

GOOD THINGS COME IN SMALL SIZES

The third of three studies of single inside cylinder brass locos

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Pictures by the author



Fig 1a



Fig 1b

It is rare to find a brass loco in 'put straight on a shelf' condition, but this one was close, not only was it in very good original condition, still bright but with a pleasing amount of surface oxidation where the lacquer was thin, but it had nothing missing whatsoever **Figs 1a-d**.



Fig 1c



Fig 1d

However, it was not quite as easy as that, the base was badly bent and to straighten it required taking the wheels off, a smooth jawed vice, and putting them on again. I look at its condition and wonder how it got bent without seeming to show any sign of being dropped or trodden on? These things

are always baffling. It is very like the loco we looked at in TC 76 in that it is powered by a single double-acting oscillating cylinder, held to its block by a thread and spring and set to one side, with a cranked axle made from a single rod bent into shape **Figs 2 and 2a**.

However, this one is truly tiny, one of the smallest commercial dribblers I have ever come across at only 6½ inches long, 2¼ inches across the plates and a nominal gauge of 2½ inches.

Fig 3 compares it to the locos we looked at in TCs 74 and 75. Small it may be, but it is a better-quality loco with cast frame and hefty boiler. The boiler is dark lacquered at each end with a turned bright brass centre and lines. The lacquer is seriously imitating chemical darkening and has a sort of graphite-grey sheen, it looks very convincing beneath the inevitable instrument lacquer. Interestingly, the burner is in the grey lacquer too. The loco has barely been fired and so the burner looks almost new.



Fig 2

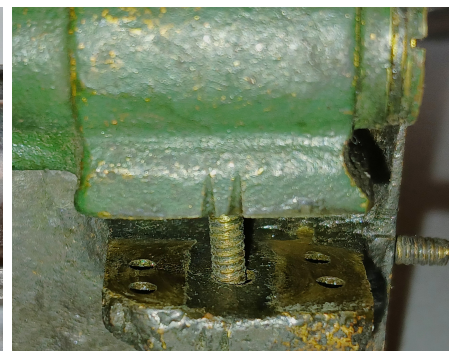


Fig 2a: Double-acting ports in the cylinder block, notice also the coarse thread.

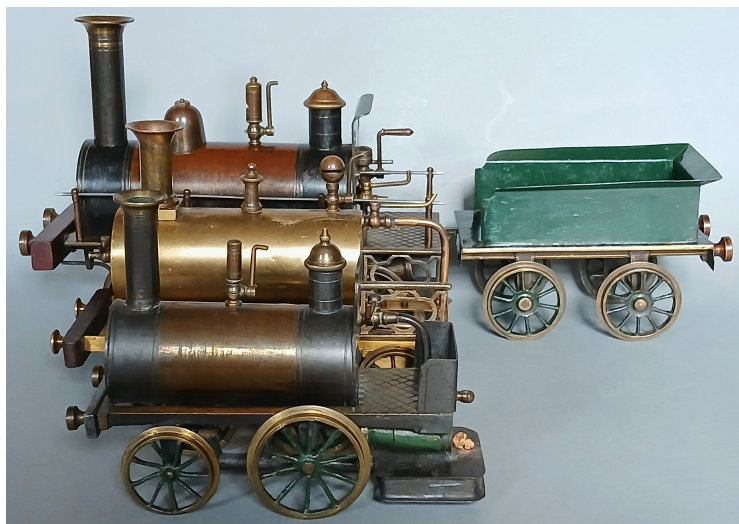


Fig 3: Notice the similarities between the smallest and largest, while the loco we looked at in TC 74 is completely different in fittings and style of finish.

first loco in TC 75 slides in, and the one in TC 76 hooks on, this one is held on by a threaded knob. Close inspection shows it to be a handrail knob intended for a much larger loco, but here it functions as a coupling eye in a neat bit of making economy. The burner hanger also doubles as the bunker, an arrangement commonly found on far larger brass locos **Fig 5**.



Fig 5

might have expected it to be, but it has never been holed and tapped **Fig 7**.

Another curiosity of this loco is its lead buffer beam. Almost all cast-frame dribblers are fitted with mahogany buffer beams, typically spaced from the frame. Here the lead beam is fitted flush to the frame. There is no doubt about it being right, not only given the overall untouched condition of the loco, but also because it is lacquered similarly to the other components.

Noting the similarity of detail with the loco in the last issue, the boiler is similarly treated, its wheels are very similar, as is its chimney **Fig 8**. Its buffers share the same very heavy heads and 'drawer knob' shaped shanks **Fig 9**. While this loco does not have a regulator, inspection of its steam tap shows identical design to the check cock on the loco in TC 75 and it shares a similar pattern of axle-setting for either straight or radial running

As ever, the drive has posed a problem for the burner reservoir. It is very flat indeed, but, even then, does not quite clear the cylinder, which pushes it down every time the crank is at bottom-dead-centre **Fig 4**. To give it a bit more capacity, the reservoir protrudes behind the rear beam and its hanger is mounted forward of the filler, a $1/16^{\text{th}}$ inch further forward would have it clear the cylinder's flange and cure the problem, perhaps a bit of careless making? While the burner for the

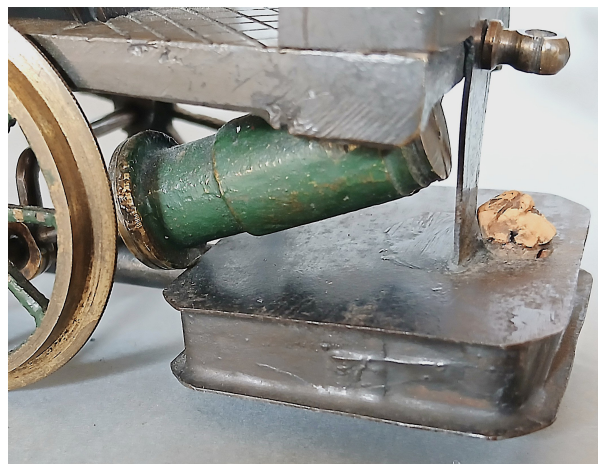


Fig 4: At 'bdc' the cylinder head pushes down on the burner, but for a $1/16^{\text{th}}$ inch setting difference on the burner hanger, almost certainly a careless error in making.

We looked at boiler design in TC 76. Unlike that example, the boiler has a front that solders over the barrel; not that this is an advantage, as there is no set-screw at the front; the boiler is merely held in place by its steam pipe at the rear. Its rear incorporates a weatherboard, rather than it being a bolt-on as fitted to the loco in TC 76, suggesting a making date a bit later than that example **Fig 6**. The thickness of the brass is impressive. For such a high quality little loco, one thing that is surprisingly absent is any water level check cock. The boiler front has a raised turning where one



Fig 6

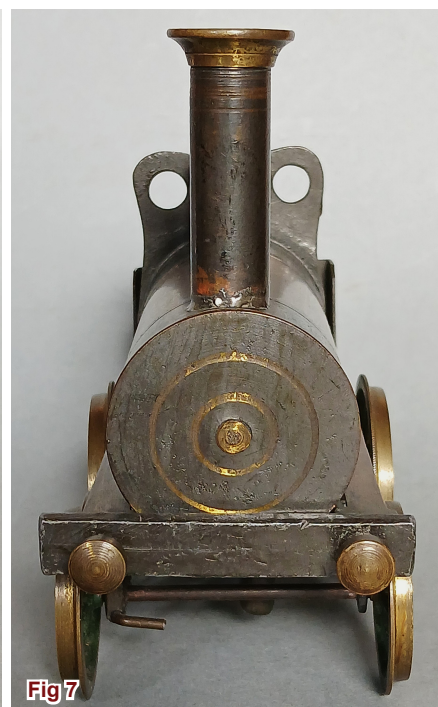


Fig 7

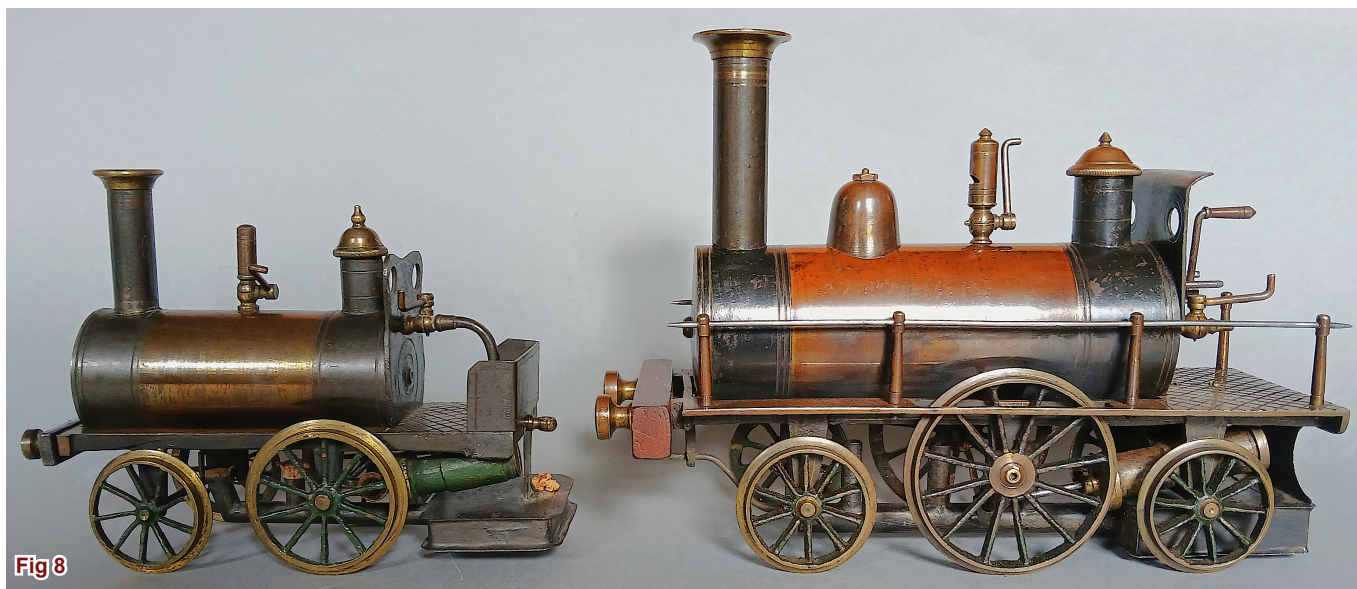


Fig 8

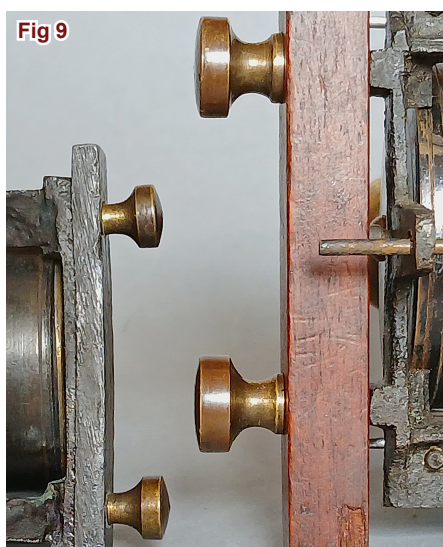


Fig 9



Fig 10: TC 75 above.

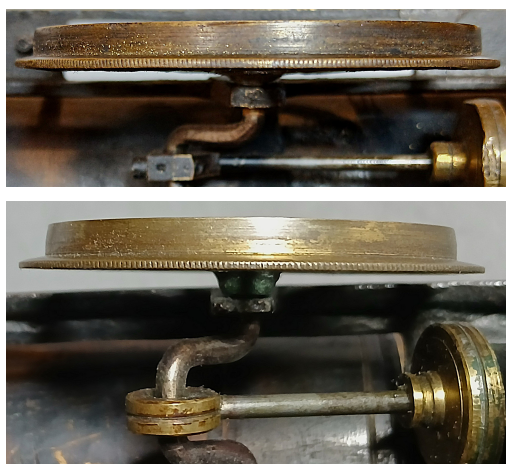
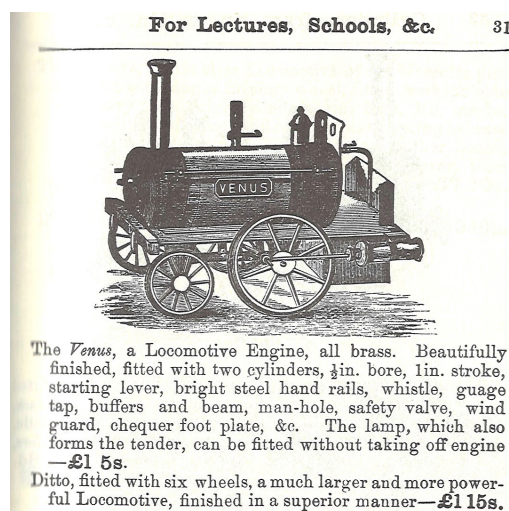


Fig 11: TC 75 above. Note the captive big end on the smaller loco, so designed that it can be slid round the axle bends and presumably a saving on the traditional, split big-end on the TC 75 loco.

were thinking about brand identity and product consistency, they were interested in selling things to make a profit. It did not matter who made them, they'd happily buy the products of a rival business if they thought they could sell them and the rival business would happily supply if they, too, found it financially worthwhile. I suspect you'd find identical items for sale in both Bell's and Stevens' Model dockyards made by each other and/or by someone like William Wilson, who is yet to be found. 🕵️

Fig 10, both have knurled driving-wheel flanges for grip on the floor Fig 11 and both share the same coarse thread on the cylinder set-screw. It is all too easy to fall into the trap of firmly stating that they are by the same maker, this issue's loco at a much smaller scale and perhaps a bit later. However, there is nothing at all to prove this even if it seems quite likely. Place of build? It has the quality and age of 'London make', but there is nothing to confirm this either. However, a rather similar outside cylinder loco, with the same style of buffer-beam, but enhanced with handrails, appears in the c1889 Bateman catalogue Fig 12. At best 'it could be', but equally might not be, by Bateman, his predecessor Bell, or bought in from Stevens. As for date, given its details and quality and the loco in the Bateman catalogue, I think this one could well be early-mid 1880s and its similarities with the loco in TC 75 tempt me to *think* Stevens and quite likely sold by Bell/Bateman.

If there is one thing the exercise of close study does, it demonstrates the problem of the nature of 19th century making and retailing viewed from 150 years away. We can see similarities that certainly suggest a shared maker but to ascribe the actual name of the maker is a different matter. This was not a period where toy makers and retailers



The *Venus*, a Locomotive Engine, all brass. Beautifully finished, fitted with two cylinders, $\frac{1}{2}$ in. bore, 1 in. stroke, starting lever, bright steel hand rails, whistle, gauge tap, buffers and beam, man-hole, safety valve, wind guard, chequer foot plate, &c. The lamp, which also forms the tender, can be fitted without taking off engine—£1 5s.
Ditto, fitted with six wheels, a much larger and more powerful Locomotive, finished in a superior manner—£1 15s.

Fig 12: The *Venus* shares commonalities, including 'the lamp, which forms the tender' and by the price, good quality; but is it related? One thing to note is that for ten shillings more, Bateman would provide the loco with six wheels – an offer that suggests others might do the same, taking us back to the loco in TC 74.