MY REGULATORS Geoff King

My locos have now all had their boiler ticket renewed to the new procedure. Gordon has remarked about the fact that my regulators do not leak now on several occasions. The regulators on these loco's are all of the type using flat sliding surfaces to seal, so to help others here is my method to get two flat faces on your regulator valve.
Obtain a piece of plate glass and scratch it all over with a glass cutters diamond or a corner of a carbide tip tool. A piece of glass about nine inches square is about right for size and say a half inch thick. Most glass companies will give it to you as it is only going in their scrap bin. When your regulator valve faces are ready to assemble this is the method that I follow to get a steam tight face.
Place a sheet of very fine emery paper (800-1000 grit size) on the non scratched side of your plate glass and rub the face of the valve on the paper with only one finger in the middle of the valve to apply pressure. When the faces appear flat remove the emery paper, turn over the glass plate and pour some Brasso onto the scratches. Now lap the valve face on the glass until a dead matt surface is obtained all over the valve , renewing the Brasso from time to time. When flat the two faces will stick together when wiped over with a clean finger,a process known as wringing the two faces together.
On no account lap the two surfaces against each other. This will result in unflat faces and a leaky regulator when your boiler test is done. The scratches are needed on the glass plate to get the Brasso abrasive between the glass and the valve face, and the process will not work without them. Silvo or chrome polish has an even finer abrasive than Brasso and if you are fussy will get a face even flatter than Brasso but you will need to be patient to get a better result.

A VIEW FROM THE WEB Jon Mottershaw
www.csmee.co.uk

The development of the society's web site has continued over the last few months and now carries a comprehensive selection of photographs covering our recent activities. It also records the progress on the ground level track. Included are notes on the speakers during the autumn / winter season.
A useful feature is the "Notice Board" which gives advanced news of events and trips which are in planning. This edition of the "Link" will be carried on the website so any one with an interest in our activities can download it to their computer.
There is also the facility to advertise items for sale and at the time of writing we have a Myford Lathe, a vertical slide, a road trailer and a power hacksaw up there.
In common with most other SMEEs the club web site gives contact details.
The aim of the web site is to present the club as a progressive, active organisation which would welcomes new suitable members, as well as keeping existing members up to date with coming events.
For the neighbouring societies which have agreements to provide public running sessions, a web site is now essential to advertise their programmes as the web is the first choice source for public information.
In the case of Colchester SMEE the web site is still very much an optional extra and whilst it does its job well in presenting the club to the outside world (the most distant contact has been from Australia), it is still an underused resource as far as the membership is concerned.
For the future, we can develop the site to our advantage, should we wish, by reserving some pages which would be private to members and protected by password. These

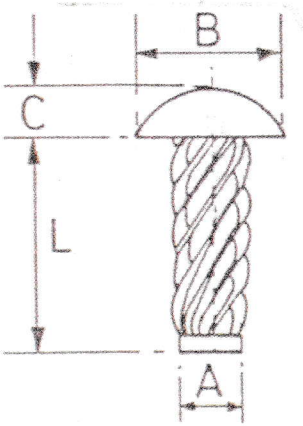
Drive Rivets **Mike Gipson**

One of my current projects is a Great Western Auto Trailer to go with my 'Large Metro'. The basis for the 5" model is the Modelworks kit and this was a retirement present from my wife. The kit is loosely based on Diagram A28 which was a 62 foot 8 inch coach of 1930's vintage however detailing is very sparse and I am endeavouring to add as much detail as possible by using the 3 excellent John Lewis (Wild Swan) publications together with some close-up photographs taken for me by a friend of the A28 Auto coach 178 which is preserved and running on the Forest Of Dean Railway.

As ever with these types of kit there is a trade off between how many parts you make anew and how much of the kit supplied parts you discard in the name of detailing. One of the areas that I do not like to compromise too much is the visible rivet detailing and one problem associated with the chassis required some 'blind' rivets and this was resolved by resorting to using drive rivets. It occurred to me that perhaps some people may not have come across these useful items and I hope the following may be of interest.

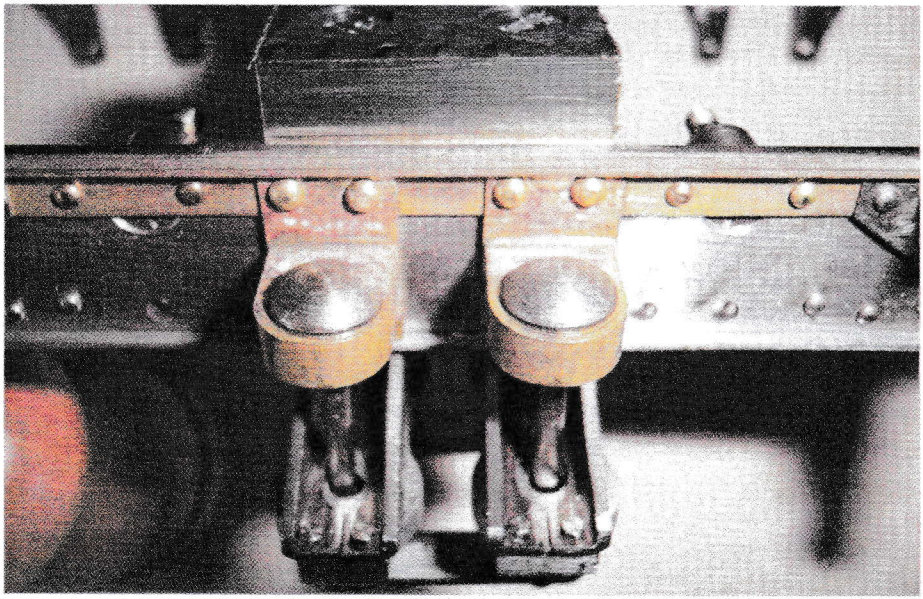
Drive rivets are the rivets used typically to secure thin nameplates, power rating plates etc to engines/machines. The sketch shows how they have a spiral gripping 'thread' that once driven into a nominal size hole grips the parent metal and thus secures the plate. The rivets are made from hardened steel so once driven in form a tight gripping fit in the hole, they are also brass plated.

Rivet Size	A Hole Diameter	B Head Diameter	C Head Height	L Length
1/16"	0.062	0.109	0.047	Various
3/32"	0.093	0.164	0.070	Various
Size 0 (0.074)	0.063	0.127	0.049	1/8"
Size 2 (0.099)	0.083	0.162	0.069	3/16"



Sizes 0 and 2 drive rivets are probably the most useful to us as they compare with standard 1/16" and 3/32" snaphead rivets. Drive rivets do however come in many other sizes.

The photo below illustrates how on the addition of revised spring carrier detail to the bogie chassis sides that rivet positions clashed with the bogie support casting. The use of size 2 drive rivets solved the problem. These are for effect only as the new supports actually reuses a bolt from the back intended for the kit supplied support. Incidentally the pair at the top either side of the spring supports are size 0 rivets. This was necessary as it can be seen there was a further clash with the brake pivots supplied in the kit. For comparison the rivet on the extreme right hand side is a normal 1/16" snaphead rivet



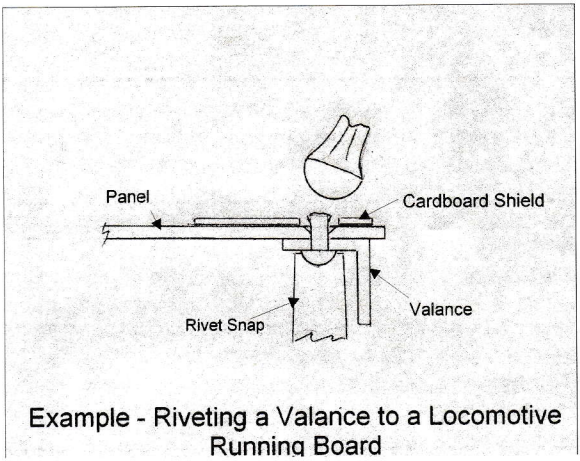
The best source of supply is likely to be your local fasteners stockists; yellow pages should identify likely candidates. The price is usually quite reasonable (2p each) but be prepared to buy in larger quantities than you may do for normal rivets.

A RIVETING IDEA

Norman Barber

I am rather reluctant to write about techniques that I have developed to assist me in my workshop because I am quite sure that other people must have already thought of any ideas I have dreamed up and I shall be telling my grandmother (or father) how to suck eggs. At the risk of doing just that the procedure I adopt when flush riveting to a flat panel may be of interest.

The sort of scenario I am referring to is closing small rivets (1/16" diameter copper, for example) into countersinks - say a tender side panel or a locomotive running board where the prototype had flush panels with no rivets showing. Unless you are rather more skilled than me there is a high risk of the hammer ball pein occasionally missing the rivet and landing on the panel (probably brass) alongside the countersink. The result is a small dent in the plate work which, unless carefully filled at the painting priming stage, will assume the appearance of a massive crater when the gloss finish is applied. Filling and rubbing down is a tedious and time consuming activity and in my experience requires at least two attempts before a satisfactory finish is obtained. Better not to have a dent in the first place, or at least to minimise the damage.



Example - Riveting a Valance to a Locomotive Running Board

The procedure I adopt is to cut a small hole (about 5/32" diameter for a 1/16" rivet) in a piece of soft cardboard and place this over the rivet. If (when) the hammer does miss the rivet or glance off it is cushioned by the cardboard and damage to the underlying panel is avoided. I have found the ideal material for the shield is the cardboard used for the backing of A4 writing pads. I have tried brass and steel shim stock but this does not work. The cardboard shield will only last for a few rivets, the edge of the hole becoming compressed when the closed rivet is finished off by planishing with the flat face of the hammer. No matter! Simply cut another hole half an inch away and you have a brand new shield!

Clearly the technique is only suitable for small rivets being closed with a lightweight "toffee" hammer. If you intend to attack a 3/16" rivet with a 1 lb. hammer improving you aim is the best way to avoid surface damage!

SMILE

A man entered a Hospital lift with an Orderly who was wheeling an elaborate machine fitted with several pipes, dials & gauges. "I'd hate to be connected to that', he said. "So would I", agreed the Orderly, "Its a carpet shampooer."