	**C.S.M.E.E. 2022**	Drawing No 3 of 3
Rev No.	Date	Amendment		Rev A

More turntable fabrication work

It pays to advertise. New sign on water-tower

Andrew replacing buoy

Peter Grounds "The Berkshire" (Part 11)

Well, here we are at the eleventh instalment of “The Berkshire” series. I wonder what number we will reach before this engine finally hits the “high iron”.At the stage where I left things in the last instalment, there were quite a few cut-outs in the smokebox. One of them now has a cover, as seen in **photo 1**. This involved a little bit of TIG welding in 16 gauge steel. Using silicon bronze filler, (which has a melting point lower than that of steel), made this easier. Is this “TIG welding” or “TIG brazing”? The cover is held on with 6BA hex head screws. Strictly speaking, the cover should be clamped down with studs and dogs. However, I will need to be in a special kind of mood to make and fit 44 little dogs. In the meantime, the screws will do just fine.


Photo 1


Photo 2

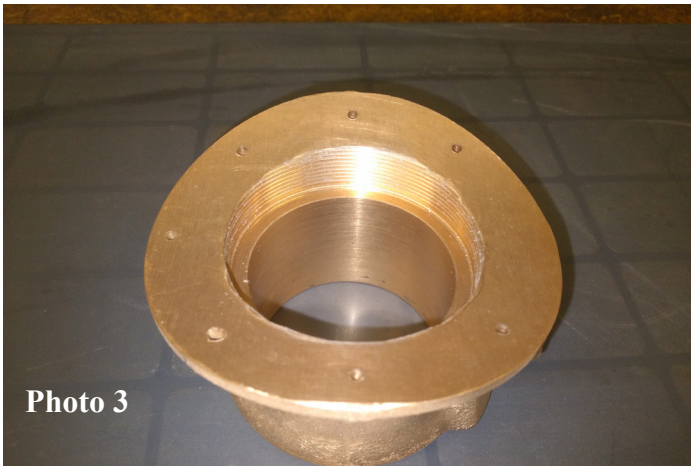


Photo 3

The chimney ("stack" in USA--speak) has been machined. It started as a bronze casting (thanks Win Holdaway), and machined up well. See **photos 2 and 3**. The base of the chimney was fly-cut to 282mm diameter, and fits nicely on to the smokebox. There is a 70mm x 1.5mm thread (M70?) cut into the base of the chimney. This is where the petticoat pipe screws in. I was hoping to have a photo of the petticoat pipe, but it is still being machined. Photo next time. Anyway, my biggest metric tap and die is M18, a far cry from M70, so the thread was 100% cut in the lathe. Which, of course, is what lathes do!

On the top of the chimney are three vents, with pipe connections below. I had to do some research to find out what these are for. The left-most vent is the exhaust for the left side cross-compound air pump. The right-most vent is isthe exhaust for the steam stoker the exhaust for the steam stoker engine and centrifugal pump supplying cold water to the feedwater heater. The small centre vent is for the feedwater heat exchanger. I don’t know where the right side air pump exhausted to. By the end of steam on the Nickel Plate, all three vents were blanked off, and all of the various pump exhausts exhausted into the feedwater heat exchanger. One day my Berkshire will have working air pumps, and I will keep things simple and exhaust these into the left and right chimney vents.

Photo 4 has nothing to do with the Berkshire. It is a copper boiler for a 5” gauge “Torquay Manor”. I built this boiler 20 years ago,

Maybe I was apprehensive about it failing its test. However, it did pass its test, and my 75% complete "Manor" has been resurrected. About time!

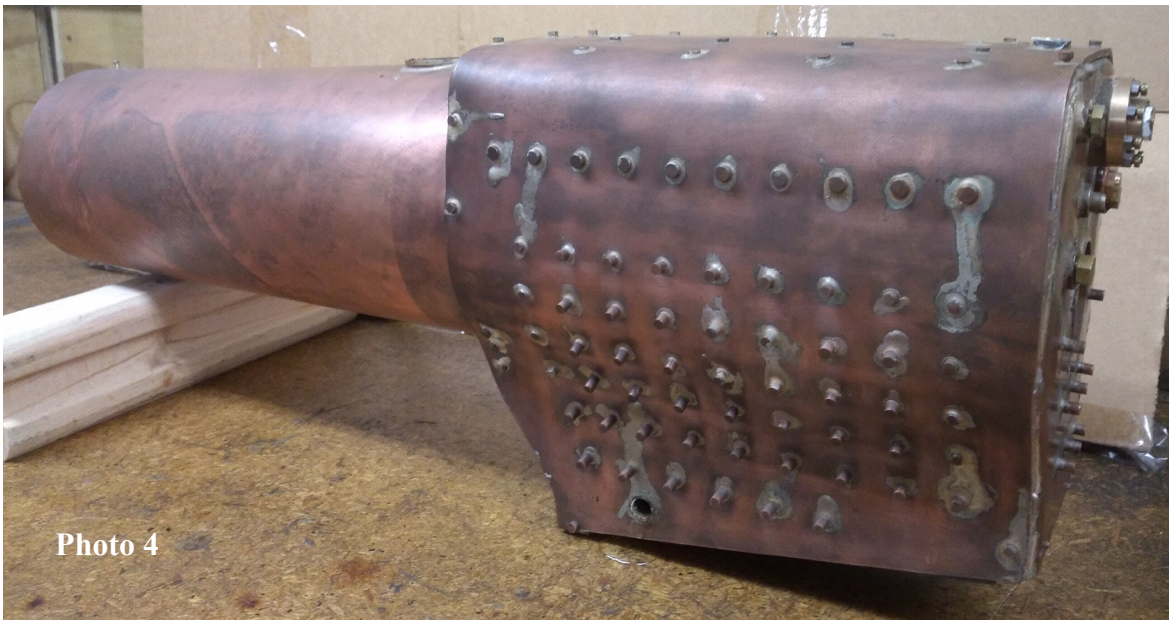


Photo 4

Rob Wilson's Workshop

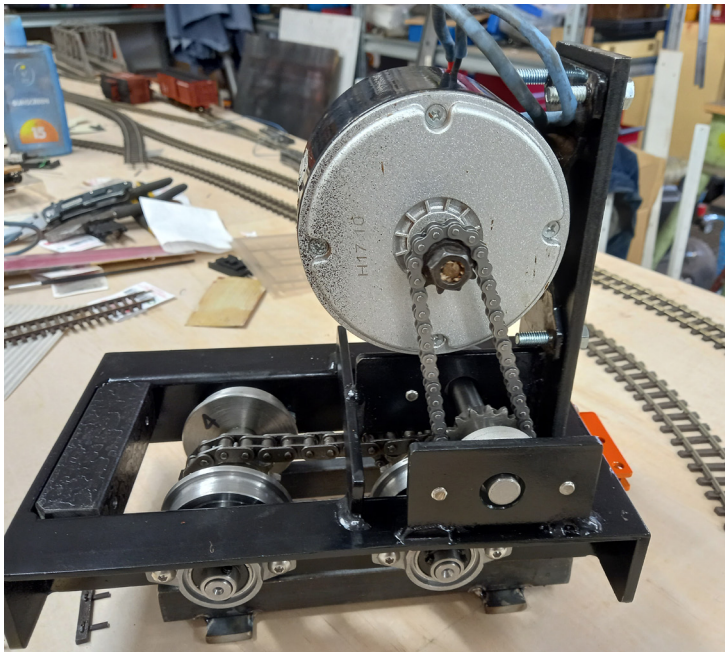
I have completed a motorized 4-wheel chassis in 2 ½" gauge for Jayden to make a "Mini-me" version of his 7 ¼" Prince **(see photo).** Now I've started a 7 ¼" gauge D10 diesel loco of the Zillertalbahn.

I'm also assisting Alister Ward with the construction of his "ride-in" Dsc, as well as gathering parts for a 5" Dsc for Barrie Doublesin.

I have started laying track on a long delayed On30 layout in my garage.

Additionally I need to fit a loco and wagon securing brackets to Bev's trailer.

Apart from that, not much going on….



Ian Fanshawe: Further progress on the 7¼" gauge S.A.R. Class 15F locomotive

The last Canterbury Tales had to do without an article, due to too little progress on the 15F, and therefore not much to report. Since then I am pleased to say things have picked up, and the loco is continuing nicely

Photo 1

All bits made so far, - thrown together.

The **power-reverser** is now completed. Control rods run along from the cab to operate the two cocks on top of the cylinders at the same time. The cylinder on the right receives steam at boiler pressure to either side of a piston. This in turn lifts or lowers the radius rod via a bell crank operated by the block on the piston rod. The cylinder on the left is oil- filled, This oil gets pushed from side to side of a piston via the cock on top The oil also passes through a restrictor which controls the flow of oil, thereby regulating the speed at which the reverser changes the valve cut-off.

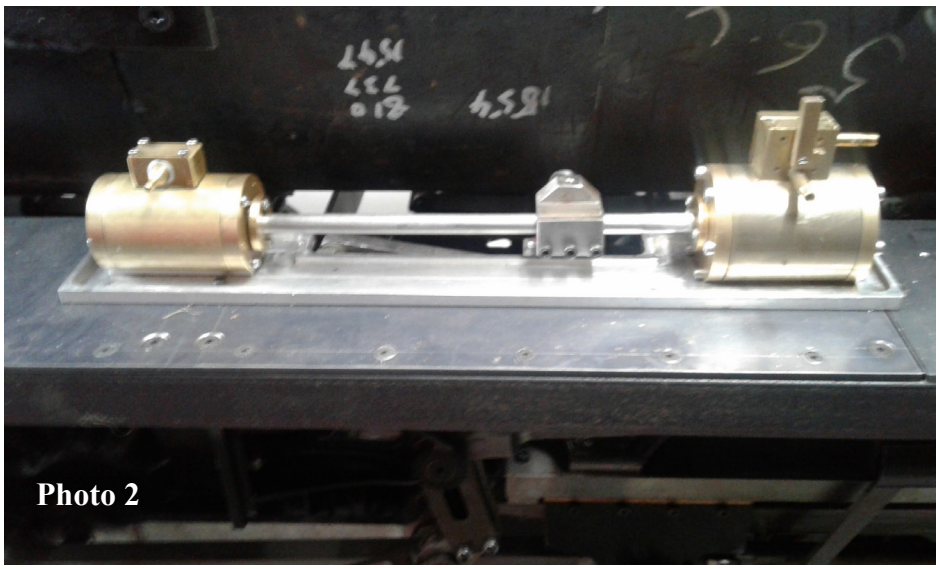


Photo 2


Photo 3

Smoke-box machining. **Photo 3** shows one of the oblique holes for the 1” steam pipes being cut. Whilst on the mill, the holes for the exhaust to the blast pipe, chimney and the oblique hole for the regulator shaft were cut. The cutter is shown mounted in a right-angle drive in the vertical mill head


Photo 4

4. Smoke-box door

5. Smoke-box and boiler united during trial fit on frames. The weight of the boiler and smokebox is 242 Kg. The total combined weight shown is 460 Kg. The engine hoist is a must have!

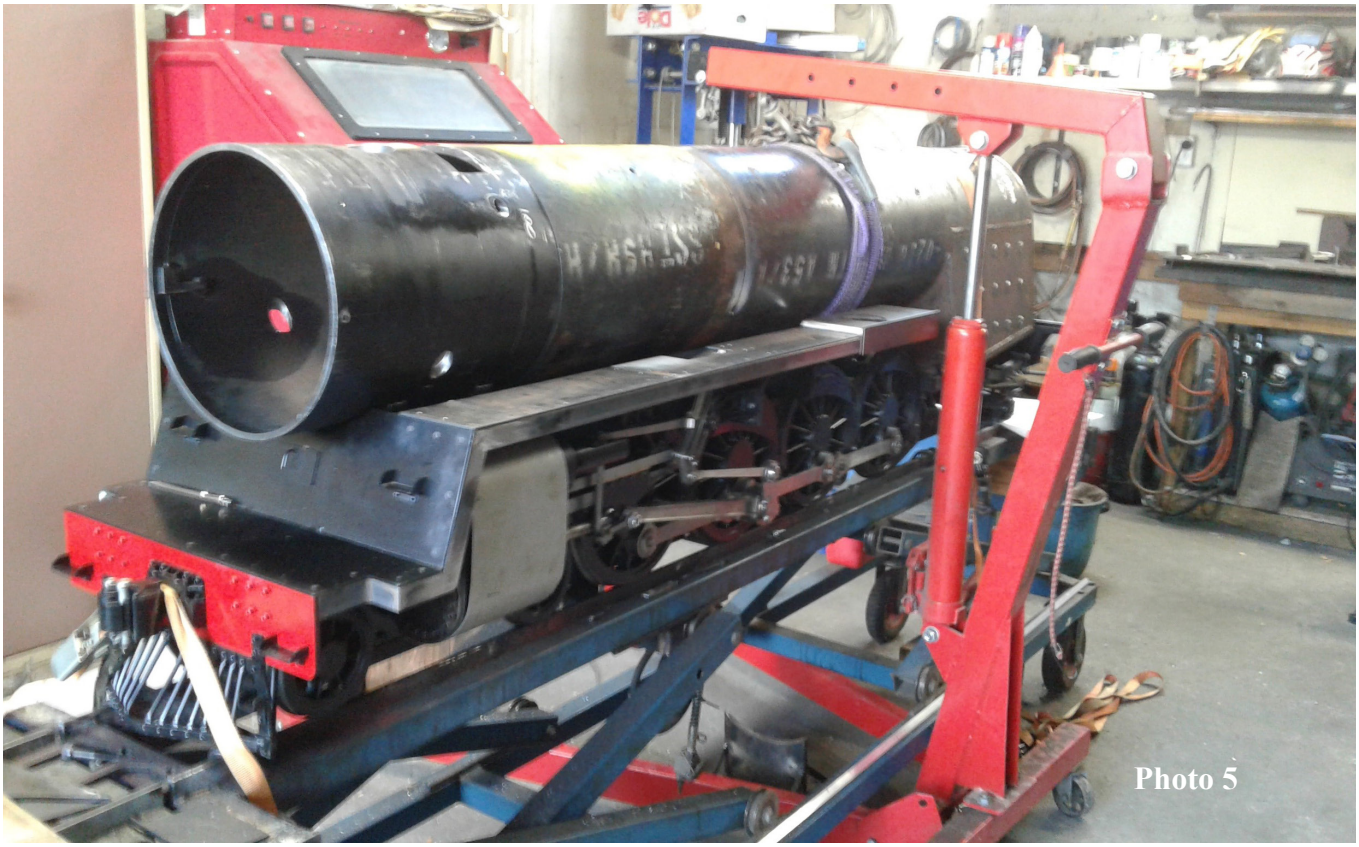


Photo 5

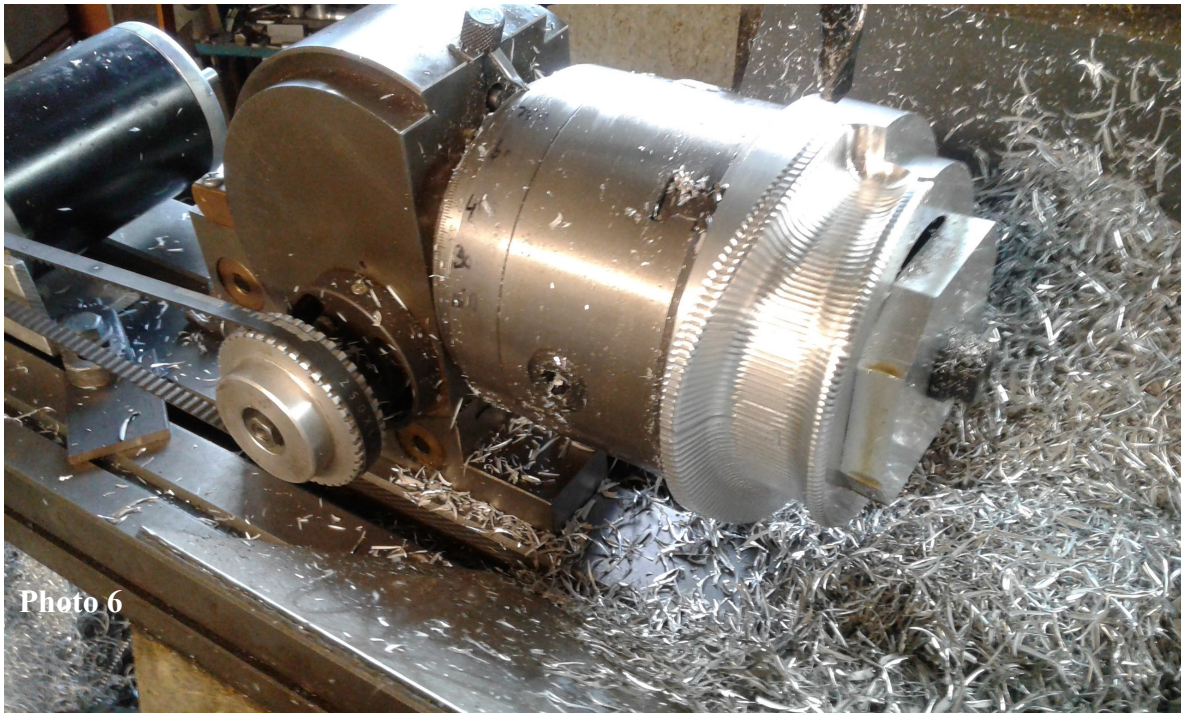


Photo 6

Photo 6 shows the chimney solid blank being rough- machined using the A, X and Z axes. A ball-nose slot drill was used, travelling on the X and Z cross- sectional profile. Then the job was rotated 2 degrees between each profile cut, using the A axis driven by a stepper motor via a dividing head. Each 2 degree profile is different between 0 and 90 degrees, after which they are repeated in reverse

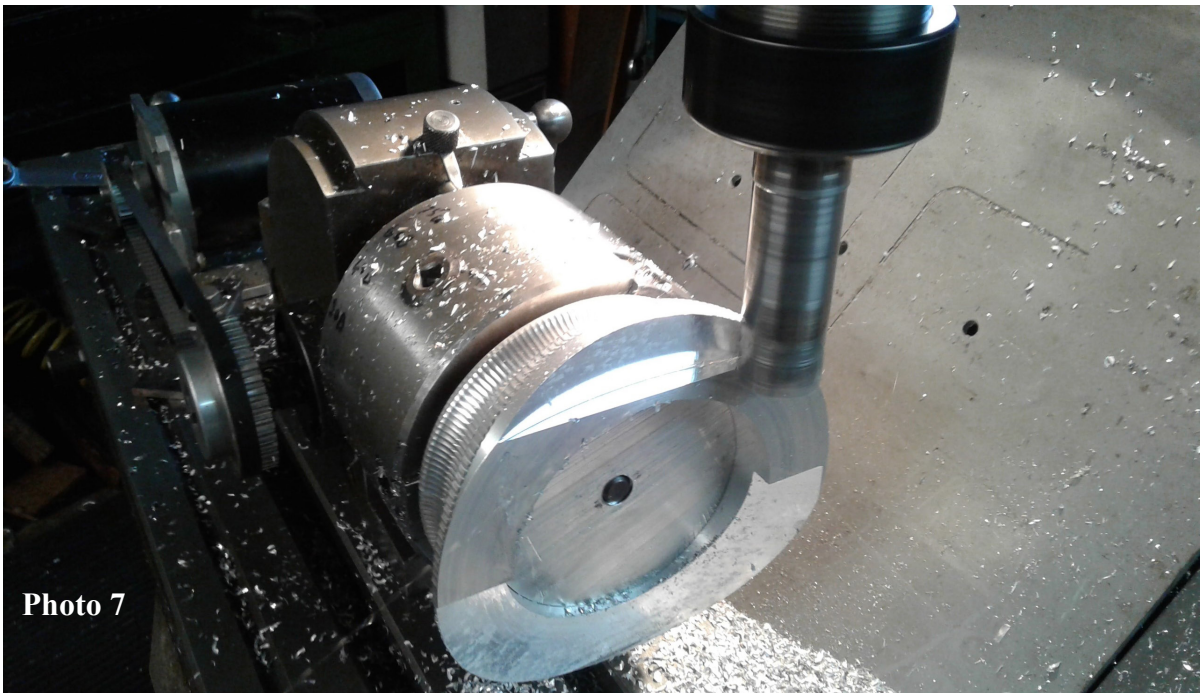


Photo 7

Machining the chimney bottom curve to fit the smokebox

Photo 8

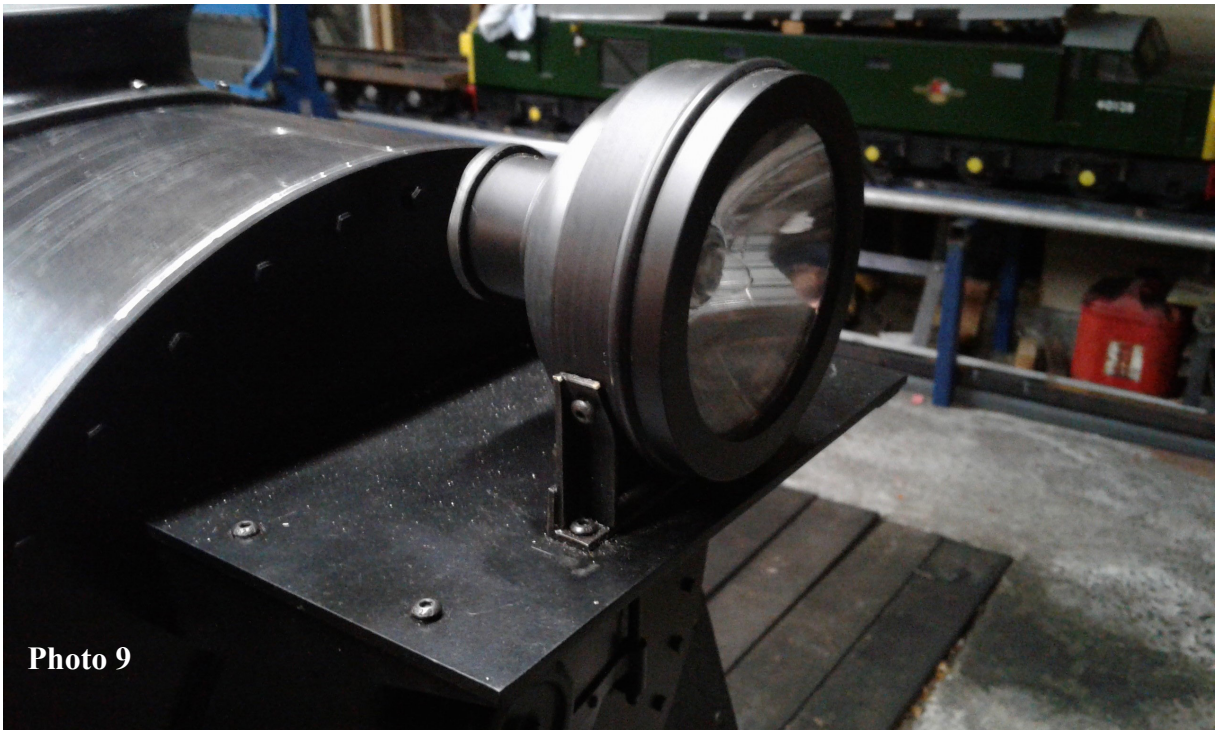


Photo 9

Headlight body and bezel machined from solid. The reflector and lamp holder are from a Dolphin torch cut down to fit inside the bezel.

From the Dockside

Sunday 26 June was a glorious winter's day and the boating section put on a grand display to match, with many bystanders enjoying the show. Your Commodore took the opportunity to chase various other sail boats around the pond and be as big a problem for them as he could. This caused much hilarity and the spectators loved the show.

It was good to see some new members there as well as a visitor from the Dunedin club who brought along his scratch-built tug and grandson (not scratch-built) to drive it.

As it's been a little cool of late, boating has been a bit limited and members have been busy elsewhere. Andrew Hawke has taken the opportunity to refurbish an old boat donated to the club. It was unfortunately a bit beyond being saved for its **designed** purpose but Andrew, being undeterred, set about repurposing said item. He was also asked to build us a couple of storage cupboards. The results are to be seen in the pictures above.

Malcolm Cowie has also been a busy lad, though he seems to have strayed a bit from the usual. Instead of boat-building he has gone into vehicle construction with his ¼ scale car. It was good to see it puttering about the club and drew a few interested stares from the bystanders.

Keith Schroder
Commodore

NOTICE TO ALL MEMBERS

SUBSCRIPTIONS FOR THE CURRENT YEAR ARE STILL DUE

PLEASE EXAMINE YOUR BANK STATEMENT OR YOUR CONSCIENCE!

CSMEE Officers for 2022 - 23

Patron: Jock Miller

President	Alex Cowdell	03 318 1908
Vice President	Jonathan Grueber	365 0604
Past President	John Howie	328 7459
Secretary	Rob Wilson	021 816 505
Treasurer	Mike James	321 7051
Loco Foreman	Barrie Doublesin	383 3827
Commodore	Keith Schroder	027 320 0609
Clerk of Works	John Howie	328 7459
Librarian	Ritchie Wilson	960 5878
Boiler Committee Chair	Ian Fanshawe	942 2937
Safety	Committee	

Committee Members

Bev Brash	329 6113
John Blanchard	359 4053
Eddie Clark	359 9615
Mike Harrison	349 6946
Dave Markham	322 7524
Keith Schroder	027 320 0609

Boiler Committee

Ian Fanshawe	942 2937
Mike James	383 4985
John Hamilton	322 4574
Keith Robson	324 4195
Dave Campbell	326 5585
Peter Grounds	343 1443

Constitution and By-Laws Chair: John Howie 328 7549

Volunteer Positions

Awards Night Conv.	Dave Campbell	326 5585	**Visiting Spkrs.**	John Begg	3398448
Asst. Librarian	TBA		**Membership**	Murray Fowler	03 349 5691
Asst. Loco Foremen	Dave Markham	322 7524	**Canterbury Tales**	John Pattinson	329 4441
	Rob Wilson	021 816 505	**Shed Foreman**	Ben Sewell	027 384 5651
	Peter Grounds	03 3243662	**Mech. Mtce.**	Peter Grounds	03 324 3662
Asst. Clerk of Works	John Hamilton	322 4574	**Roster**	Ben Sewell	027 384 5651
Projects Manager	John Hamilton	322 4574	**Facebook**	Patrick Whillis	318 7301
Archivist	TBA		**Ticket Box**	Bev Brash	329 6113
Webmaster	John Begg	339 8448	**Publicity**	Ben Sewell	027 384 5651
Wagon Mtce.	Phil Bellaney	03 312 5659		Glen Batchelor	351 5411