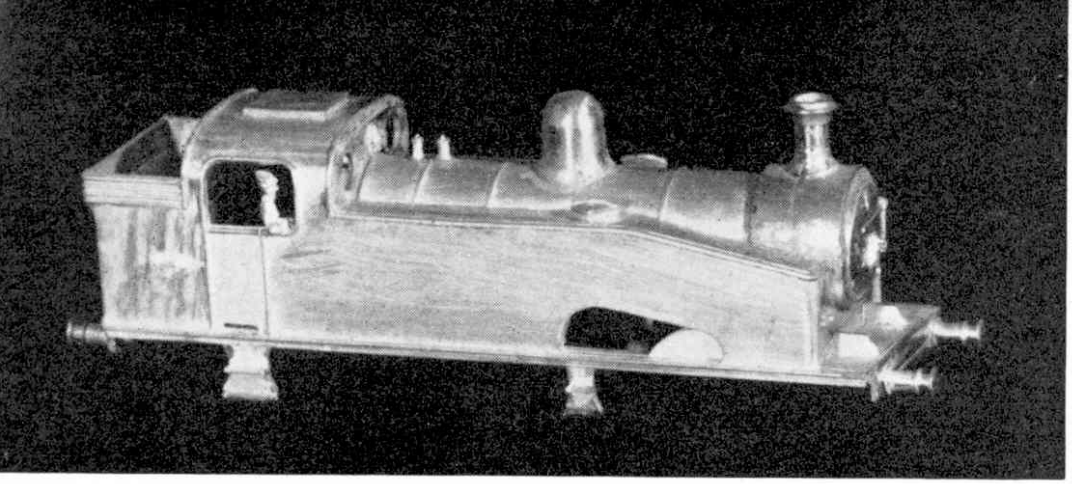


by **Linesman**

The J.50 0-6-0 tank body made by Messrs. K's. The locomotive is almost finished, and the gaps have been stopped, as described in the article.

Locomotive Kit Construction

LAST month, I dealt with the types of locomotive kit available to fit both Hornby-Dublo and Tri-ang chassis, and readers will by now be familiar with the wide variety of kits available. This month, I shall deal with the constructional methods involved in assembling a sample kit from each range of locomotives.

The method of assembling white metal kits varies according to the kit, but many common features can be found. The kits, for instance, have to be assembled with an adhesive and should not be soldered. As I mentioned in last month's article, I have used Evostik throughout, although Bostik, Araldite, Pafra, or H.M.G. would do equally well.

The glue has to be applied sparingly on both surfaces to be joined and should be allowed to dry before the two parts are pressed together. If too much glue is applied to the parts, a thick joint will result, leaving an unnecessarily large gap.

The K's J.50 kit was the first to be assembled. This is one of the 'bodyline' series of kits and is intended to fit on to a Hornby-Dublo 0-6-0 chassis. The kit should be assembled first without glue, to make quite certain that no major filing or alteration is needed. This procedure is known as a 'dry run' and should be used for all kits wherever possible. The first operation with this and other kits is to clean off the 'flash' on the castings. ('Flash' is surplus metal on the mouldings and can usually be recognised by its thin and ragged appearance.)

An old needle file or a modelling knife should be used to clean the flash off and care must be taken to ensure that no damage is done to the casting proper. In addition to cleaning off the flash, I make a point of cleaning the casting surface with fine emery paper whenever the finished surface will be seen. This helps paint to 'take' to the casting and also prevents it from peeling at a later date.

When the casting includes fine detail such as rivets and axleguards, it is safer to leave the casting surface, since it is extremely easy to damage the fine detail that manufacturers often cast into their kits.

The next most important step in the construction of the J.50 tank is to glue an 8 B.A. nut into the smoke-box top, to allow the fixing screw to hold the body to the chassis. The nut must be positioned before any further assembly takes place. The piece resting between the two sides at the rear of the locomotive is located, and the back of the bunker and tank fronts are then glued into position. The boiler top, the spectacle plate, and the cab roof are also fixed.

Any surplus glue is wiped off the surfaces of the joints and the assembled parts are set aside and allowed to dry. The chimney, smoke-box casing, dome and safety valves are then glued into position on the boiler tops. This completes the assembly of the model, except for the addition of the rear spectacle plate and the front buffer beam. The whole model should then be set aside to allow the glue to harden.

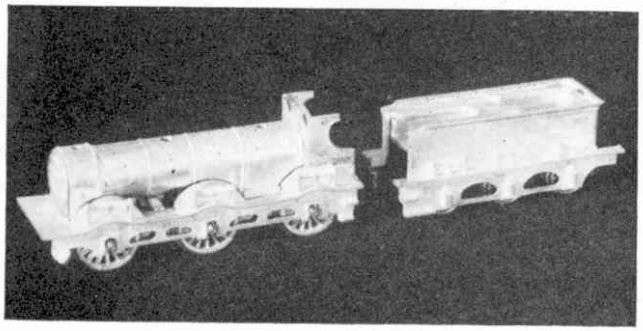
You will invariably find that small gaps exist in the joints between parts. This is almost unavoidable, irrespective of the accuracy with which parts are glued together. The answer to this problem is to fill these gaps with a stopper such as H.M.G. cellulose stopper, or Joyplane filler. These substances can be applied over the joints in the metal with a pin or a piece of wire and can be smoothed over afterwards to leave a filling between the two pieces of metal. You will find that the substance dries rock hard after a time and any surplus can be filed down.

The entire model should then be cleaned in readiness for painting. I use an old toothbrush dipped in a stiff solution of 'Vim' and water. This should be mixed to the consistency of a creamy paste for it to give the best results. Dip the toothbrush in the mixture, then brush the model vigorously. This gives the completed kit a shiny appearance and also cleans off any grease, surplus glue and other foreign matter which may spoil the final painting.

Building the Kirtley 0-6-0

The other K's locomotive kit to be assembled was from their range of locomotives supplied with its own chassis and the model I selected is the recently-introduced Kirtley 0-6-0 goods locomotive. This is a beautifully-cast kit and

The 0-6-0 Kirtley locomotive and tender made by Messrs. K's are shown here partly assembled.



includes an abundance of rivet detail, especially on the tender, where it is very noticeable. The first stage in the construction of the locomotive body is to have a 'dry run' with all the component parts, making sure they all fit. You will probably find that a small gap exists at the bottom edges of the firebox. This can be reduced by filing the rear of the boiler, or by filling the gap with a stopper as before. I chose the latter course, which is most effective.

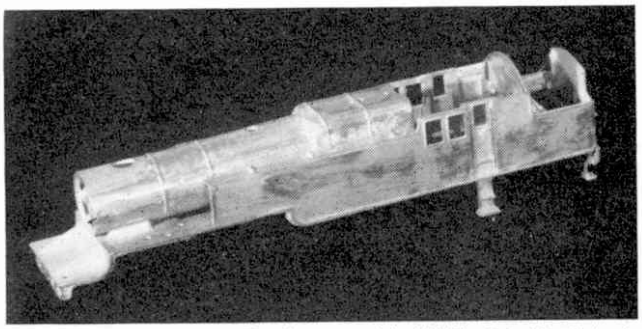
The photograph of this locomotive shows the gaps in the places mentioned and I think you will agree they would mar the model's appearance if left in that condition. After making sure that all flash has been dealt with in the manner already described, the two halves of the cab may be glued together and the smoke-box front and the back of the firebox, may also be added. When these four parts have dried, the two footplate and cab side parts can be glued to the boiler and cab front. Extreme care must be taken to ensure that the boiler fits properly in between the two footplate parts. The cab and the spacer between the footplate sides which has to have an 8 B.A. nut glued into the hole provided, are glued in position and the assembly set aside to dry.

The footplate front, the cab roof and the boiler fittings can now be fitted. Make sure that the boiler fittings sit squarely on top of the boiler and do not lean over at an angle.

This practically completes the construction of the locomotive body and work on the tender may now be started. This is fairly straightforward and consists of only ten parts. I found it easier to assemble this on its side, glueing on the back and front first. Make sure that these two parts are level with the raised edge on the inside of the tender side. The tender top can be glued into position, the wheels can be placed in the axle holes and the second side glued on. Next, the engine coupling is secured to a pin on the front tender beam, which is then glued on. The remaining tender parts can then be added.

The Wills 2-6-4 kit

The Wills 2-6-4 tank kit was next assembled. This is intended to be used with the Hornby-Dublo 2-6-4T chassis. Once again, the 'dummy run' should be carried out. The lower part of the boiler, the top boiler half and the firebox are first glued together and allowed to dry. The footplate front, the two cab sides and the bunker back are then all glued together, but before glueing the bunker back between

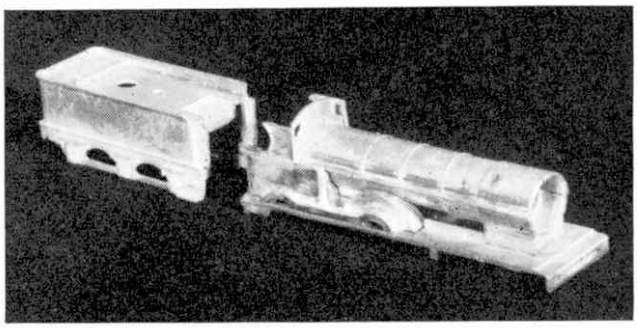


Partly-assembled Wills 2-6-4 tank body.

the two cab sides, make sure that the mechanism mounting plate is in position in the slots provided in the sides of the cab. The various parts should be lined up and then allowed to dry. Glue the rear spectacle plate and bunker tops into place and also the inside plate in the bunker. The front spectacle plate can now be added and you should make certain that the top bearing on the Hornby-Dublo motor is not fouled by this piece. You can now add the cab roof and boiler fittings, having ascertained that no flash exists under the chimney and other fittings that would prevent them from sitting squarely on the boiler.

Tank locomotive by Bec

The J.50 tank locomotive made by Bec is intended for use on TT gauge railways and should be fitted with a Tri-ang TT chassis. The construction of the locomotive body is very simple and should begin with the glueing together of the front and one of the sides. The back and the other side are then glued on to the footplate and the



The L.N.W.R. 'Precursor' 4-4-0 locomotive kit made by Gem.

boiler top is glued on to the top of the tanks, in the recess provided.

The cab top is then fixed in the space between the boiler and the bunker, in the four appropriate recesses. The chimney, dome and bunker back can then be added and the whole assembly set aside to dry. Any gaps should be filled as described previously. You will find it unnecessary to force any of the parts into their places; indeed, the kit almost built itself! As in other kits, the flash must first be removed before assembly can begin.

The delightful model of the L.N.W.R. 'Precursor' locomotive made by Gem is also produced for TT gauge but, unlike the last kit, does not fit on a Tri-ang chassis. A chassis casting is instead provided, but the builder has to buy the wheels separately. The makers recommend the use of balsa cement or a similar adhesive, rather than any of the impact adhesives.

Assembly should start by glueing the two halves of the boiler together and the smoke-box door to the boiler. Splasher and cab side units should then be glued to the footplate, making sure that the curved rear end of the splasher unit coincides with the curve on the valance rail of the footplate. This ensures that these two units are correctly positioned. The boiler assembly can then be fixed to the footplate. The firebox end should rest firmly against the cab front and the front end of the smoke-box should meet two raised lugs on the footplate.

The cab front fits inside the two cab sides and this is an excellent way of judging whether the parts are properly aligned. The cab roof and covers should then be glued into position and the fittings, chimney, dome, safety valve, steps and buffers should then be located. As before, make quite certain that the chimney and dome are sitting correctly on the boiler.

The tender consists of six parts, including coal and no difficulty should be experienced in making the parts fit. The Tri-ang TT motor bogie is intended to be screwed into the tender unit. The sides and ends should be glued together first of all and then the top added.

Next month, I will write about the construction of chassis kits, painting and lining models.