

A MODEL FOR OLD MECCANO BOYS

“SPANNER’S” NOTES FOR
ADVANCED BUILDERS

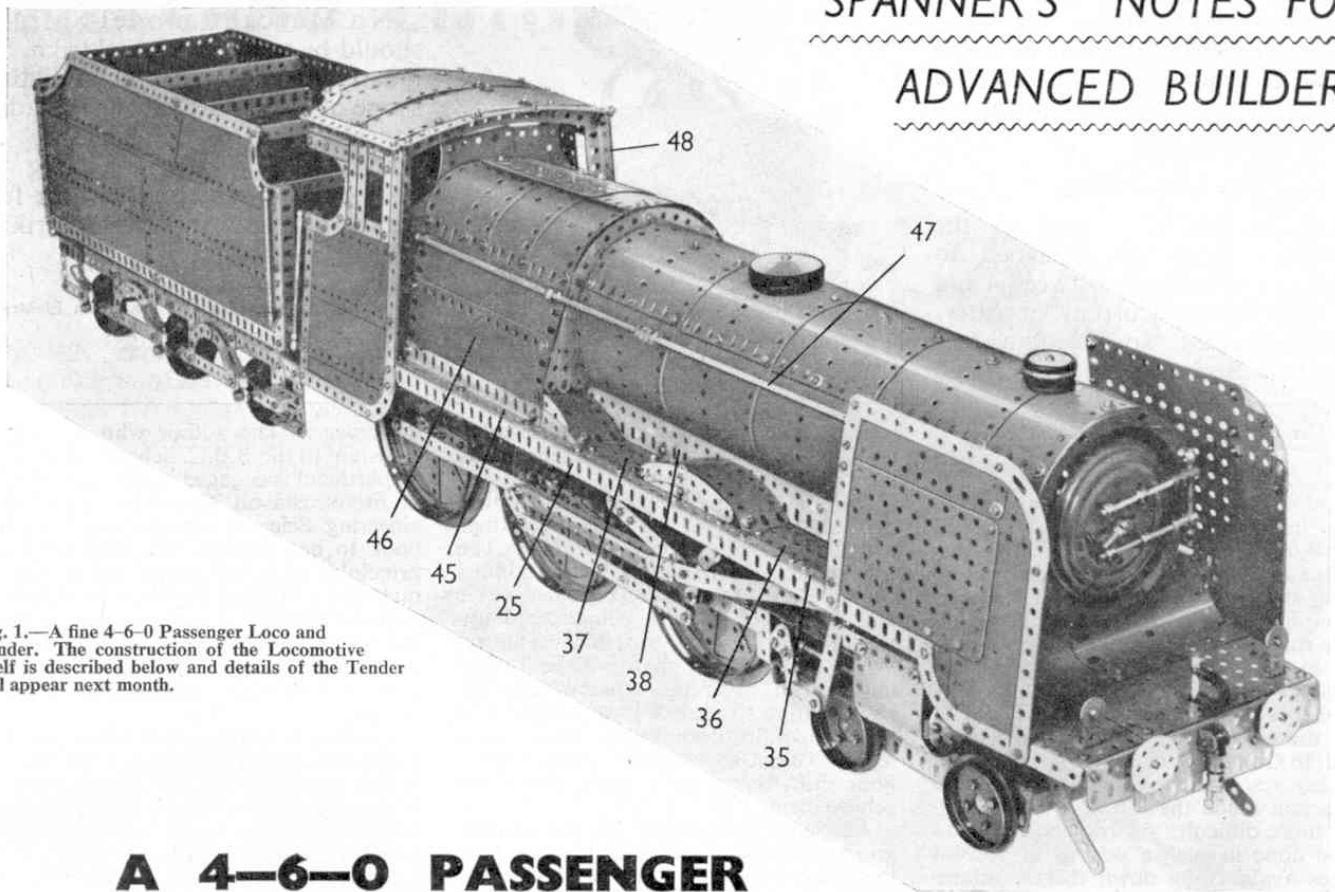


Fig. 1.—A fine 4-6-0 Passenger Loco and Tender. The construction of the Locomotive itself is described below and details of the Tender will appear next month.

A 4-6-0 PASSENGER LOCOMOTIVE

IF you are one of those older and very fortunate Meccanoites who possess massive collections of Meccano Parts, possibly you may be one of those who have been writing letters complaining that I have been starving you of large advanced models into which you can get your teeth!

Well, while I am always delighted to hear from anyone interested in Meccano, I don't want you to get your teeth into me. That would never do. And so, in response to your prompting—urging might be a better word—I ask you this month to bring out your Outfits and get cracking on the giant 4-6-0 Passenger Locomotive and Tender shown complete in Fig. 1. This model should surely be big enough for the most ardent enthusiast, for overall it measures roughly 5 feet and it weighs I don't know how many pounds! Further, it is interesting mechanically on account of its valve motion, etc., and I am sure you will find that building it is quite a challenge. It is powered by an E15R Electric Motor.

The constructional details of the Loco-

motive itself, including a list of the parts required, are described in this article. Details of the construction of the Tender will be given next month, together with further illustrations of it and a list of the parts required.

Construction of the Locomotive (Main Frames)

Both frames being similar, only one side will be described. A $24\frac{1}{2}$ " Angle Girder 1, and a compound angle girder 2 made up from an $18\frac{1}{2}$ " and a $12\frac{1}{2}$ " Angle Girder overlapped five holes, are joined to each other by four $5\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plates and one $2\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plate. The $2\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plate is extended by bolting a $4\frac{1}{2}$ " Flat Girder and a $9\frac{1}{2}$ " Angle Girder 5 in

the centre holes. A $3\frac{1}{2}$ " Flat Girder 6, supporting a $2\frac{1}{2}$ " Angle Girder 7, is attached to the angle girder 2 by $2\frac{1}{2}$ " Strips. At each end of the Flat Girder 6 a $2\frac{1}{2}$ " Stepped Curved Strip is bolted. The front one is secured by a $1\frac{1}{2}$ " Strip and a Fishplate attached to a $1\frac{1}{2}$ " Strip that also has a 4" Stepped Curved Strip bolted to it. The two frames are joined together with $4\frac{1}{2}$ " Angle Girders 3, 8 and 11, a $\frac{1}{2}$ " Strip 9, and a $8\frac{1}{2}$ " compound angle girder 12 attached to a $4\frac{1}{2}$ " Angle Girder bolted on the upper flange of the angle girders 2. At the front of the angle girders 2, a 3" Angle Girder with a $2\frac{1}{2}$ " Flat Girder attached is bolted, so as to extend the angle girders 2 by one inch. An Obtuse Angle Bracket is secured to the front hole of the $2\frac{1}{2}$ " Flat Girder (this will later be used as an attachment for the boiler). The six driving wheels are built up as shown and are fastened to $5\frac{1}{2}$ " Rods, care being taken to see that the wheel cranks on one side are set at 90° to those on the other side of the locomotive. A 3" Sprocket Wheel 14 is fastened to the centre Rod.

The E15R Motor is bolted to two $4\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plates, which are secured to the angle girders 2. A $\frac{3}{4}$ " Sprocket Wheel

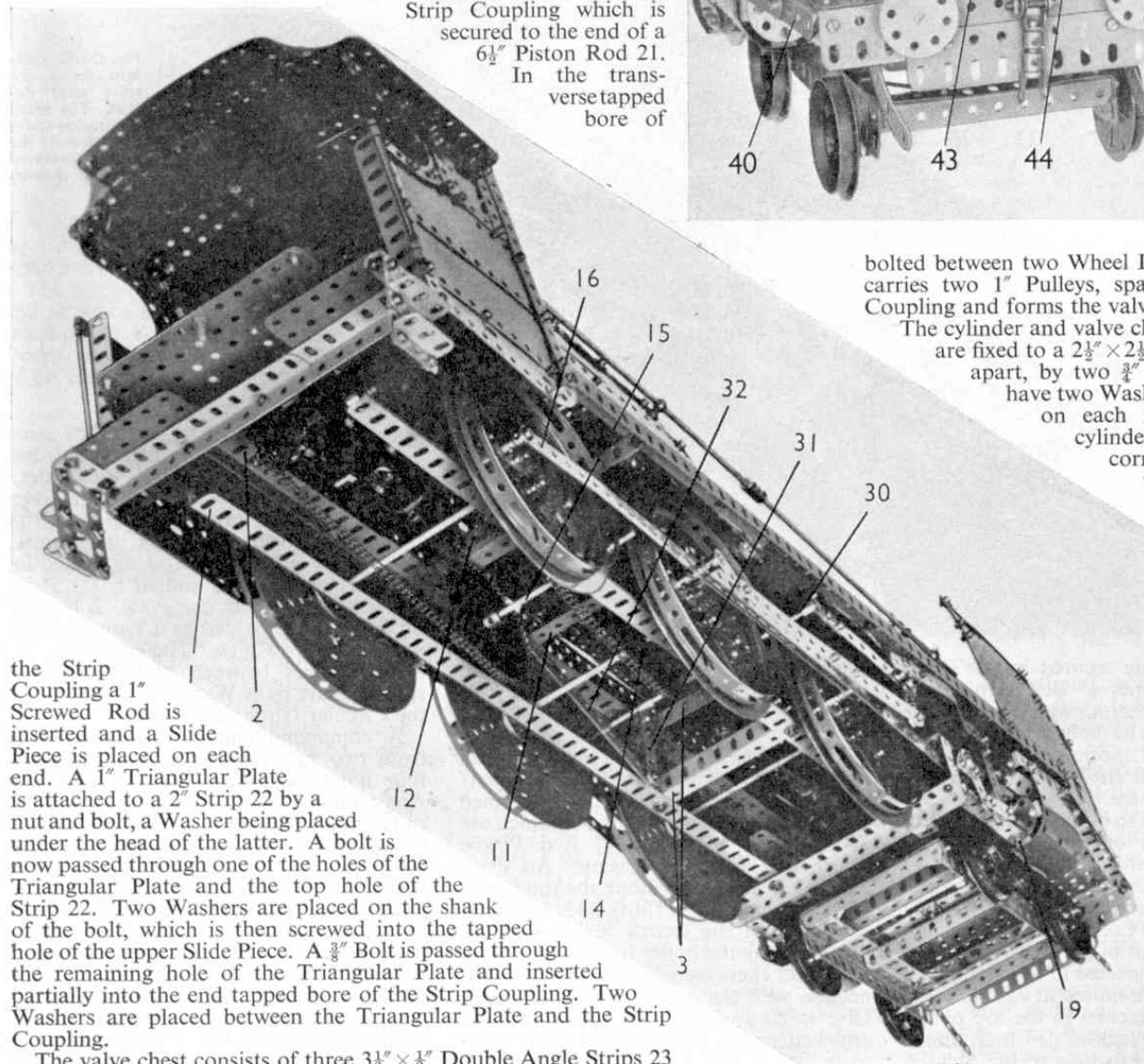
on the armature shaft drives a 3" Sprocket Wheel on Rod 15, which supports a $\frac{3}{4}$ " Sprocket Wheel that drives the Sprocket Wheel 14. Two 7 $\frac{1}{2}$ " Strips 16 are loosely attached to the Double Arm Crank on the first and second wheels from the front by means of Pivot Bolts. The Strips are spaced from the Crank bosses by Collars. The Double Arm Crank on the centre wheel carries in its boss a 1 $\frac{1}{2}$ " Rod, on which is a Collar, the Strips 16, three Washers, a 12 $\frac{1}{2}$ " Strip 17, and a Crank 18.

Remember—next month's M.M. will contain full details of how to build the Locomotive Tender.

Valve Gear, Connecting Rods, etc.

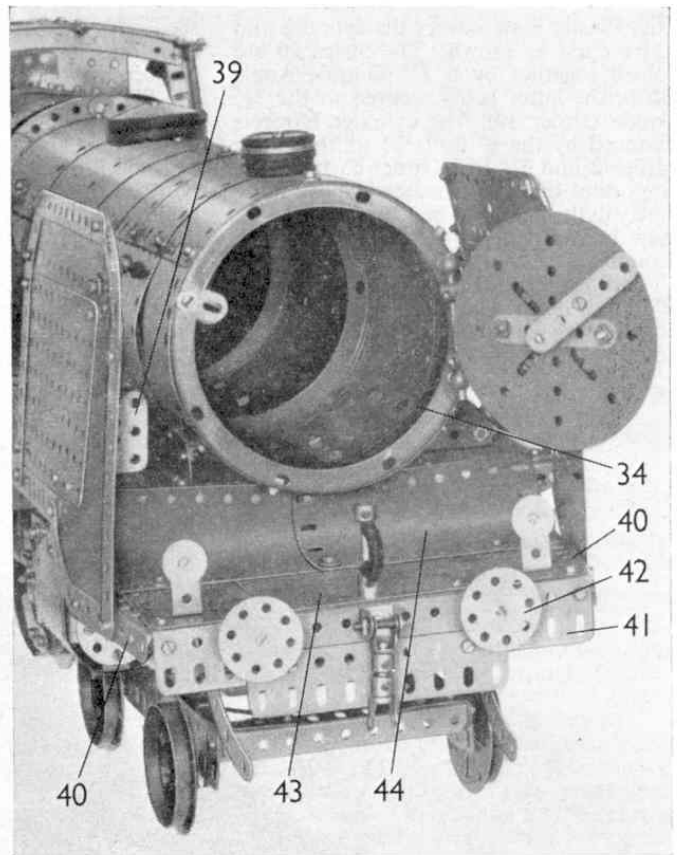
The Crank 18 must be set at a slight angle so that its end describes a circular path about the driving wheel centre. Each cylinder consists of three 2 $\frac{1}{2}$ " x $\frac{1}{2}$ " Double Angle Strips bolted between two eight-hole Wheel Discs. Two $\frac{1}{2}$ " x $\frac{1}{2}$ " Angle Brackets 19 are secured to the rear Wheel Disc by the bolts which hold the Double Angle Strips, and are diametrically opposite one another in a vertical plane. The 4 $\frac{1}{2}$ " Strips 20 are attached to the Angle Brackets 19, a Washer being placed between one of the Strips and the Angle Bracket.

The "crosshead" consists of a Strip Coupling which is secured to the end of a 6 $\frac{1}{2}$ " Piston Rod 21. In the transverse tapped bore of



the Strip Coupling a 1" Screwed Rod is inserted and a Slide Piece is placed on each end. A 1" Triangular Plate is attached to a 2" Strip 22 by a nut and bolt, a Washer being placed under the head of the latter. A bolt is now passed through one of the holes of the Triangular Plate and the top hole of the Strip 22. Two Washers are placed on the shank of the bolt, which is then screwed into the tapped hole of the upper Slide Piece. A $\frac{3}{8}$ " Bolt is passed through the remaining hole of the Triangular Plate and inserted partially into the end tapped bore of the Strip Coupling. Two Washers are placed between the Triangular Plate and the Strip Coupling.

The valve chest consists of three 3 $\frac{1}{2}$ " x $\frac{1}{2}$ " Double Angle Strips 23



bolted between two Wheel Discs. A 5" Rod carries two 1" Pulleys, spaced apart by a Coupling and forms the valve rod.

The cylinder and valve chest on each side are fixed to a 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " Flat Plate 2 in. apart, by two $\frac{3}{4}$ " Bolts 58, which have two Washers and a Collar on each for spacing the cylinder block the correct distance from the main frames. A 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ "

Figs. 2 and 3.—The upper picture shows the details of the smoke-box and front buffer beam. On the left is an underneath view of the complete locomotive.

Red Plastic Plate covers the cylinder and valve chest as shown. The Strips 20 are joined together by a $1\frac{1}{2}$ " Double Angle Strip, the latter being secured to the $7\frac{1}{2}$ " Angle Girder 10. The cylinder block is fastened by the $\frac{3}{4}$ " Bolts 23 to the angle girder 2 and $3\frac{1}{2}$ " Flat Girder 6. It is very important that the crossheads move quite freely in the guides. The $12\frac{1}{2}$ " Strip 17 may now be inserted in the slab of the Strip Coupling.

The "expansion link" 24 consists of two $2\frac{1}{2}$ " large radius Curved Strips connected together by $\frac{3}{8}$ " Bolts and spaced apart by four Washers on each of the bolts. A

Strip must be bent slightly. The end that projects beyond the Slide Piece slides in the Slide Piece pivotally attached to the $3\frac{1}{2}$ " Strip 29 bolted to a Crank fastened on an 8" Rod 30. Another Crank extended by a $2\frac{1}{2}$ " Strip 31 is secured to the Rod 30 between the frame. A $12\frac{1}{2}$ " Strip 32 with a Threaded Boss pivotally attached to it by a nut and bolt at one end is lock-nutted to the $2\frac{1}{2}$ " Strip 31. The Threaded Boss is screwed on to a Screwed Rod 33 operated by a Double Arm Crank and Threaded Pin fixed on its end in the cab interior. The bogie can now be built and attached

The steam dome is represented by two $1\frac{1}{2}$ " Tyres, one around a $1\frac{1}{2}$ " Pulley, held in position by a Conical Disc. Three 1" Pulleys fitted with Rubber Rings, two Wheel Discs and a loose 1" Pulley with Rubber Ring, represent the smoke stack and are held in place by a $1\frac{1}{8}$ " Bolt and a nut.

The smoke-box door is made by bolting together a Ball Thrust Race Flanged Disc and a 4" Circular Plate. Four Collars are screwed onto the Bolts passed through the Flanged Disc, and these support two short Rods, each of which is fitted with a Coupling. The Couplings pivot on a 2" Rod fixed in Handrail Supports attached

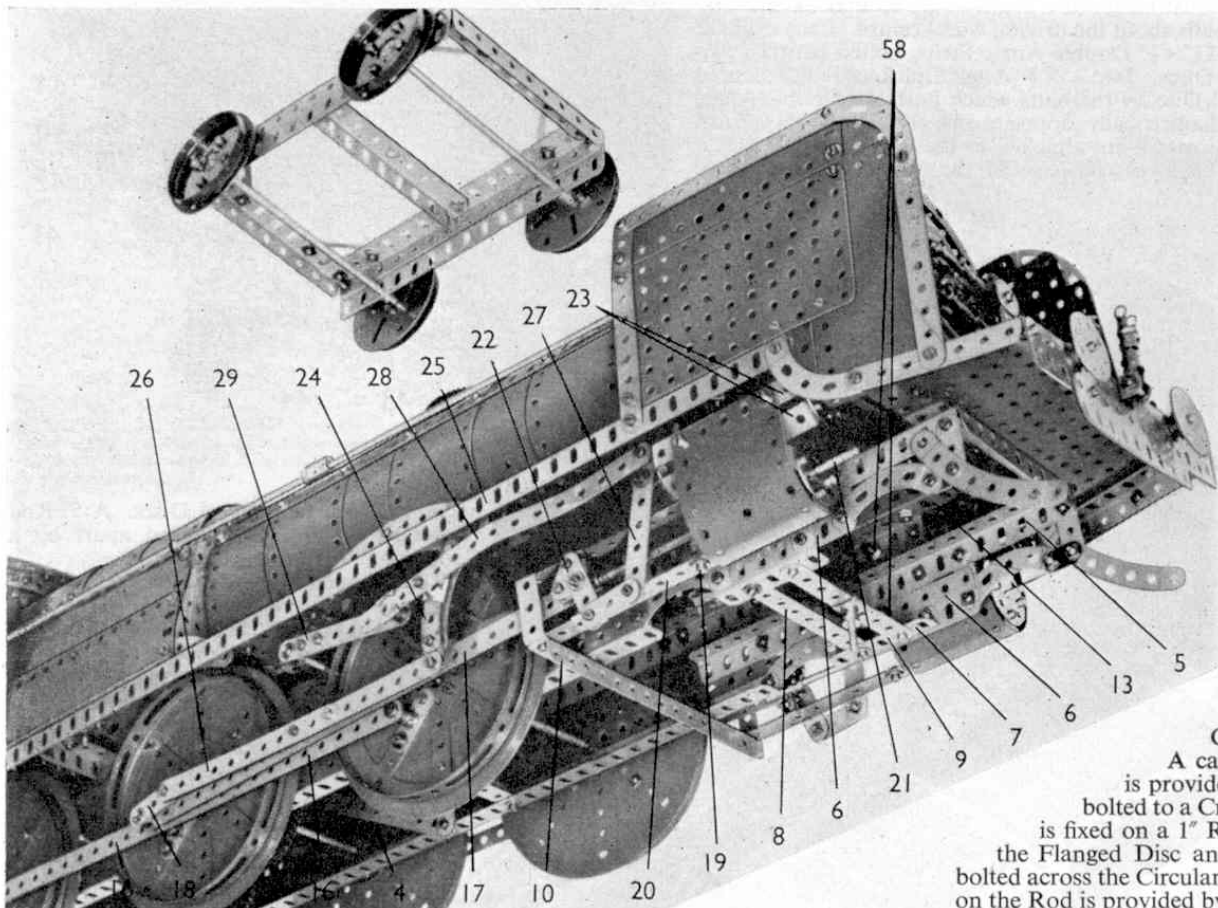


Fig. 4.—This picture shows the valve gear details. The small illustration above is a view of the bogie removed from the chassis.

Fishplate is rigidly secured by the lower $\frac{3}{8}$ " Bolt. The upper $\frac{1}{2}$ " Bolt is pivotally attached to a Trunnion, which later in the construction will be bolted to the Angle Girder 25. The motion of the return crank 18 is transmitted to the expansion link by means of the Strips 26, which are pivotally attached to both the return crank and the Fishplate on the expansion link by lock-nutted bolts. A $3\frac{1}{2}$ " Strip 27 is pivoted on the second hole from its upper end on a set-screw that is inserted in the tapped hole of the Collar, this Collar being secured on the end of the valve rod. The $3\frac{1}{2}$ " Strip 27 is connected to the 2" Strip 22 by a $1\frac{1}{2}$ " Strip 28 lock-nutted at each end. A $7\frac{1}{2}$ " Strip 28 is attached to the top of the $3\frac{1}{2}$ " Strip 27 by a lock-nutted bolt, and a $\frac{3}{8}$ " Bolt in the fourth hole of the Strip is

to the Strip 9 by a Slide Piece, 1" Rod and a Collar.

Boiler

Three Circular Girders (and a Hub Disc at the end nearest cab) are evenly spaced inside the boiler. They are joined together by compound strips to which are also secured the $5\frac{1}{2} \times 2\frac{1}{2}$ " Red Plastic Plates that form the casing. An extra compound strip runs along the top centre of the boiler and a $4\frac{1}{2}$ " Strip 34 is bolted on each side in the fourth hole, the inner bolts holding the boiler fast to the Obtuse Angle Brackets mentioned earlier in connection with the main frames. The Hub Disc is secured to a $4\frac{1}{2}$ " Angle Girder attached to the main frames by a Fishplate.

to the front Circular Girder.

A catch for the door is provided by a $2\frac{1}{2}$ " Strip bolted to a Crank. The Crank is fixed on a 1" Rod supported in the Flanged Disc and in a $2\frac{1}{2}$ " Strip bolted across the Circular Plate. A handle on the Rod is provided by a Threaded Pin screwed into a Collar. The end of the 3" Strip engages between two Fishplates, spaced apart by a Washer and bolted to the Circular Girder as shown.

A compound angle girder (made up from two $5\frac{1}{2}$ " Angle Girders overlapped four holes) is bolted to the end of the Angle Girder 13 by Fishplates. At each end of the compound girder a $24\frac{1}{2}$ " Angle Girder 25 is bolted and this is also secured to the angle girder 12. On each side a $5\frac{1}{2} \times 2\frac{1}{2}$ " and a $2\frac{1}{2} \times 2\frac{1}{2}$ " Flat Plate 35 and 36 are attached to the Angle Girder 25. A further $2\frac{1}{2} \times 2\frac{1}{2}$ " Flat Plate 37 is bolted in position. Between the plates 36 and 37 and the angle girder 12, a $5\frac{1}{2} \times 1\frac{1}{2}$ " Flexible Plate is attached by Obtuse Angle Brackets. Two 4" Curved Strips bolted to a $1" \times \frac{1}{2}"$ Angle Bracket complete the wheel guards.

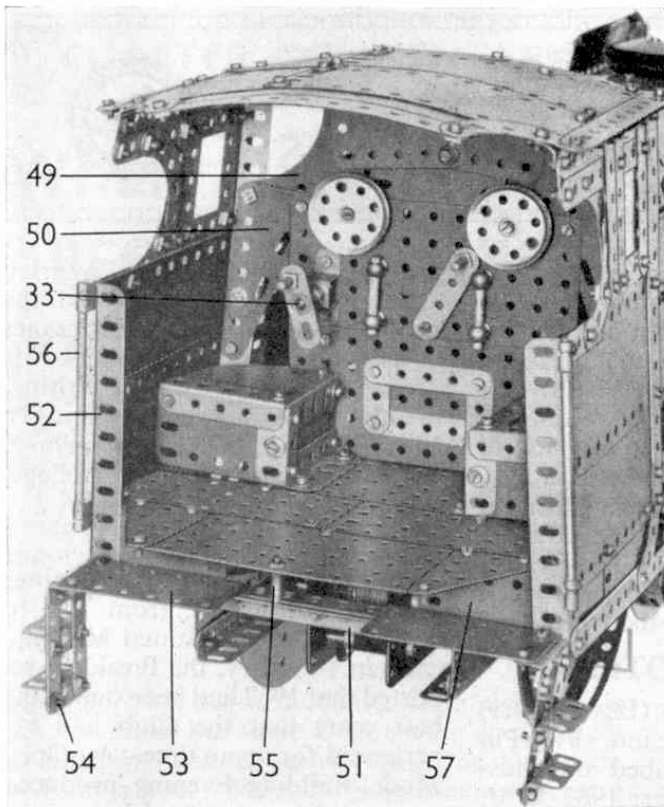


Fig. 5.—The interior of the cab.

The Cab

A $7\frac{1}{2}$ " Angle Girder 48 is secured to each Angle Girder 45 by an Angle Bracket. The upper ends of these Angle Girders are joined together by two $5\frac{1}{2}$ " Curved Strips overlapped seven holes. Next, the sides of the cab are built as shown in Figs. 1, 3 and 5, and the cab roof is attached by Obtuse Angle Brackets. A Flexible Gusset Plate 49 and a $3\frac{1}{2}$ " \times $1\frac{1}{2}$ " Triangular Flexible Plate 50 are bolted to each Angle Girder 48. These are connected together by a $5\frac{1}{2}$ " \times $3\frac{1}{2}$ " and a $4\frac{1}{2}$ " \times $2\frac{1}{2}$ " Flat Plate. The floor of the cab consists of Flat Plates attached to the sides by Angle Brackets. The

A $12\frac{1}{2}$ " and a $4\frac{1}{2}$ " Flat Girder 38, overlapped four holes, are fixed by Angle Brackets to the Plates 35 and 37.

The smoke deflectors can now be built and attached to the model. Two Corner Brackets 39 bolted on each side of two Double Brackets are secured on each side of the boiler.

Front Footplate, Buffer-beam and Firebox

At the bottom edge of each smoke deflector a $3\frac{1}{2}$ " Angle Girder 40 is bolted. These are connected together by a $7\frac{1}{2}$ " Angle Girder that supports a $7\frac{1}{2}$ " and a $4\frac{1}{2}$ " Flat Girder 41. The Wheel Discs 42 are fastened in position by a $\frac{3}{4}$ " Bolt that has two $\frac{1}{2}$ " loose Pulleys on its shank. The lamps, coupling, etc. are shown clearly in the illustrations, and are bolted to two $5\frac{1}{2}$ " \times $3\frac{1}{2}$ " Flat Plates 43 overlapped seven holes. Two $4\frac{1}{2}$ " \times $2\frac{1}{2}$ " Red Plastic Plates 44, curved as shown, are bolted to the Flat Plates and rest on the front Angle Girder.

At the rear end of the boiler four $2\frac{1}{2}$ " Curved Strips and six $2\frac{1}{2}$ " Strips are attached to Angle Brackets bolted to the Hub Disc. Then a $7\frac{1}{2}$ " Angle Girder 45 is bolted to the Angle Girder 25. Two $7\frac{1}{2}$ " \times $2\frac{1}{2}$ " Strip Plates 46 are bolted to the Angle Girder on each side. These are connected together by three $5\frac{1}{2}$ " \times $2\frac{1}{2}$ ", three $4\frac{1}{2}$ " \times $2\frac{1}{2}$ " and two $5\frac{1}{2}$ " \times $1\frac{1}{2}$ " Red Plastic Plates bolted together and attached by Angle Brackets to the boiler and the cab. Two $11\frac{1}{2}$ " Rods 47 joined by a Coupling are fixed to the boiler with Handrail Supports.

"boxes" inside the cab are built with Angle Girders and Flexible Plates. The gauges, starting handle, etc. can now be added. An $8\frac{1}{2}$ " compound angle girder 51 is secured to the Angle Girders 52. The 3 " \times $1\frac{1}{2}$ " Flat Plate 53 and the steps 54 are now bolted to the angle girder 51 and a Threaded Pin 55 is fixed in the centre of the cab floor.

The $4\frac{1}{2}$ " Rods 56 are fixed to the cab by Right-Angle Rod and Strip connectors. Bolted to the angle girder 51 are two $2\frac{1}{2}$ " \times $1\frac{1}{2}$ " Flexible Plates 57. The cab windows are filled in by Transparent Plastic Plates.

When the model is completed make sure that all moving parts work smoothly and freely with the aid of a little oil, before attempting to switch on the Motor.

Parts required for the 4-6-0 Passenger Locomotive only: 8 of No. 1; 5 of No. 1a; 9 of No. 1b; 17 of No. 2; 11 of No. 2a; 6 of No. 3; 6 of No. 4; 19 of No. 5; 7 of No. 6; 10 of No. 6a; 4 of No. 7; 2 of No. 7a; 2 of No. 8; 2 of No. 8a; 8 of No. 8b; 8 of No. 9; 9 of No. 9a; 2 of No. 9b; 2 of No. 9c; 8 of No. 9d; 8 of No. 9f; 13 of No. 10; 5 of No. 11; 33 of No. 12; 4 of No. 12b; 19 of No. 12c; 2 of No. 13; 1 of No. 13a; 3 of No. 14; 5 of No. 14a; 2 of No. 15; 2 of No. 15a; 1 of No. 16a; 2 of No. 16b; 5 of No. 18a; 3 of No. 18b; 3 of No. 21; 4 of No. 22; 4 of No. 22a; 4 of No. 23; 5 of No. 24; 12 of No. 24a; 622 of No. 37a; 583 of No. 37b; 236 of No. 38; 2 of No. 38d; 1 of No. 43; 1 of No. 45; 2 of No. 48; 6 of No. 48a; 6 of No. 48b; 9 of No. 50;

5 of No. 52a; 4 of No. 53a; 25 of No. 59; 6 of No. 62; 7 of No. 62b; 5 of No. 63; 2 of No. 63c; 1 of No. 64; 11 of No. 70; 8 of No. 72; 2 of No. 73; 4 of No. 74; 2 of No. 77; 1 of No. 80c; 2 of No. 82; 2 of No. 89; 2 of No. 89a; 7 of No. 89b; 11 of No. 90; 14 of No. 90a; 1 of No. 94; 2 of No. 95b; 2 of No. 96a; 2 of No. 103; 5 of No. 103c; 2 of No. 103d; 2 of No. 103f; 3 of No. 103k; 4 of No. 109; 9 of No. 111; 9 of No. 111a; 20 of No. 111c; 2 of No. 111d; 4 of No. 115; 2 of No. 116a; 6 of No. 118; 2 of No. 126; 9 of No. 133; 9 of No. 136; 4 of No. 137; 2 of No. 142d; 3 of No. 143; 6 of No. 146; 1 of No. 146a; 4 of No. 147b; 4 of No. 155; 1 of No. 168a; 1 of No. 179; 1 of No. 187a; 13 of No. 188; 7 of No. 189; 2 of No. 190; 10 of No. 192; 2 of No. 193a; 10 of No. 194c; 2 of No. 194d; 27 of No. 194e; 4 of No. 195; 2 of No. 201; 4 of No. 212a; 4 of No. 221; 2 of No. 224; 1 E15R Electric Motor.

"The Friendliest Line in the World"—

(Continued from page 199)

flatlands give place to hills and we begin to climb. We plunge through tunnels hewn in solid rock and, every so often, catch glimpses of the river far below.

At Bog Walk chickens flutter off the line as we approach. Here our engine does a little shunting and some passengers change trains. On a siding a little railcar, full of school-children, waits to go to Linstead.

Then we really take to the hills. Our engine tackles 1 in 30 inclines with thunderous exhaust. Trees growing picturesquely right over the line get their topmost leaves blasted off as we pass beneath. On the downgrades we seem to fly along, lurching on the bends with the ring and shriek of flanges hard against guide rails in our ears.

Harewood Halt, Richmond, Highgate, Albany. Familiar names but what different countryside! Through banana plantations, past tall coconut palms, breadfruit trees, mangoes and bamboo, the train moves on.

At every station there is much activity. Stops are always longer than scheduled, but who cares?—there is so much to see. We are a bit late but we'll get there just the same.

There is no dining car on the train, but at every station there is fruit in plenty to buy, and on board there is always an unofficial "refreshment officer". Somehow he manages to serve every conceivable soft drink *on ice*, yet he can provide hot patties, too. These are like Cornish pasties, but are filled with curried meat.

Now we are leaving the hills and for the last 25 miles our route lies along the coast. Sometimes the line is built right along the water's edge and, if we are lucky, we may see a fine sunset over the Caribbean Sea. We reach Annotto Bay, Windsor Castle, Buff Bay, St. Margaret's Bay, then, at length, Port Antonio, our terminus and the end of our never-to-be-forgotten trip on the friendliest line in the world.

MODEL FOR OLD
MECCANO BOYS

Tender For 4-6-0 Locomotive

LAST month I described how to build the fine Meccano 4-6-0 Passenger Locomotive illustrated in that issue, and this month I am dealing similarly with the Tender, which is shown on this page. Together, the Locomotive and Tender form a very striking model, and are a fine example of what can be achieved by the serious Meccano model-builder.

By "SPANNER"

A list of the Parts required for the Tender is given at the end of this article; those for the Locomotive were listed last month.

Building the Tender

Two $1\frac{1}{2}$ " Angle Girders 1 and 2 are placed together to form a reversed angle

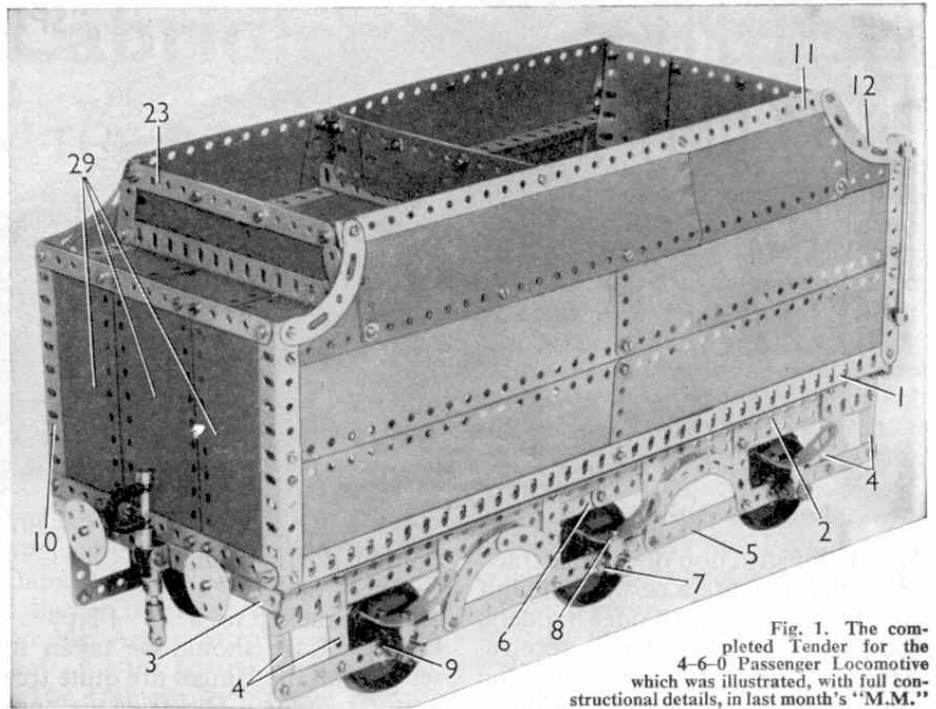


Fig. 1. The completed Tender for the 4-6-0 Passenger Locomotive which was illustrated, with full constructional details, in last month's "M.M."

girder. They are connected to a similar pair by $7\frac{1}{2}$ " Angle Girders 3. Eight $2\frac{1}{2}$ " Strips 4 are bolted to the Angle Girder 2 to support two pairs of $9\frac{1}{2}$ " Strips 5 and 6 and two 2" Flat Girders. Two pairs of $2\frac{1}{2}$ " Curved Strips are secured to the Strip 5. Each of the wheel bearings, or axle boxes, is made with a 3" Formed Strip 8 attached to a Threaded Coupling 7 by a bolt, and

Couplings. Collars are now fixed at the ends of the Rods.

At each corner of the Tender a $5\frac{1}{2}$ " Angle Girder 10 is bolted and the sides are filled in by six $9\frac{1}{2}$ " x $2\frac{1}{2}$ " Strip Plates and two $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Triangular Flexible Plates. Two $3\frac{1}{2}$ " Curved Strips 12 are attached to the Angle Girders 10 and the compound strip 11. A $7\frac{1}{2}$ " Angle Girder 13 supports two $4\frac{1}{2}$ " x $2\frac{1}{2}$ " Flat Plates 16, two $5\frac{1}{2}$ " x $1\frac{1}{2}$ " Flexible Plates 14, and an Angle Bracket 15. At each side an $18\frac{1}{2}$ " Angle Girder 17 is bolted to the Angle Girder 10 and the two are connected by $7\frac{1}{2}$ " Angle Girders 18 and 19. Three $12\frac{1}{2}$ " x $2\frac{1}{2}$ " Strip Plates 21 are bolted to the Flat Plates 16 and the Angle Girder 18 and are extended by $5\frac{1}{2}$ " x $2\frac{1}{2}$ " Flexible Plates bolted to a $7\frac{1}{2}$ " Strip 22. Compound $6\frac{1}{2}$ " x $1\frac{1}{2}$ " flexible plates strengthened by compound strips 23 and 24 are bolted to the Angle Girders 18 and 19. Two $3\frac{1}{2}$ " x $2\frac{1}{2}$ " Flexible Plates 26 are secured to the $7\frac{1}{2}$ " Angle Girder 25, and two $4\frac{1}{2}$ " x $2\frac{1}{2}$ " Flexible Plates overlapped five holes are bolted between the compound strips 27 and 28.

The rear of the tender is completed by means of three $5\frac{1}{2}$ " x $2\frac{1}{2}$ " Flexible Plates 29. The buffers, coupling, etc. are now added to complete the model. Two $4\frac{1}{2}$ " Rods 30 are held in place by Collars to represent handrails.

Parts Required

9 of No. 1a; 4 of No. 1b; 3 of No. 2; 6 of No. 2a; 1 of No. 3; 16 of No. 5; 2 of No. 6a; 6 of No. 7a; 6 of No. 8b; 4 of No. 9; 1 of No. 11; 14 of No. 12; 3 of No. 13a; 2 of No. 15a; 1 of No. 18a; 1 of No. 18b; 4 of No. 23; 2 of No. 24d; 192 of No. 37a; 194 of No. 37b; 18 of No. 38; 1 of No. 43; 2 of No. 53a; 11 of No. 59; 6 of No. 63c; 4 of No. 89a; 8 of (Continued on page 272)

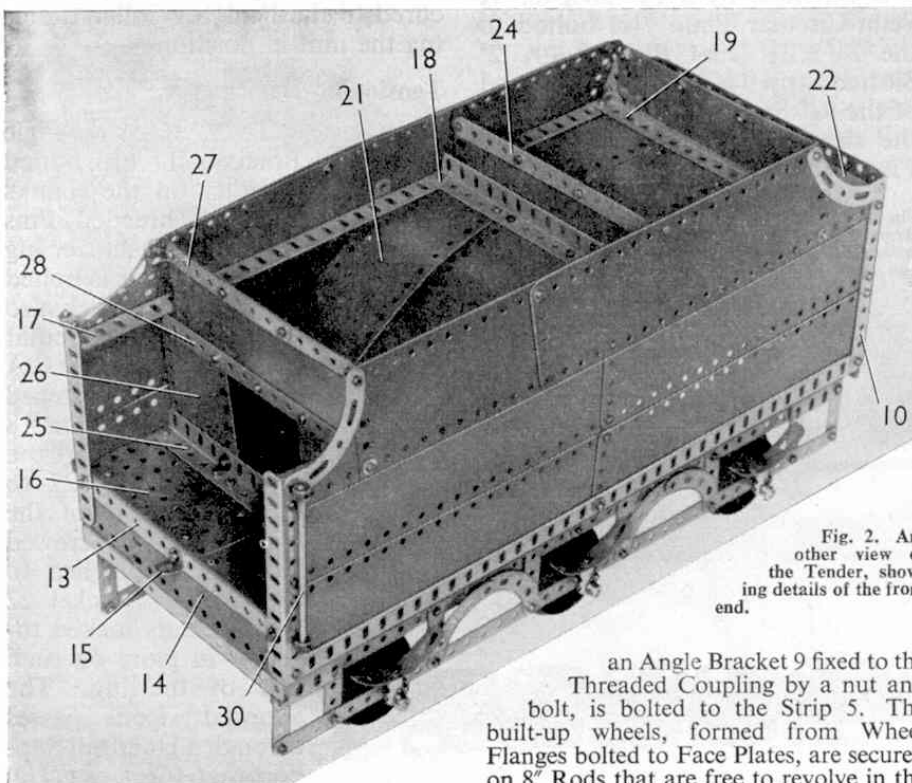


Fig. 2. Another view of the Tender, showing constructional details of the front end.

an Angle Bracket 9 fixed to the Threaded Coupling by a nut and bolt, is bolted to the Strip 5. The built-up wheels, formed from Wheel Flanges bolted to Face Plates, are secured on 8" Rods that are free to revolve in the

Stamp Gossip (Continued from page 270)

to spend it on, collectors and, of course, dealers bought heavily any special issues of their favourite countries — Victory stamps, etc. It is only now that the big stocks thus acquired are being cleared out, and prices are beginning to harden in consequence. So if, you have not got these stamps, now is the time to buy, for they will never be as cheap again.



All this has had the effect of preventing dealers, etc., stocking up on subsequent issues, and I am sure that a year or two hence stamps of special issues, still available today at not much above face value, will by then cost a whole lot more. One set I particularly like is the Tanganyika "Republic" issue which appeared as late as December last year and went off sale within a couple of months. Mark my word, such sets are going to more than pay for their keep.

Old-Time Cabriolet—

(Continued from page 258)

the ears. The tail is a number of strands of cord tied to an Angle Bracket bolted to the Curved Plate and the reins which the driver is holding also are lengths of cord arranged as shown.

Finally, the horse is held in the cab shafts by a 2½" Rod passed through the centre elongated holes of the Curved Plate and fixed in position by Spring Clips.

Parts required to build the Horse-Drawn Cab: 4 of No. 2a; 17 of No. 5; 8 of No. 6; 8 of No. 6a; 2 of No. 10; 2 of No. 11; 1 of No. 11a; 7 of No. 12; 2 of No. 12b; 1 of No. 15b; 1 of No. 16a; 2 of No. 19a; 1 of No. 22a; 2 of No. 35; 81 of No. 37a; 81 of No. 37b; 10 of No. 38; 1 of No. 40; 1 of No. 48; 8 of No. 48a; 1 of No. 51; 8 of No. 90; 2 of No. 90a; 2 of No. 188; 1 of No. 190; 3 of No. 193; 1 of No. 194b; 1 of No. 199.



Calling All Bus Spotters—

(Continued from page 249)

particularly interested in a steep concrete ramp in the open which has been specially designed for M.O.T. inspections and for chassis cleaning, which is done by spraying. A sign of the times is that brush painting has returned in place of paint spraying, since the modern coaches are too long to fit into the old paint shop.

A final note: The once omnipresent Bell Punch tickets are still in use with this operator, but so, too, is the cheap return fare of 1/- for the Ryde-Seaview journey which is the same as on the first journey over 40 years ago! My thanks are due to Mr. Higgins for the frank and kindly way in which he answered all my questions on a very busy morning.

* * * *

The registration mark of Safeguard's new Bedford coach, left blank in the tabulated list in my March article, has now been confirmed as 1920 PJ, and that of Delaine's coach No. 57—another Bedford—listed in my April article is WCT 901.

Meccano Creeper Track Unit—

(Continued from page 259)

is bolted in the centre hole of the Double Angle Strip 13. A Coupling 24 locked in place by nuts provides a means of turning the Screwed Rod 23.

Two 3" Pulley Wheels 25 are mounted on a 2½" Rod passed through the 3" Strips and the Semi-circular Plates 19 and 20, and through the slots of the 2" Slotted Strips 9.

The track is placed around the 3" Pulley Wheels, and the Screwed Rod 23 adjusted so that the track moves freely when driven from the Rod 16.

Meccano—and Me:

(Continued from page 261)

me to borrow it and I was very happy indeed to see it. In fact, that night I dreamed about it.

In 1958 I had built a good Hornby Railway layout and by then I owned a fine Meccano Outfit. During the following year I purchased a large quantity of Hornby material and operated a railway with Hornby rolling stock and clockwork locomotives. In October, during school holidays, I went back to my native village, taking with me my Meccano Set and Hornby Trains, but on Saturday, October 20, our village was destroyed by insurgents and my Meccano Set and Hornby Trains were also burned. I was very sorry about that, and later left my village for Rangoon. In 1961 I bought a new Meccano Outfit and another Hornby Train Set and was able to build again very happily. In that year I became a member of the Meccano Guild and was able to wear the Guild Badge. Early in 1962 the first Hornby-Dublo 2-Rail items arrived in Burma and I was able to obtain some of them,

In conclusion, let me add that in my view the *Meccano Magazine* is the finest model publication on the market. Now that I am eighteen years of age I find it just as interesting as when I read it for the first time.

May the future generation enjoy Hornby and Meccano products as much as I have done and hope to do for a long time to come.—C. Mya Thaug, Pegu, Burma.

Meccano Tender for 4-6-0 Locomotive—

(Continued from page 260)

No. 90a; 2 of No. 103g; 6 of No. 109; 3 of No. 111; 2 of No. 116a; 6 of No. 137; 1 of No. 179; 6 of No. 189; 2 of No. 190a; 2 of No. 191; 6 of No. 192; 12 of No. 196; 3 of No. 197; 6 of No. 215; 4 of No. 221.

Northbound Night Mail—

(Continued from page 264)

Changing the load of mail bags is done with the lineside equipment when the train is on the move, and is carried out as required, one in and one out; one in only or one out only.

Having reached its destination, the train is drawn into a carriage siding where the vans are detached and shunted away for unloading. The locomotive departs for its depot, and the three coaches which make up the standard rake are left together to await the next southbound run.

By each set of lineside equipment, staff are stationed to handle the mail bags which are brought from the local G.P.O. sorting office in one or more of the Dublo Dinky Toys No. 068 Royal Mail Vans.

From such running it will be appreciated that any station siding on a layout can house vans used for the transport of mail, and that these can be shunted on to the rear of the Royal Mail Van during its running period on the layout. This makes for very interesting working on any railway scheme, no matter how small it is.

