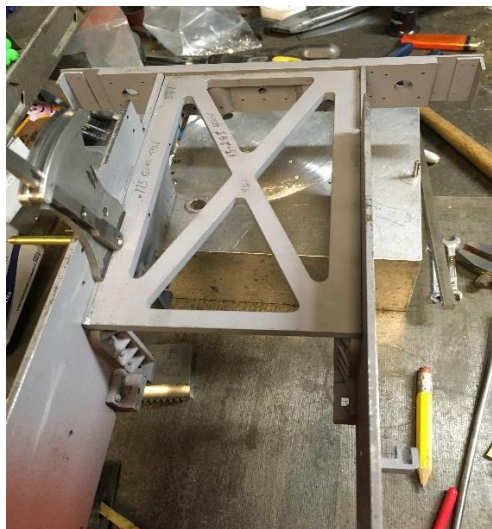


Five inch “Jinty” build.

Around five years ago I decided to build Martin Evans’ “Jinty”, a 5” version of the ex LMS 3F 0-6-0 tank engine. I aim to model the loco’ depicted, 47528 of Longsight shed. I worked for many years with the son of the gentleman climbing down from the footplate so even more added interest.



The frames were cut, horns, brake hanger brackets, stretchers and buffer beams all fitted. I also fitted an extra stretcher (as shown) to stiffen the frame behind the boiler as there is nothing shown on the drawing and I thought the frame could easily flex which wouldn’t be good!



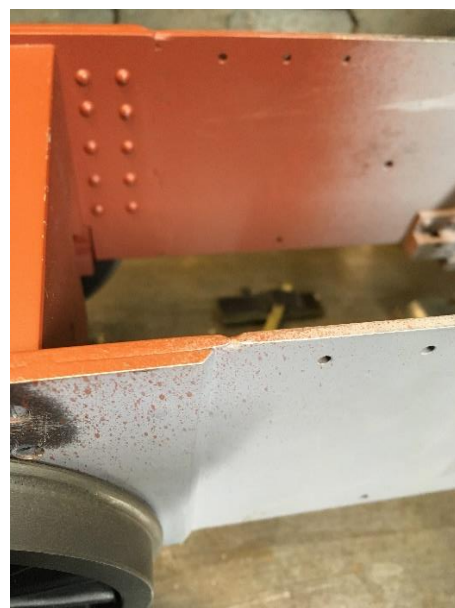
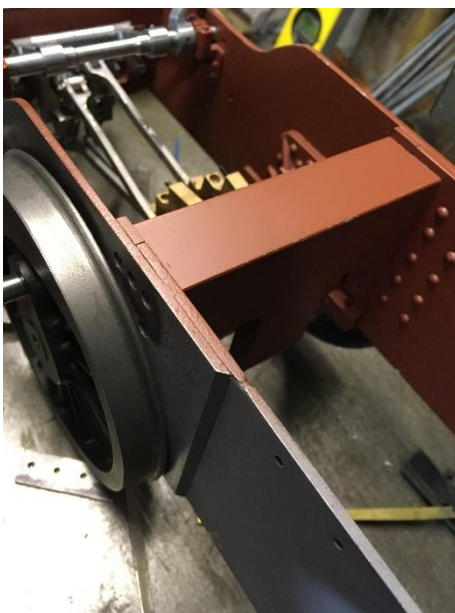
As the whole was assembled I started to think that the width of the buffer beams didn't look right, seemed to my eye to be too wide?

Using the drawings from the "Wild Swan" publication covering the class and comparing with the Evans drawings I found that his dimension is 0.375" too wide, something that is easily put right by shortening the buffer beams and making the tanks and bunker slightly thinner than those drawn. Length and height of his drawings very nearly correct.

The biggest "bugbear" for me is the positioning of the steamchest on Martin's drawing, being underslung below the cylinder block, meaning a great big lump of cast iron showing below the frame front end, something not there on the prototype. The steam chest on the prototype is between the cylinders and in line with the piston rods. Decision made, revamp the cylinder block. Ideas needed! These came in the form of the valve gear drawing for the 5" "Didcot" loco which has the correct steamchest position.

Using Martin's dimensions but keeping an eye on the "Didcot" arrangement I started to machine the two cylinder blocks. The "Didcot" frames are drawn with an internal space of 4.375", wider than the 4.125" drawn by Martin. Keeping to his design doesn't leave much room for the steamchest and valves, only 0.375" for the two back to back slide valves, too much like watchmaking for me! Another decision made, cut the frames, weld a bit on and rejoin them giving the 4.375" gap required, which is also correct to scale minus a few thou'.

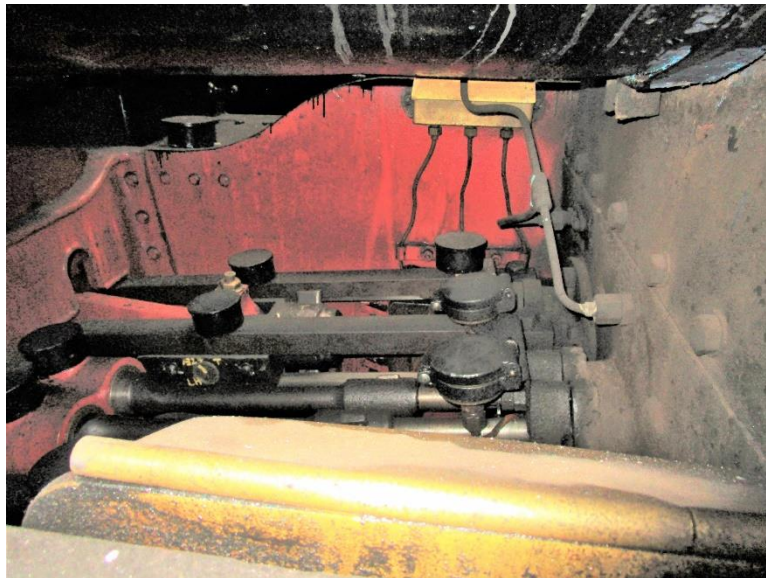
Photo's explain all I hope....



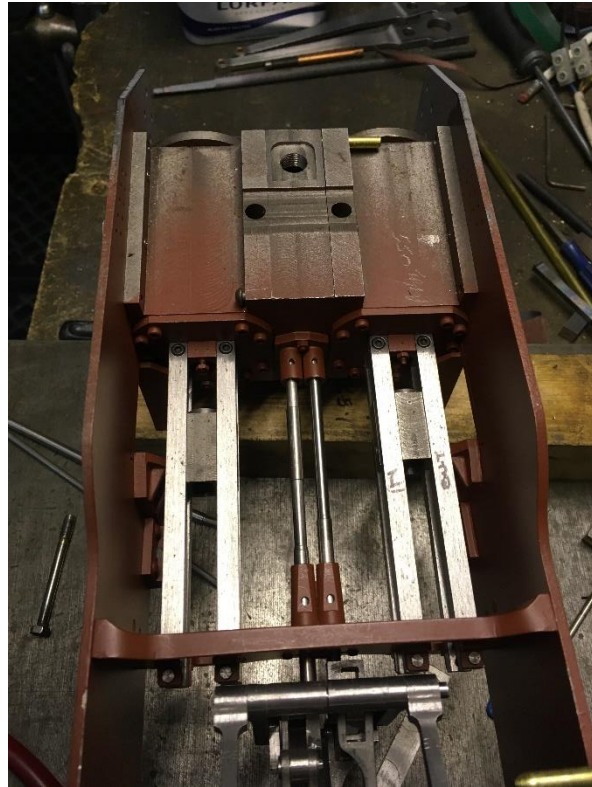
The position of the cut is to allow keeping the 4.125" frame spacing at the back end thus allowing a good endfloat of the rear wheelset so the thing will go around corners! (I recently took the chassis to our track and it does go round the tightest curve, just past the traverser.)

Revamping the gear meant changes to the motion plate, again something that can be made to look right by using the Wild Swan drawings. Around this time I was sent some photo's of a scrap 3f frame at the Severn Valley Railway by a member of a model engineering website. These enabled changes to be made to the front horns and axleboxes so they were closer to reality.

Martin drew his version with a single wide slidebar and crosshead. The prototype has four bars per crosshead as below. The bottom L/H bar just visible above the valve rod.

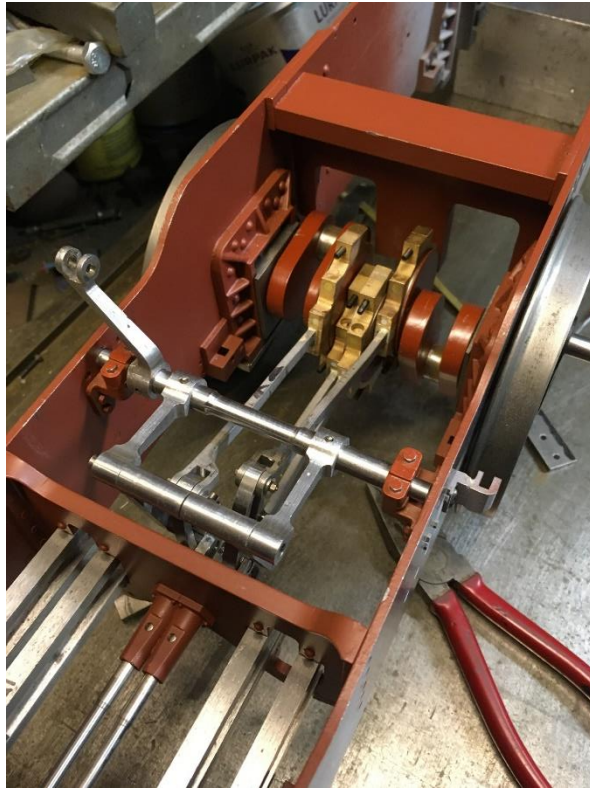


So, another change to the motion bracket and cylinder end covers to enable fitting the eight slidebars. Not too difficult to do, I machined the front mounting lug and the crossheads in one piece so their cross sections are all the same, cutting the piece as required on completion. Assembly pic below.



Now to the gear itself. All centre dimensions as per Martin's drawing.

The eccentric straps are castings from Blackgates, the crank axle and eccentrics a built up item, all loctited and pinned. Expansion links machined using the rotary table. The four link rods aren't the easiest of things to machine and bend as drawn so some rethinking required. I ended up making a jig to silver solder the rods to the traps, not using the bolted design, this is why there is some filler showing where the drawn fixing holes were on the photo below. All the links and shafts will be cleaned up when I know it works.



The reverser stand is partially made (shown in second photo')

The next step will be the reversing rod and cutting the notches in the reverser rack.

The chassis is "under the bench" for the time being whilst I concentrate on repairing another loco.