Sundry Snippets 23 . A veritably intrepid solution of a 7mm problem

Mike Sharman

"Deep in Bucks, necessity is still the Mother of invention"

Since the season of house/workshop repairs, painting, gutter-cleaning, woodrot-treatment - and even holidays - is upon us, Editor Jim's question at the AGM, "What have you got for the next *Snippet*?" left me dead in the water! He suggested a sort of 'lessons learned' from the very successful Missenden Modellers' Weekend, so, since quite a few Scalefour Society members were there, why not?

From my point of view, the weekend was based on the usual format of lathe work, toolmaking and chassis construction, but this time it turned out differently. Whereas I can usually flannel my way out of trouble and at least *pretend* to know what I am doing, this time I was presented with a lathe which I had never seen before. Moreover, there were no instructions for it, but there was a request for a chimney and dome in 7mm scale for a, to me, 'modern' LNER prototype.

I had made a tall chimney for my Maryport and Carlisle Crampton, but that had quite a small flare at the base and had been no real problem. The items required in this case, though, were short and squat, and of a very large diameter. I really did not know if the systems of shaping, forming and so on in 4mm worked in 7mm. Worse still, I had to try to find out in public.

A Lathe Encounter

Anyway, first the lathe: it was quite big - half-way between a Unimat and my Myford M.L.7; and it was bright yellow! It was fitted with quite robust milling attachment, and was accompanied with so many gizmos in boxes "to do sophisticated tasks" that it made your head spin.

To shorten the story a bit, I will just say that it took 15 minutes to find out how to switch it on, another 30 minutes to find out what we actually needed, and then a further 15 minutes to grind tools from spares provided by other course members (the tools supplied comprised fancy-shaped 'bits', which were Allen-keyed on to holders and would never produce flares of a dome shape and the like in a million years.

The poor owner of the lathe was a bit miffed to find that the bulk of the turning was done with hand-held shapers, ground up from old files which were fitted into suitable wooden handles; but that is the nature of lathe work for model railways.

And for the second challenge . .

So, we had sorted out the basics of the lathe, we had some usable tools, and we had negotiated various 'swap' deals with the rest of the lathe brigade to get some brass of the right size, and ditto for suitable drills. And now I had a dozen pairs of eyeballs in a circle, all waiting for me to make a fool of myself. In fact, once we got started, the drilling, shaping, producing the flare, and the parting off, all went

quite well, which led to the *next* problem area. Could we shape the flare at the base, without splitting the now very thin brass?

The proud owner was looking quite pleased so far . . . at least until I explained about splitting the base and the need for annealing. He was packed off outside, with a blowlamp and instructions to prop the object on a brick, to get it red hot, and to return without singeing himself. This achieved, he was ready for the next stage of forming the flare by pressing the turning over a bar of the same diameter as the boiler. Now, in 4mm, there are always bits of scrap brass/steel, or whatever, in the 16 mm to 22mm range to hand, but we needed something with a diameter of around 2-2½in., and a vice in which to squeeze it, so you can imagine the language.

Hands, Legs

After a search round the rooms, the nearest bits to those dimensions were found to be tubular table legs, but they were *still* too small. Eventually, we spotted the vertical milling pillar. We worked out that, with suitable packing, it *could* serve, but we did not want to strip the lathe; there was no large vice anyway.

In the end, with three pairs of hands holding the dome, some packing, and a G-clamp supplying pressure round the vertical pillar - and a lot of unseemly giggling - I managed to tap gently and roll a quite acceptable flare.

The whole episode was quite crazy, but a lot of fun and, on the serious side, it worked, and it justified the claim by the Missenden folk about value for money.

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