

Suggested Hornby Train Improvements

ELECTRICAL REVERSE FOR LOCOMOTIVES.—

We note your proposal that electric engines should be fitted with permanent magnet motors so that they may be reversed from the track. While this is highly desirable, we would point out that permanent magnet motors are not as efficient in operation as those fitted with wound field coils, and they cannot be operated from alternating current. At present we consider that it is advisable to use the wound-field type, employing a mechanical reverse gear. (Reply to B. Herbert, Sunderland, and C. B. Mawdsley, Southport).

ELECTRIC COLLECTING SHOE DEVICE.—

We note your suggestion that Hornby electric locomotives should be fitted with a device by means of which the collecting shoe may be raised clear of the live rail. We agree that this would be of value when it is desired to run two engines from the same circuit, for it would allow one to remain stationary whilst the other is in motion. Further experiments will be made in connection with your idea. (Reply to S. Gregson, Leicester).

SLIP COACHES.—

The question of introducing slip-coach working in the Hornby system has been under consideration for some time past. Experiments are being carried out and we hope to be able to make an announcement on the subject in the near future. (Reply to G. Jones, London, S.E.25; K. W. Turner, Southwold; L. Black, London, N.4; B. Cook, Richmond; T. N. Kenealy, London, S.W.5, and many others).

WELL WAGONS.—

The existing trolley wagon is very similar to your proposed well wagon, and we are unable to see any advantage that would result from the introduction of a new accessory complete with a miniature casting to represent a typical load. It is a simple matter to devise suitable loads for these wagons from any scrap material. (Reply to O. Geomans, Redditch).

VACUUM BRAKE CONNECTIONS.—

As pointed out in a previous issue of the "M.M.," the addition of vacuum brake connections to Hornby rolling stock would be purely ornamental, and would tend to increase the cost of the accessories to a large extent. We are unable therefore to consider their introduction at present. (Reply to G. Trobridge, Bellevue East, Johannesburg).

PLATELAYERS' TROLLEY.—

We think there would be little demand for this accessory. When required an excellent substitute might be constructed from Meccano parts. (Reply to L. H. Porter, Stoke-on-Trent, and others).

RAIL CONNECTING PLATES.—

We note your suggestion concerning a locking plate for insertion between rails. The new Hornby rails are manufactured with specially shaped sleepers and locking plates (or Connecting Plates) similar to the one you suggest. These plates hold the rails securely together and result in a very rigid layout. (Reply to P. Vigors, Fernhill Heath, Worcester).

RAIL MOTOR TRAIN.—This model would no doubt be of considerable interest to many readers, but we do not consider that it would prove as popular as the ordinary type of locomotive. (Reply to E. Crilley, Kenilworth).

"TUBE" RAILWAYS.—There is little demand for the introduction of a train set modelled on the London "Tube" railways. As pointed out in the "M.M." for August 1926, it is practically impossible to obtain the proper surroundings for a miniature underground railway. It is for this reason that our all-electric train set was copied from the electrified portion of the Metropolitan Railway, a large section of which runs continuously above ground. (Reply to M. H. Holloway, Minchinhampton, Glos.)

DETACHABLE LAMPS.—We have noted your suggestions on this point and are keeping the matter in mind. As we have previously remarked, however, there are several difficulties obstructing the introduction of small accessories of this type. (Reply to R. Blackstone, Wallington, R. Plumb, Kuislip, and E. Riches, Hemel Hempstead).

SPRING BUFFERS.—The addition of spring buffers would merely serve to increase the price of Hornby rolling stock, and therefore we do not think their introduction is worth while. (Reply to C. Yates, Brinscall, Lanes., and P. Barkham, Rehill).

BRAKE FOR CONTROL LOCOMOTIVES.—We are experimenting with a view to the possibility of fitting a hand brake lever to Hornby Control locomotives. Meanwhile

if it is required to brake the locomotive without using the special Control Rail the reverse lever should be placed in a central position. This should be done gently so that no damage results to the gears. (Reply to R. Plunkett, London, N.19, and P. Summers, Newent, Glos.)

EIGHT-WHEELED VEHICLES.—Very many suggestions have been received regarding eight-wheeled passenger and goods rolling stock, including petrol wagons, coal trucks, milk vans, etc., and we are giving careful consideration to the question of their introduction. We hope to make an announcement in the near future. (Reply to D. J. Taylor, S. Ashfield, N.S.W.; P. Harrison and D. Lambert, Southbourne; J. E. Phelps, Johannesburg; W. R. Tomkins, London, S.W.16; J. C. Thorne, Maidstone; D. Miller, Birkenhead; K. Nelson, Montreal; and many others).

COUPLED WHEELS IN No. 1 LOCOMOTIVES.—

Following our announcements in recent issues we have experimented with the possibility of coupling the wheels in the No. 1 Hornby engines, thus converting them to the true 0-4-0 wheel arrangement, and we hope to adopt this improvement shortly. A further announcement will appear in an early issue of the "M.M." (Reply to Eric Crilley, Kenilworth; H. S. Napier, Bancrana, Co. Donegal; W. B. Hutchinson Jr., Cambuslang, Glasgow; J. H. Capell, Weston-super-Mare; Douglas Short, London, N.W.7; S. G. Sanders, Kossendale; M. Rowlett and C. Wood, Gillingham; and many others).

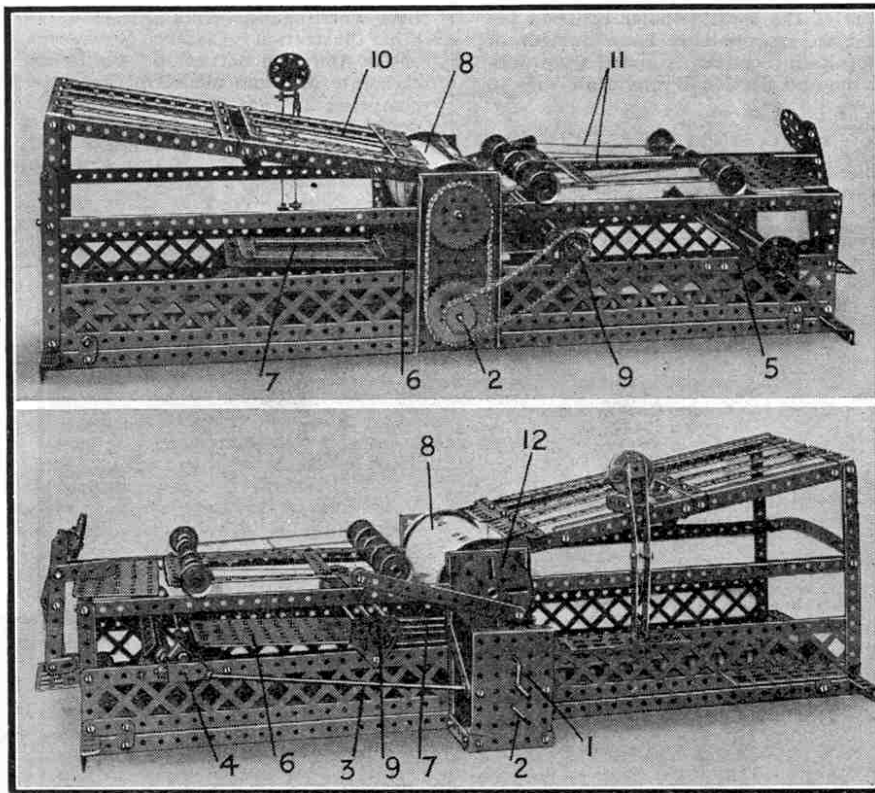
"COWCATCHERS" FOR LOCOMOTIVES.—

Your suggestion re fitting cowcatchers to Hornby locomotives is very interesting, but as pointed out in a previous issue we fear that they would scarcely be suitable for the existing engines, excepting, perhaps, the "Blue" Train Locomotive. Those Hornby

enthusiasts who particularly require this fitting should be able to construct a substitute without much trouble. (Reply to V. Eckersall, Manchester).

DOUBLE TRACK VIADUCT.—The possibility of introducing a Viaduct fitted with parallel tracks will receive further attention at a later date. (Reply to P. Harrison and D. Lambert, Southbourne; and H. S. Napier, Bancrana, Co. Donegal).

PRINTING PRESS BUILT WITH OUTFIT No. 5



The small son and daughter of Mr. F. Shrubsole, of Ashford (Kent), are fortunate in having a father who takes such a keen and helpful interest in their hobby. Most Meccano boys sooner or later "get round Dad" to help them build something "extra special," and the fine printing machine shown above is the result of an appeal of this kind put forward by our two young Ashford readers. The two views are of opposite sides of the machine. The model is built from a No. 5 Meccano Outfit and one extra $\frac{1}{8}$ " Pinion.

The operation of the principal working parts of the machine is as follows. The Crank Handle 1 carries a 57-teeth Gear Wheel that engages with a similar wheel on an $11\frac{1}{2}$ " Rod 2. The latter carries an Eccentric, which gives a throw of 1" and has its arm pivotally attached to an $11\frac{1}{2}$ " Rod 3. The other end of this Rod is connected to the ink roller 4, which moves down the Curved Strip 5 to the ink duct and on its return just touches the ink slab 6. The Rod 2 carries at its centre a Worm driving a $\frac{1}{8}$ " Pinion on a short vertical Rod, to the top of which is secured a Crank that is connected pivotally by a $5\frac{1}{2}$ " Strip to the underside of the bed. The forme is represented by a framework of Strips supported on Washers and secured to the $5\frac{1}{2}$ " x $3\frac{1}{2}$ " Flat Plate 7. The ink slab 6 is bolted to the end of this plate 7 and the whole unit, representing the bed, is mounted on Flanged Wheels that run on girders in the base of the model. The bed moves to and fro as the handle 1 is turned.

The other end of the Rod 2 carries two Sprocket Wheels, as shown in the upper illustration. The larger of these wheels drives a similar wheel secured to the shaft of the cylinder 8, whilst the smaller drives the centre roller of the three inking rollers 9. A stout piece of cardboard is wrapped round the cylinder, to represent the "blanket." Three cords, or "tapes," are tied to a cord stretched from side to side under the feed board 10 and passed round the under-side of the cylinder, their other ends being secured to a transverse Rod on the other side of the cylinder. These serve to guide the sheets of paper while printing. The printed sheets are picked up on the travelling bands 11 and conveyed down to the end of the machine where, it will be noted, a "pressman" stands ready to receive them! The bands 11 are carried in a frame that is moved to and fro as the sheets are printed by means of the Face Plate and connecting rod 12 (see lower illustration). A second pressman is stationed at the feed board, and there is no doubt that this individual will see that the Meccano printing press produces some very fine work!

No. 1 TANK PASSENGER SETS.—We shall consider the possibility of introducing a No. 1 Tank Passenger Set. (Reply to B. Jenkins, Cardiff).

THREE-WAY POINTS.—We note that you support the suggestions regarding a three-way point. We shall keep your ideas before us. (Reply to D. Blake, Wallington, and W. Gunn, Gourrock, Scotland)