THIS PRAIRIE IS NO DOG - Continued

In Gazette issue No: 11, Volume 15, May 2004, I wrote about my experiences building the Mitchell 45xx 2-6-2. The engine was sold on through an intermediary and so I did not know to whom it ultimately went.

However, I thought readers might be interested in what happened to it. In the late summer of last year, I received a letter from the owner in Scotland, via a convoluted chain of Guild officers, with alarming news. The smoke box appeared to have exploded and lifted from the footplate. I took delivery of the engine at Bo’ness while on a trip there soon after and brought it back to my workshop. As you can see from the accompanying pictures, it looked horrendous.

The ballast, which had been fitted in the smoke box, was a mixture of liquid lead and dilute PVA. Following my questions on the 7mm E-group, there was a considerable exchange of ideas and news of several instances of other people’s stock suffering a similar fate. It seems fairly certain now that the ascetic acid in the PVA has reacted with the lead, or something in the lead, and the resulting corrosion has swollen it to the stage where the smoke box has burst and lifted off the saddle, pushed the door off and lifted the boiler away from the tank ends. The sharp eyed among you will have noticed that the buffer plank number is wrong it should be 4500. Strange, no one noticed in four years.

Fortunately, all the parts, save for the smoke box door, turned out to be salvageable but the paint job I had spent so much time and effort on would have to go. It was only the second engine I had ever painted, which made it all the more galling. Stripping took two separate coats of Nitromoors and a wash in cellulose thinners but even that did not get all of it off. Obviously a good paint job!
Here you can see the damaged parts that were removed prior to cleaning up.

Cleaning out the corroded ballast from the smoke box took a while, as did preparing all the parts ready to be soldered back. Rebuilding in reality took less time than getting the parts ready but you can see from the pictures how it progressed.
Here is the rebuilt smoke box fitted with half a pound of rolled lead and fixed in with blue-tack. I was taking no chances with it this time however, it has been suggested by (I think) Bob Alderman, that liquid lead and a resin based powered glue is non-reactive.

The door is new since the original was damaged beyond repair. The lamp iron to replace the one on top of the smoke box that was damaged in the clean-up process came from the spares box. It was a lost wax casting left over from a DJH kit. However, had the box failed to come up trumps it would not have been difficult to fabricate a new one. Here is the almost completed repair waiting to go to the paint shop. At the time photographing, the lamp iron still had not been fitted.

The front steps were a particular problem, they are flimsy on the original, and they fractured at a bend line during deconstruction and so had to be held together with bits of scrap brass. Not easy to solder up as the parts were all tiny and close together, but once more proving the utility of an RSU, steel plate and magnets, I doubt I could have done it with just an iron.

I also took the opportunity to correct the front stays and fit them in their proper place. Another error neither I, nor anyone else, had spotted until I came to take it apart for repair. The safety valve cover remains loose fitted inside its mounting with blue-tack so that it can be removed for polishing.

I enjoyed building the kit in the first place and having it back for repair has tempted me to build another. At Telford 2007, I bought another 45xx kit from Pete Waterman (who kindly provided the extra smoke box door for the repair) and a set of Alan Harris castings. I intend to build the small-wheeled variety 44xx - one day. Quite how I will justify it on a freight railway in Birmingham in 1900 is still something with which to be wrestled, but it will be interesting to see what changes have been made to the kit.
Here is the newly painted engine back from Dennis Morley’s ministrations parked in my private siding until we can arrange delivery to its owner. I fancy it looks better now that it did originally and a couple of small errors have been corrected too.

It will be delivered back to its rightful owner at Telford 2008. I just cannot resist including this shot of the slide bars, as I did not have a digital camera when it was built. It does illustrate how beautifully the kit is designed.