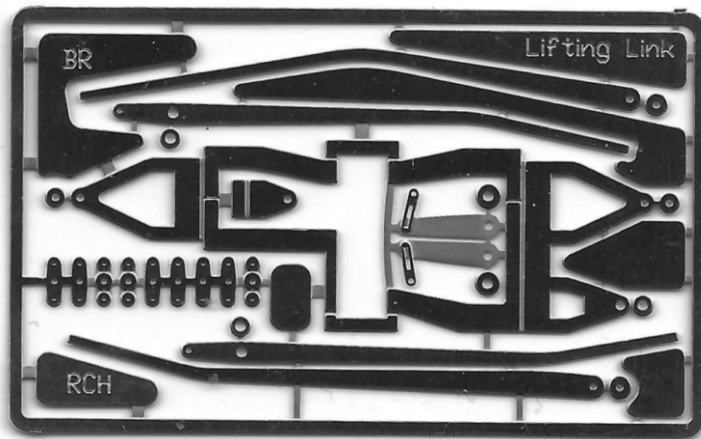


# Lifting Link Etches - WV5 to WV14

There are also lifting link brakes fitted to BR diagram 1/181, 1/183, 1/184, 1/185, the Iron Ore Tupples chassis etches, Diagram 1/073 (sand wagon) and the LMS Diagram 2153

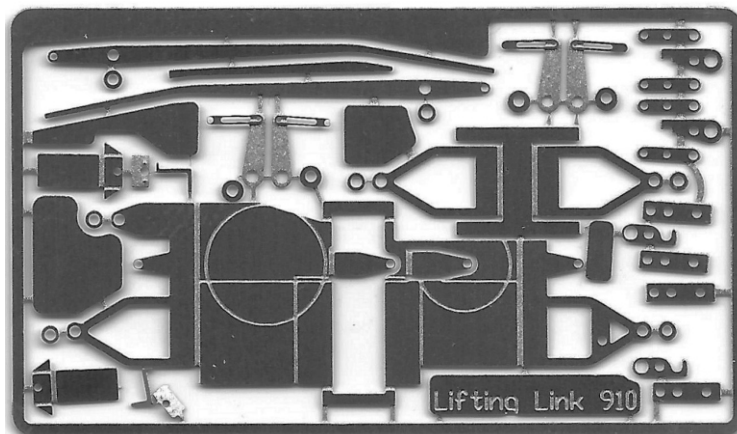
Some dimensions particularly of the levers are longer than seen in drawings as this is to accommodate bending, primarily around axleboxes and to shape handles.

## WV5



This lifting link brake gear appears to have first been used c.1930 by Charles Roberts on private owner wagons. It is most commonly associated with unfitted short wheelbase wagons built in the British Railways era but also occurs on some other wagons. The lifting link reverses the lever movement and a Moreton style clutch makes braking independent of the lever used to apply brakes.

## WV6



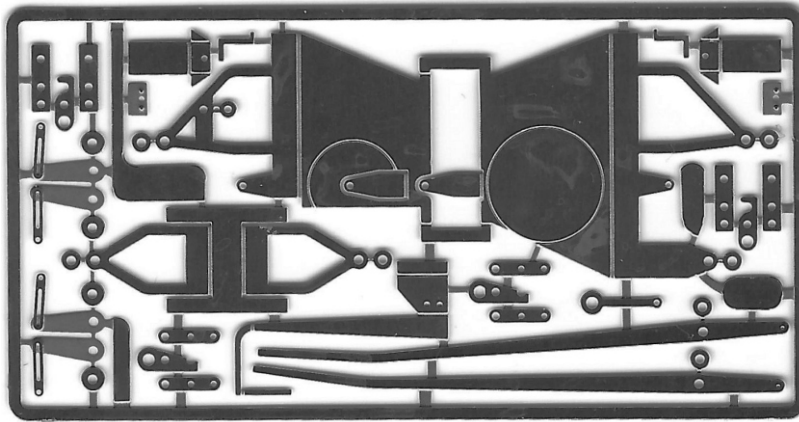
This style of lifting link is generally associated with British Railways era vacuum fitted 8 shoe or clasp braked wagons.

It includes linkages to the two vacuum cylinders and a hand lever to change over the brake cylinder used from unloaded to loaded wagons. There is an internal double "Vee" to allow brakes to be applied independently.

The location of the vacuum cylinders is indicated on the etching and cylinder hangers are included.

All Vee etchings accommodate the AMBIS spinal column for wagons - a 12in or 4mm wide strip down the centre line of the wagon Brake levers are thinned at the rear - the user should taper file the edge away as a thinner handle end is easier to bend to a handle shape.

## WV7

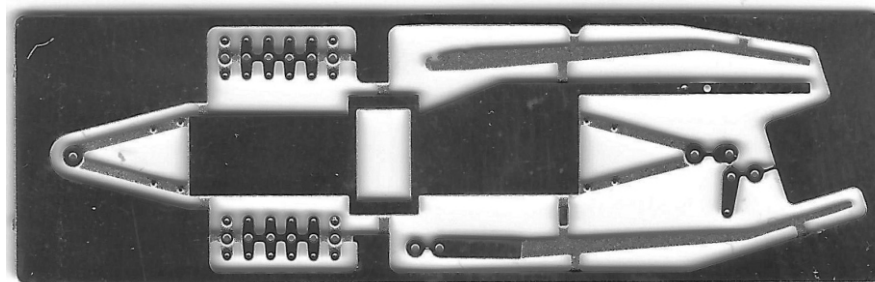


This is a similar design to WV6 but appears to be exclusively used on long wheelbase wagons (12ft) such as the high capacity mineral wagons.

Again there are two internal "Vees" linkages to brake cylinders and a hand lever change over valve.

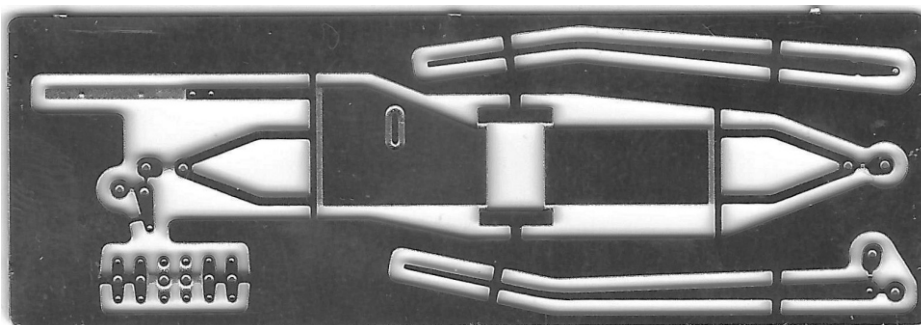
The brake levers are longer and the external "Vees" are assymetric.

## WV11



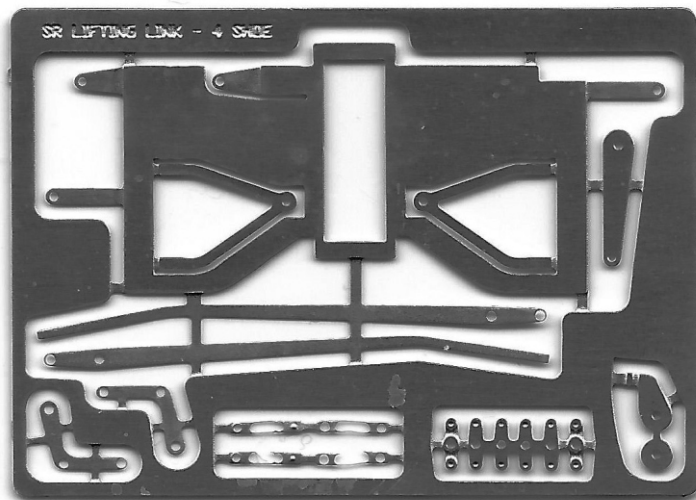
This lifting link brake gear was used on GCR wagons. The user will need to make a small loop of wire to create the lifting link. Note the "Vees" are straight sided and are located on the outside of the wagon solebars.

## WV12



A similar but different version used by the LSWR railway. The user has to make a small loop of thin wire to create the lifting link.

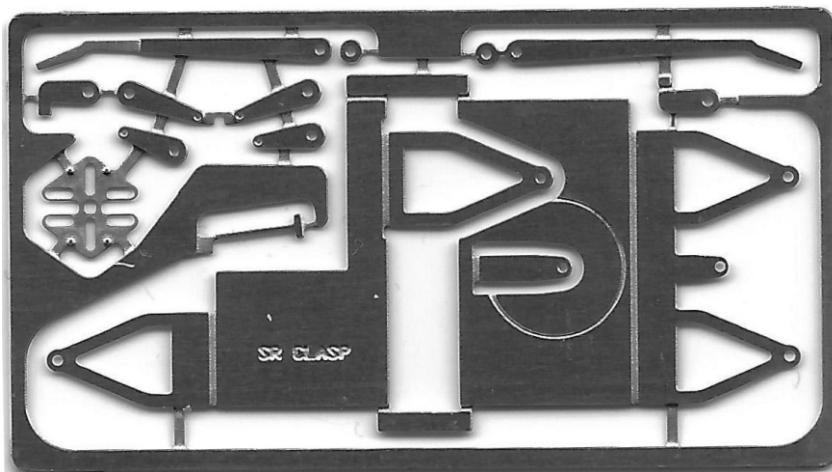
## WV13



This design of lifting link was commonly used by the Southern Railway for 4 shoe braked wagons. This includes Diagram 1430, 1452, 1458 and 1460 wagons (but not necessarily every wagon in these diagrams)

Note the asymmetric "Vee" and the "rocking cranks" for normal location push rods

## WV14



This format of brake gear appears to be general to 8shoe fitted wagons built by the Southern Railway, e.g. Diagram 1428, 1429, 1477, 1478, 1479, 1486 (but not necessarily every wagon in these diagrams)

Note the unusual triangular adjustment for brake gear and the fairly standard symmetrical "Vees" used. Also a fourth "vee" is located towards the centre line of the wagon.

Note WV etches do not include push rods or brake blocks, these are available separately in a thinner etched metal.