



Revised and reprinted from *The Australian Hornby Collector*, December 2001.

QUITE some time ago I became aware of a Princess in distress. World events had set her aside as history flowed around her. Now she had re-emerged into sunlight but but time had taken its toll. Storage had been unkind and damp concrete floors did little for one physical being. Who is this Princess you may well ask, is she someone Douglas Fairbanks abandoned in a Ruritania castle?

As always, the reality is more mundane. In this case a Hornby 'Princess Elizabeth' loco had emerged from being placed to one side as WW11 unfolded. No time for toy trains now. Eventually better times arrive but also many things have to be placed elsewhere and the 'Princess' is one of them. A friend contacts me and now the 'Princess', including her box, is in my care.

Fortunately storage had only been damp in a chilling sense and I don't think free water was involved. However the plywood of the box base had started to de-laminate and sundry little wormy things had drilled their tunnels in the wood. The lining material was mildew-stained and the box covering paper was lifting away from the base and suffering colour loss as damp spread. So far as the loco and tender were concerned, the upper surfaces closest to the lid were perfect, just as if they had come straight from the factory. The inner lid illustration was excellent as was the Princess guarantee certificate and the Tested label which declared the date of testing to be 27/2/40. Finish on the model was matte varnish.

The under side of both loco and tender however was a different story. Paint was lifting off surfaces which were also starting to get a touch of rust although not pitted. Other paint just flaked away as adhesive power had been lost to metal. Surprisingly however the paint on the cylinder was fine. Transfers on the cab were gone

but on the tender they were fine despite the heavy paint loss around them.

All tender castings had self-destructed but loco buffers and boiler backhead were OK. I believe this is a common pattern. No wheels or crossheads were sound. Incidentally the front pony wheels were of the later, larger diameter.

Where to start? With the help of Alan Middleton and Andrew Hurley all castings were finally sourced and eventually delivered.

That gave the whole restoration project tremendous momentum to get started. Wessex Transfers supplied cab and tender lettering plus some lining. Full tender lining apparently was not available at the time nor was curved lining to apply to the level changes on the loco underframe. Eventually I was able to build up tender lining by using the long gold lines left over from a partial Riviera Blue coach restoration. The curved tender lines had to be carefully painted and likewise on the loco eventually.

Of course before lining was tackled, paint work had to be dealt with. A good 70-80 per cent of the paint was simply too good to remove. That also would have entailed the complete loss of all original lining on one side of the loco and tender. All I could think of was to rub back the poor paint and rebuild it to blend into that which had been retained. Out came the trusty 1200 cut wet and dry paper and carefully I rubbed all necessary surfaces back either to bare metal or the removal of loose and flaking paint. Removal of the handrails and the four threaded hand-rail knobs on the smokebox greatly assisted here.

Now came the paint matching task. I always find this difficult. It is so much easier to start from scratch with new paint. In mixing new to match old there are the variations over time of different pigments, ageing, chemicals etc. I do not have

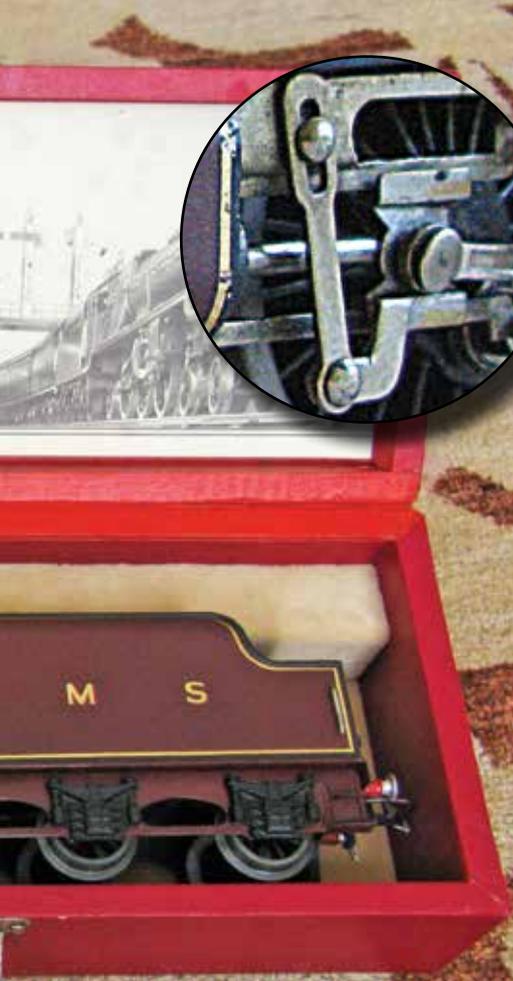
THE LOST PRINCESS

by George Coop HRCOA 217

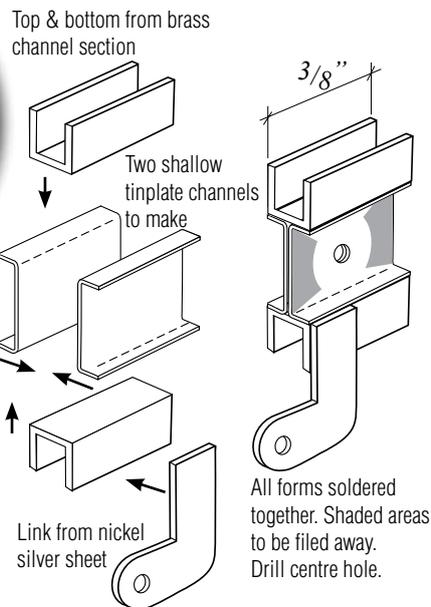
the resources of someone like Dulux behind me, simply the local hobby shop and Humbrol. At this point Lady Luck smiled upon me. In my box of old paints hid a tin of Humbrol C.P.R. Tuscan Red (No. 123). It was at least 20 years old, never opened and in a tin whose graphics style was long out of date. It was a perfect match for the shade of red on my locomotive.

I did not use any undercoat and simply brushed two quite liberal coats of paint onto the areas needing it. This tended to be the under curve of the boiler from about the handrail area down to the footplate, one cab and one tender side. On the boiler, my brushing action was upwards toward the handrail. As I passed the handrail and moved more towards the upper boiler I used less and less paint thus trying to feather the new into the old and not have too much buildup. I allowed each of the two coats about a week's drying time and rubbed each back with wet/dry paper. The first coat was rubbed back more than the second because if there was any minor surface pitting it also acted as a bit of a filler coat. The second coat was rubbed back to even things if necessary and also to remove any dust specks etc.

It also helped to further blend new with old where they came into contact with each other. The footplate simply received two coats of



Crosshead reconstruction



Take basic measurements from remains of crosshead castings then just ensure your new item slides smoothly between the slide bars.

had not covered the fitted handrail knobs from the spray so these had to be carefully rebrunished and the repolished handrail slid back into position. The whistle, valves and nameplates were also refitted.

At the same time similar work was being done on the tender. After fitting the new tender bulkhead casting, I had re-blackened the tender interior and also given it the rub back treatment. Again the matte overspray tied new and old together seamlessly.

Mention should be made of the motor. Fundamentally it was virtually in new condition. The coil earth wire had to be re-attached and at some stage the pick-up shoe had jammed itself perhaps in some point work and been 'peeled' backwards a little on the fibre mounting block. It was easy to reinforce this area by soldering on a little bit of nickel silver sheet to the shoe base. After cleaning the commutator face, brushes in their mountings and some gear/bearing lubrication, the motor took off down the track very smoothly.

Now to the box. A new base was an obvious need and ply for this was soon found and fitted. The raw timber edges in the box construction had all been covered with a black fabric tape. I was able to save most of this and re-apply it. It is quite an aid to the later smooth application of the box covering paper. A lot of the red paper box covering (Rexine it is called in *The Hornby Gauge 0 System* book) was lifting away from the box. Some of this was badly discoloured but much was not, so this was carefully set aside. I looked everywhere for some suitable new material but general art/craft-type stores could not help. However one did direct me to a bookbinding materials supplier and the search was over. The name Rexine meant nothing to them but they had a wide range of covering materials for books, ledgers, folders, files, etc. What I got was no longer solely a paper material but a lamination of thin paper for the adhesive material and a finely textured, coloured, very thin plastic film for the outer wearing surface.

My box lid, in contrast to the base, had

survived very well so the new covering had to be as close a match as possible. The match turned out to be almost perfect. In strong daylight a tone difference can be seen. However inside, with artificial light, little or nothing is noticeable. Surface textures are a very good match and the new material cut and folded around the main box forms extremely well.

I was careful to note the order in which the paper was applied originally and followed this when eventually applying the new covering.

The lid did need a little patching as the paper covering had a few little nicks and scrapes. Here I used the saved good paper from the base. I carefully tore it (to get soft feathered or tapered edges that would blend in more smoothly than a cut edge) into little patches each just a little larger than the defect being covered and glued these into place with diluted PVA. When dry, I then gave the aged lid colour a wash of red Indian ink to bring it up to a more uniform tone of colour.

The box had a false floor made of thick cardboard. Enough of it remained for me to work out its shaping and size. It had various pieces cut out of it so that the model could nest down into it more evenly and not rest on a few high points. It also served as the support for the cream-coloured velveteen material that the model actually rested on. I had quite a job finding this material but eventually it turned up at a shop selling a wide range of fabrics for wedding dresses. The velveteen pile was a little fuller than the Hornby original but the sales staff assured me I could 'shave' it if I thought it was a problem. I left it alone as it provides just that little bit of extra support to the models. The fabric is easily cut and a generous edge is left to fold over to the back of the card base for gluing down with PVA. Be careful here and do not let the PVA touch any part of the fabric that will be eventually seen.

The box also has some fabric-covered wooden blocks fitted that help locate the model precisely. These need to be removed to give access to the false base mentioned above. I was able to remove the old material covering them and use it as a pattern for cutting replacement pieces. Again be careful with the PVA. If you spill it onto the pile, that area cannot properly be cleaned up.

Likewise do not allow excess PVA to seep through to the visible surface from underneath. I spread a thin coat of PVA evenly onto the wooden blocks and then allowed it to dry a little so that eventually it acts more like a contact adhesive and only grabs the under surface of the fabric without soaking in. With the fabric cut to the desired shape, line up a fabric edge with a wood block edge and gently shape the fabric around the block. Use sharp fabric scissors to nip and shape fabric folds so that important visible edges are protected from fraying.

I later found out from Lindsay Chapman that a second piece of card, (not fabric covered) cut to the same outline as the false base, was placed on top of the models just prior to closing the lid. This obviously restricted movement in the box even more and prevented rubbing on the attractive illustration located inside the lid. Lindsay also supplied me with a photocopy of the maintenance leaflet that came with his boxed Princess Elizabeth.

Well, that is it. It all took some time but I am glad that I made the journey.

Reference

The Hornby Gauge 0 System
by Chris & Julie Graebe

Humbrol 85 (a kind of coal or sooty black). This was carefully brushed up to a defined edge of the remaining original black such as a frame top near the boiler front. All was now set aside so that paint could harden.

I now replaced transfers where needed and cleaned up things such as the name plates, whistle and safety valves. I burnished brass fittings as much as I could then spray coated them with INCRILAC. This is a Wattyl aerosol type product that applies a clear coating over copper, brass and similar alloys. It is NOT a clear finish for paints!

The sprayed objects were set aside to let the finish harden. New crossheads had to be made as the old castings had long gone to the Great Engine Shed in the sky. These were soldered up from tinplate and small brass channel section such as is available from K&S displays in hobby shops. The accompanying diagram best explains the construction method.

Now it was time to establish a new surface finish for the loco and tender. The original was matte. I decided to very, very gently rub back all the new and old paint. This had the effect of cleaning the old surface of any accumulated dust, grime, etc., so that once again it was totally smooth. Using Model Master Lacquer Overcoat (Lusterless-flat) I offered up a quick prayer and resprayed the entire model exterior and again set it aside to dry and harden. I am the first to acknowledge that a matte finish is the most sympathetic of all as it totally flattens light reflection from surface irregularities, thus if I have missed something in the preparation my sins are more easily hidden! At the same time I must also say that it has tied both new and old paint areas together extremely well. I tried to make such a meeting beneath a handrail so there is some visual distraction from possible faults. I