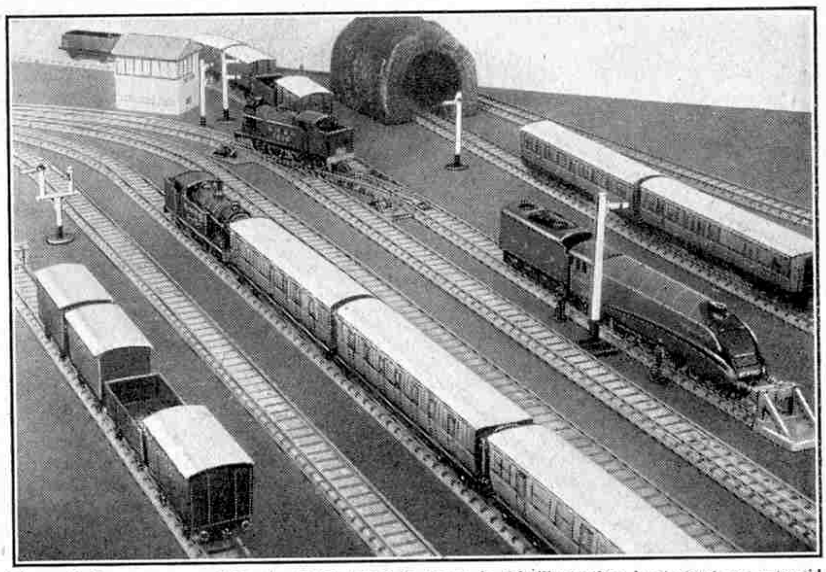
Track for Hornby-Dublo Trains

How to Develop Realistic Layouts

THE first requirement of a miniature railway system is a strong and realistic track, of a design that allows good layouts to be developed and of accurate construction to afford smooth and speedy running. The track provided in the Hornby-Dublo Railway system meets these requirements, and has other special qualities that make it the perfect track for running Hornby-Dublo Trains, both electric and clockwork. In this article we review these various features, and show how they render possible the development of interesting and railway-like systems.

Hornby-Dublo track consists of solid drawn brass running rails of neat and realistic section. These ensure good electrical contact for electric trains, and their truth and smoothness help materially to obtain the perfect running characteristic of Hornby-Dublo Locomotives, both electric and clockwork, and of the associated rolling stock. The actual rails are mounted on a pressed metal base that reproduces exactly the appearance of the well-ballasted road bed of real practice. The neat result that is secured by this method of construction is well shown in the accompanying photographs. The "sleepers" that form part of the tinprinted design of the base are uniformly spaced and thus give exactly the close-pitched appearance of the full-size timbers.



The realistic appearance of Hornby-Dublo Track is shown in this illustration. Neat effect and splendid running qualities are features of this ideal "permanent way" for Hornby-Dublo Trains.

A point that is of special importance where the railway forms a temporary layout on a table is that the lower edges of the base of each section are turned over so that the danger of marking or scratching the table is remote. Those who require to screw their rails down to a baseboard for a permanent system can easily do so, for the base of each piece is provided with holes for this purpose. This saves time in assembly, and also does away with the risk of distorting or spoiling the appearance of the track by punching or drilling the sections at home.

The running rails are kept in alignment at the joints by miniature fishplates attached to alternate rails so that the track sections can be joined up whichever way round they happen to be put together. Similarly it is easy to form reverse curves on layouts that require them. The fishplates are anchored to the base of the rails, to which they are attached so that they cannot fall off and get lost, or stay fixed on the wrong rail when the track is being taken up. Further security is obtained by the use of special spring clips fitted at each end of every rail section. These interlock in such a manner that individual rail sections cannot come apart when they are assembled in a layout; and yet the parting of the pieces can be performed without difficulty when required. The "Permanent Way Department" on a Hornby-Dublo railway in fact have an easy time, for there is no danger of "the road" opening and leaving a gap which will derail the next train that comes along!

The spring clips just referred to also serve a special purpose on Hornby-Dublo electric layouts, for they are connected to the centre rail and provide an efficient and reliable means of securing good electric contact between adjacent rail sections. The centre rail itself, which is insulated from the metal base and from the running rails, has no fishplate. It is formed of steel and makes a perfect contact for the collector shoes of Hornby-Dublo Electric Locomotives. The centre rail is arranged on the "all-level" system, and is strongly mounted on special insulating pieces.

As far as the making up of layouts is concerned there is no difference in geometrical design between the Hornby-Dublo Rails for electric and for clockwork layouts. The only difference that occurs is that in electric layouts one of the curves must be the special EDAT Curved Terminal Rail, which is provided with terminals by means of which the current supply from the Controller is fed to the track. Layouts consisting of two electrically separate tracks, each connected to a separate Controller, require two Terminal Rails, and so on.

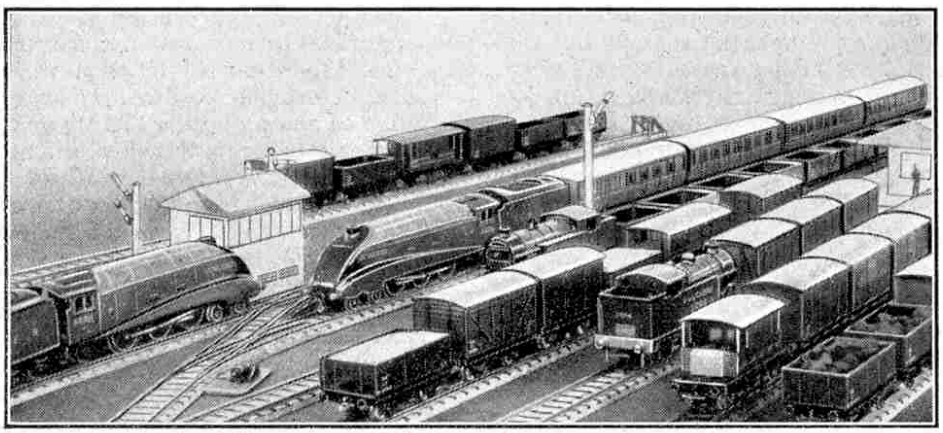
This difference in detail between the requirements for electric and clockwork layouts of similar design is shown in the lists of rails required for the different formations given in the special folder "*Suggestions for Hornby-Dublo Rail Layouts*" that has been prepared. No owner of a Hornby-Dublo Train Set should be without a copy, which can be obtained free from any Meccano dealer.

The main components of Hornby-Dublo track are Curved Rails, Straight Rails and Points. The standard radius adopted for the Curved Rails and for the curved arms of the Points is 15 in., measured from the centre of the circle to the centre line of the track. A space having a minimum width of 2 ft. 10 in. is therefore necessary for a Hornby-Dublo layout in order to allow a sufficient margin

outside the track for safe running and good appearance.

A complete circle is formed by eight of the Curved Rails, so that half-circles and quarter-circles are easily made up. This is a great convenience when it is required to form a large oval track, for straight lengths can be led off from the half- or quarter-circles at the ends of the layout. Curved Half Rails also are made, and these fulfil a useful purpose that is referred to later.

The standard Straight Rails are 11½ in. long; this comparatively great length means a minimum of rail joints in a given layout and helps the smooth running of the trains. Straight Half Rails too are provided which are necessary in making up loop lines and sidings. There is also a Short Rail; this is a straight rail of special length which is inserted in the straight sides when there is a "return loop" formed by a reverse or "S" curve connecting points situated on these two sides. Its particular function is shown in one of the layouts contained in the *"Hornby-Dublo Rail Formations"* folder.



A busy goods yard and main line on a Hornby-Dublo layout. Points are prominent in the left foreground. They form a connection between the up and down main lines on which two expresses are passing.

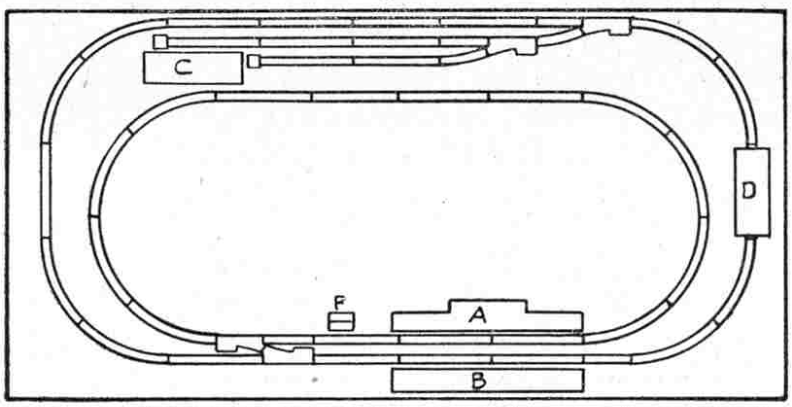
Hornby-Dublo Points are particularly interesting in design, and are perfect in every way. The arrangement of the switch rails, and of the fixed rails and crossing elements, follows real practice very closely. The Points are of the ordinary turnout kind, and are made in two patterns, right hand and left hand. The solid base which is used in the construction of these ensures perfect rigidity and alignment of all parts and is uniform in design with the bases of the other Rails.

At the crossing of the Points where the actual routes diverge, the "V"-shaped Frog and the rails alongside it forming the wing rails are combined in one die-cast unit. This makes it impossible for the various components of the crossing to get out of alignment. Check rails are fitted close to the running rails opposite each side of the frog as on real points. They ensure a smooth and easy passage for the trains whether they take the straight or the curved route.

The layout diagram reproduced on this page shows very well the relation between the various track components. Double track rails are not yet included in the Hornby-Dublo range, but quite satisfactory double track main lines can be made up of two single tracks. In order to make possible perfectly systematical layouts, however, special large radius curved rails will be introduced later. In conjunction with the Curved Rails now available, these will form perfectly parallel double track curves with a standard "6 ft. way" separating them.

The Points have a definite relation to the Curves and to the Straight Rails. The straight portion of a set of Points is equal in length to a Straight Half Rail, and the curved portion also corresponds in length and radius to a Curved Half Rail. An interesting feature is that when two right hand or two left hand Points are used together on adjacent tracks, they form right hand or left hand single crossovers, in which the distance apart of the straight tracks forms the standard "6 ft. way" adopted for Hornby-Dublo Rails. The levers of the Points are arranged inside the curve, but they are so designed that they fit perfectly between the tracks without fouling trains on either line.

Siding and loop lines therefore can be arranged readily by means of the new Points. The manner in which this is done is illustrated by the accompanying diagram, which shows a specimen layout from the folder previously referred to. A curved Half Rail added to the curved turnout of the Points, thus forming a reverse curve, brings the diverging track parallel to the main track. The insertion of a Straight Half Rail in the Straight track beyond the end of the points then causes the rail joints of the parallel tracks to come opposite each other. This is a great convenience when Buffer Stops are to be arranged at the end of siding roads, as it allows a neat and tidy arrangement to be obtained.



A specimen layout from the special folder "Hornby-Dublo Rail Formations," referred to in this article. The letters refer to various Hornby-Dublo Accessories as follows: A. Main Line Station; B. Island Platform; C. Goods Depot; D. Tunnel (Long); F. Signal Cabin.

The layout shown in the diagram is a good example of what can be done with Hornby-Dublo Rails in a space 8 ft. by 4 ft. The system can be arranged equally well for electric or clockwork trains and consists of two main tracks. These two tracks are connected by Points that are used to make up a crossover. The two main lines can be used in the orthodox manner for up and down trains or independently for traffic in either direction.

Goods sidings are situated between the inner and outer main tracks, and they make possible the performance of interesting shunting and marshalling operations. Each siding road is terminated by Hornby-Dublo Buffer Stops.

Suggested positions for various Hornby-Dublo Accessories are shown in the diagram. The inner main track is served by the Main Line Station and opposite this, serving the outer main track, is the Island Platform. A Signal Cabin is shown near to the Main Line Station. There is a Goods Depot near the sidings, and a long Tunnel is situated on the outer main line.

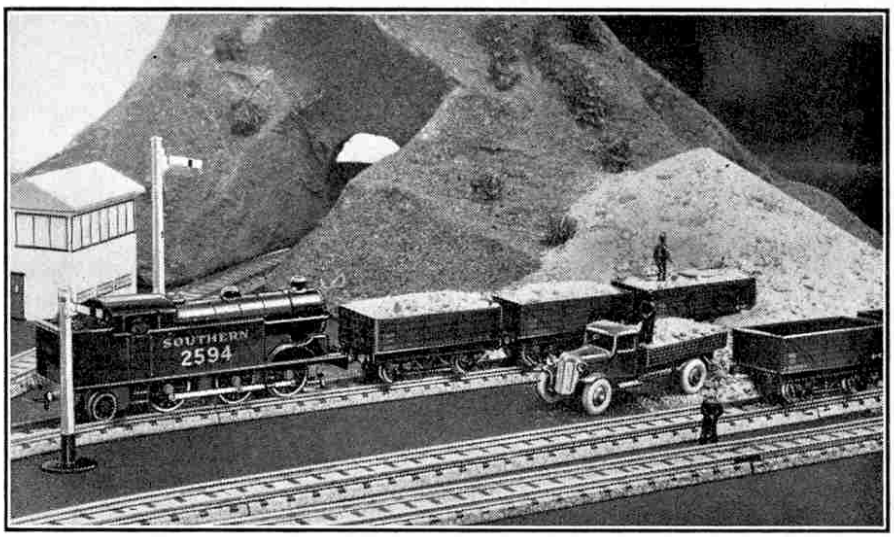
Loads for Hornby-Dublo Goods Trains

Fun with Miniature Freights

ONE of the first instincts of the model railway owner is to provide actual loads for his goods wagons to carry. The wagons themselves may be realistic enough, but the railway will never pay its way if they are run about empty all the time! Finding and making up suitable loads for Hornby-Dublo goods trains is great fun. Goods and materials of many kinds can be placed in the Open Wagons D1, but the Covered Vans naturally cannot be loaded up. Loads that would be carried in such vans in real practice can be placed on the platform of the Goods Depot, however, where they will look as if they are ready for conveyance by train or as if they have just been unloaded.

Freight for Hornby-Dublo vehicles must be in keeping with the small size of the wagons. It also must be light, especially on a clockwork-operated line, and on Hornby-Dublo railways that are of the table-top character it must be clean and of a "tidy" kind.

Probably the first material that will suggest itself as a load is the Hornby Coal. Although this is somewhat large it has the right "coaly" appearance, and is both light and clean. Several Open Wagons loaded with it can form part of a mixed goods train. Alternatively the running of a complete train of Coal can be a regular feature of operations, and will imitate the operation of the real coal trains that are such a prominent feature of the heavy freight traffic on British railways.



A realistic scene on a Hornby-Dublo layout, showing a "quarry" served by the railway. The "stone" is actually coarse sand that is loaded in the Open Wagons in the manner described on this page.

In order to give variety to the traffic on Hornby-Dublo layouts various kinds of what we may term "prepared" loads can be devised by enthusiastic "Goods Managers." A convenient method of arranging such loads is to prepare a series of cardboard "load supports" shaped like box lids to fit into the wagon bodies. The tops of these should come very near the top of the wagon, and their upper surfaces should be coated with glue or Seccotine, on which a layer of the material selected should be allowed to set in position. Hornby Coal can be carried in this way if preferred; it will save the loading of individual Wagons each time a coal train is required to be run.

Rice can be used to represent granite or limestone, and coarse sand also gives a realistic appearance. Dried peas are another household commodity that can be employed quite well. A selection of different "loads" can be made up and kept in a box reserved for the purpose. Here they will not be liable to damage, and particles of the different substances will not be shed on to the line or the surrounding premises.

Another load that can be prepared makes use of dead matchsticks to represent a consignment of sawn timber beams. When carried in open wagons these are often loaded in a sloping position, the lowest layer of the beams resting on and projecting slightly over the wagon end. The easiest way to secure this effect is first to cut a rectangle of cardboard of the internal width of the wagon and long enough to stretch from the floor at one end, up to the top of the other end, and then vertically down to the floor again when bent to shape. This forms a sloping platform of just the right height on which to support the wood. For this a number of matchsticks should be trimmed to equal lengths. The first layer of the load is then stuck lengthways on the cardboard support, the match sticks, or "beams" as they now are, projecting just about an eighth of an inch beyond the high end. When these have set another layer can be stuck on with the outer ends of the beams further in than those of the first lot, and this can be continued until several layers have been fixed, with the inner ends of the last lot touching the end of the wagon towards which the load slopes down. If this is carefully done the finished load is most realistic.

Much can be done by the ingenious owner of a Hornby-Dublo railway with various odds and ends that can be found at home. Small round tins or even pill boxes can be made to look like cable drums. Cubes or rectangular blocks of wood can be sawn, and painted if necessary, to represent large blocks of stone. All these form suitable loads for the Open Wagons.

For use on the platform, as loads supposedly conveyed by the Covered Vans, small corks can be trimmed to look like casks or kegs. Pieces of plain wood can be cut to various sizes to look like cases of different kinds. They can be marked with pencil lines imitating the boards making up the cases, and can be decorated with ink letters and signs representing traders' marks and so on. Some of these can be tied with thread as if roped up. It is possible too to construct miniature crates of match sticks, but this task requires considerable patience. Each side of a "crate" should be assembled separately, after which the sides can be stuck together. Before the last side is secured, however, the "crate" should be stuffed with tissue paper to represent the packing of some article.

Care of Hornby-Dublo Trains

Oiling and Adjusting Working Parts

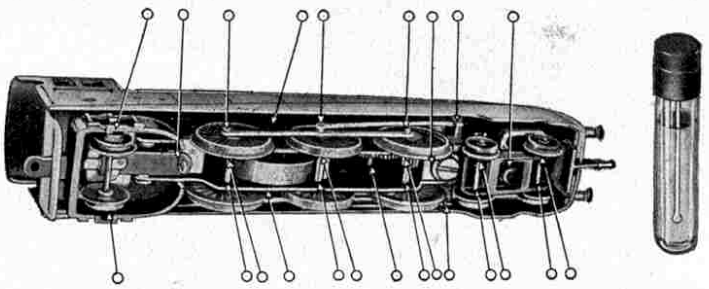
THE Hornby-Dublo System has very quickly established itself as a prime favourite with model railway enthusiasts. Its simplicity is one of its most outstanding and popular features, for there is nothing at all to go wrong with the track, and the only attention required by the rails and points is periodical cleaning to free the running surfaces from dust, or from oil that may accumulate owing to the continuous passage of wheels over them. This is best done by rubbing them gently with a dry clean cloth, which removes all trace of oil and restores the rails immediately to satisfactory running condition. An interesting practical note is that points should be wiped in a trailing direction, for the point blades may become bent through becoming caught in a cloth rubbed over them the opposite way.

It is always advisable to examine points from time to time in order to make certain that the blades fit snugly up against the stock rails, and when they are being operated the lever must be moved through the entire length of its travel and pressed hard against the base, both when opening and closing the points. Through the locking action of the lever mechanism this secures the switch blades firmly in position, so that it is impossible for them to move when a train is passing over them and to cause a derailment.

In the case of electric track care must be taken to ensure that during assembly the brass connector clips do not accidentally slip between the insulating material and the tinprinted base. This would cause a short circuit that could be a very troublesome affair, especially if the whole track had been assembled before the offending clip was discovered. The circuit breaker included in the Dublo Controller would prevent any damage, but the inconvenience would be annoying. Electrical connections should be made to the track by means of a Terminal Rail, and they should be made firmly so that there is good electrical contact.

It is important to see that the wiring from the Transformer to the Controller and thence to the track is in accordance with the instructions packed with these items. The details marked on the panels of the Transformer and Controller form useful guides.

It is surprising how many enthusiasts consider the oiling of a locomotive and train as of no importance. Some have been known to complain of their engines running badly when the trouble has been traceable only to lack of oil. When it is desired to give attention to the mechanism of one of the Hornby-Dublo Electric Locomotives, it is necessary to remove the housing, but this is a very simple process. All that is required is to remove the nut behind the buffer beam at the front of the engine underneath the frame with the aid of the special spanner that is provided with each locomotive for this purpose. When the nut is removed, the motor can be pulled away from the housing at the front end until the hole in the motor chassis casting is clear of the bolt holding it in position, and the next move is to slide the whole motor forward until it is entirely free of the housing. All parts of the motor are then accessible for the purpose of lubricatio , or for any minor adjustments that may be found necessary.

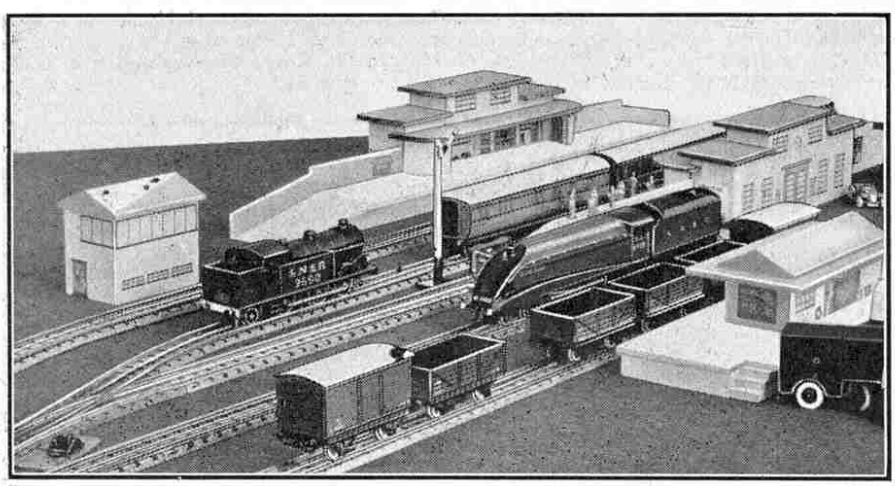


The circles in this underneath view of a Hornby-Dublo Clockwork Engine show where it should be oiled after about 10 hours' running time.

All moving parts should most definitely be lubricated, and with each locomotive is packed a special oiling chart for clockwork and electric engines. This has been prepared after careful experiments and testing, and should be obeyed to the letter. The chart for the DP1 Clockwork Locomotive "*Sir Nigel Gresley*" is illustrated on this page.

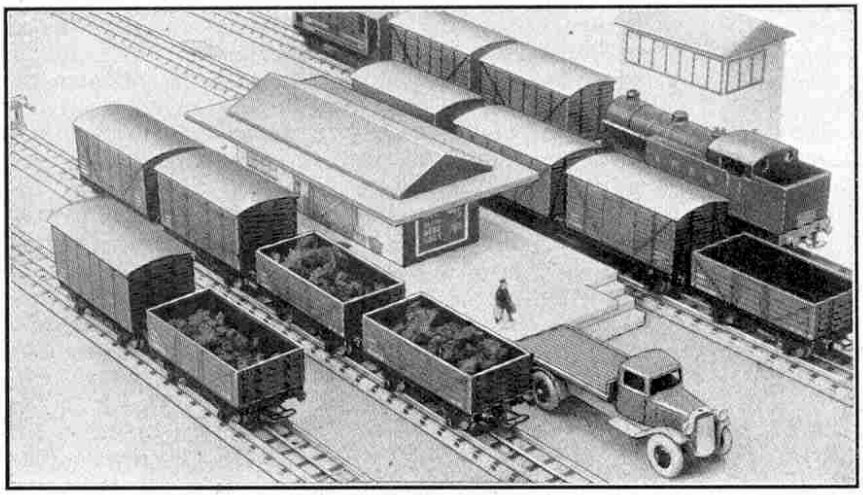
There are two parts of an electric mechanism that are not improved by the application of oil. These are the commutator and the brushes, both of which should be kept absolutely free from all traces of oil. The brushes are of the self-lubricating type that last for many months. The commutator should be kept scrupulously clean for continued good running. Sometimes it collects a deposit of carbon after long running, but this can be removed with the aid of a strip of fine emery paper, which must be about $\frac{1}{4}$ in. wide and should be pressed lightly on the face of the commutator while this is turned by slowly revolving the wheels of the engine in a forward direction.

A clockwork engine also requires



"Sir Nigel Gresley" ready to take over a train brought in from the sidings by the 0-6-2 tank engine.

lubrication, but it is not necessary to remove the mechanism for this purpose, as all oiling points can be reached easily. The only difference between a clockwork engine and an electric motor is that there are no parts in the former that should be kept entirely free from oil except the inside of the governor cup, which controls the speed of the motor and prevents it from "racing." This component is on the motor sideplate, and its effectiveness is reduced if its inner surface becomes oily. All other moving parts should receive a drop of oil to ensure their free running, and a bottle of oil of the correct grade for the engine is packed in each train set. The clockwork locomotives require D1 oil (red seal) while electric engines require D2 oil (blue seal).



A goods depot on a Hornby-Dublo layout. The lorry is waiting to be loaded with goods for distribution.

It is worth noting here that Hornby-Dublo electric engines operated from the mains require a short time to "get into their stride" after a period of inactivity. During this time, which usually is about a minute, the rectifier in the Controller is "warming up."

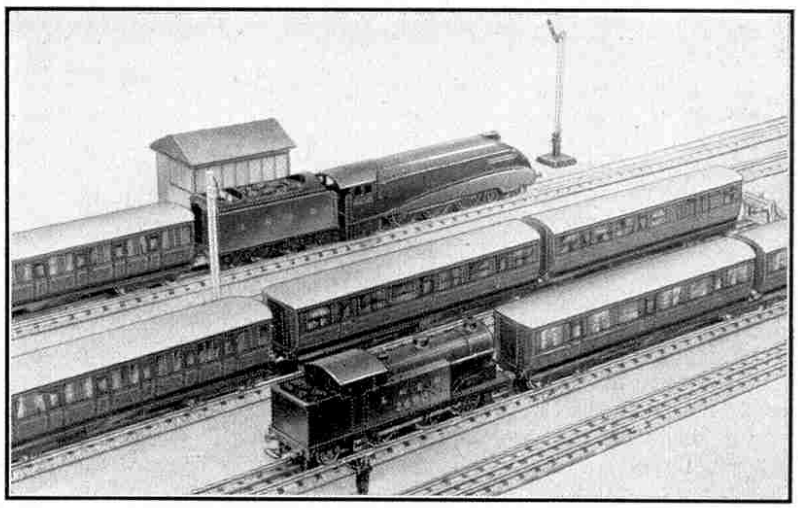
So much for the engines. The working parts of the coaches, wagons and vans also must be lubricated. This is a job that is often overlooked by model railway owners, but is just as important as the lubrication of the locomotives themselves in ensuring free running. The bogies of eight-wheeled vehicles that are not lubricated may be a little stiff and cause derailments, especially on reversed curves or when passing over points. All that is required is a drop of oil on each axle where the wheels fit on it, and a little attention to such details will be amply repaid by excellent and trouble-free results.

In the case of the Articulated Unit it is best to separate the two components. For this purpose the Unit is turned upside down and each of the two locking levers protruding through the floor near the articulating bogie is turned in a clockwise direction. The coaches are next moved toward one another and the bogie is removed. It is then a simple process to lift them apart and attend to each separately. When re-assembling the Unit care must be taken to place the metal Corridor Connection in the correct position first. The bogie is then replaced and the locking handles are moved in a counter-clockwise direction in order to secure it.

The actual quantity of oil to be applied is of importance, for too much can be as harmful as none at all. In the cork of the bottle packed with each set is a dip-stick for applying the oil to the engine and rolling stock. The use of an oil can is not advisable, as with it there is a tendency for the oil to "flood" the mechanism. The dip-stick collects just the right amount of oil, and this can be transferred to the parts requiring lubrication without the fear of any being spilled on parts that must be kept oil-free. Even then it is advisable after carrying out oiling operations to wipe all the wheel surfaces in order to make absolutely sure that no oil has found its way on to them.

The ingenious automatic couplings fitted to Hornby-Dublo locomotives and rolling stock are positive in their action, both on straight and curved track, provided that they are treated with a certain amount of care. They should be examined from time to time to see that they are perfectly aligned, for an accidental knock may bend one of them upward or downward. The design of the couplings allows them to be straightened out again without fear of breakage. A pair of pliers should be used for this work, but care must be taken not to flatten out the two prongs, one of which causes the vehicles to be hooked together, the other preventing the buffers from locking when the rolling stock is being pushed.

Model coaches look best when kept spick and span, and in this condition not only give the railway a good appearance generally, but enhance the reputation of the owner as a careful and enthusiastic miniature railway operator. It is not necessary to clean the locomotives and coaches and various items of goods rolling stock and other accessories on the layout every day, or even every week, but they should certainly receive attention at least once a month. Finger marks on the coaches and engine are unavoidable, but they can be removed quite easily by rubbing them over with a soft cloth that may be kept specially for the purpose. Coach and van roofs, especially those enamelled white, are liable to show up dust more quickly than other components, but this can be removed from them without trouble by wiping them with a damp cloth. These are jobs that do not take up a great amount of time, but are well worth while for the sake of the general appearance of a layout. Locomotive housings are most easily cleaned with a small soft brush.



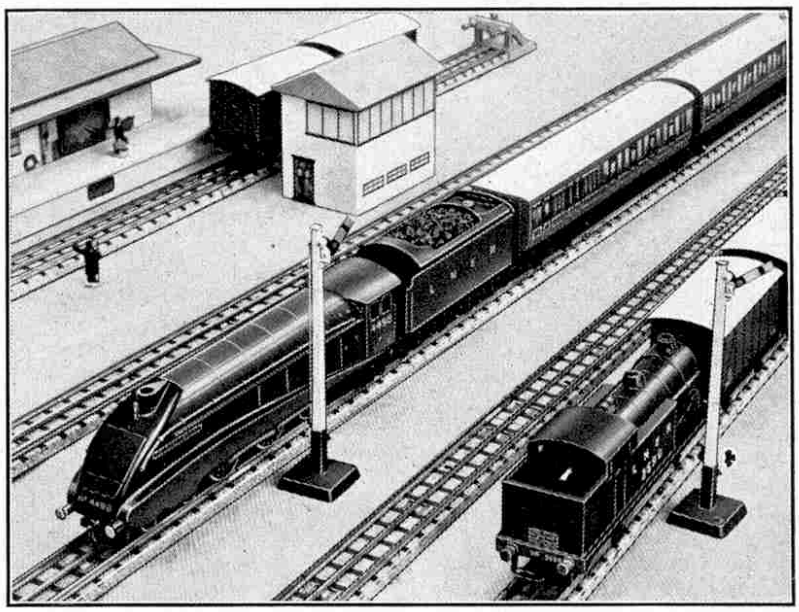
In the carriage sidings, where the coaches should be prepared for their next run.

Hornby-Dublo Mixed Traffic

Running Passenger and Goods Services

IN order to make the operation of a miniature railway as realistic as possible, it is necessary to work both passenger and goods trains. There is sometimes a tendency among many operators to concentrate their attention on one type of traffic only. For this practice there is no excuse on a Hornby-Dublo railway, as the variety of rolling stock and accessories available makes a well-balanced system of operations possible. This month therefore we are dealing with both passenger and goods train working in a general way, giving hints as to the realistic use of the various components.

Let us review first the Hornby-Dublo Passenger Locomotive and Train. As most model railway owners, and certainly all "*M.M.*" readers, are aware, the passenger train is handled by a magnificent model of the L.N.E.R. streamlined locomotive, No. 4498 "*Sir Nigel Gresley*," with corridor tender. It is the most perfect locomotive that has ever been produced in Gauge 00 and in its blue livery is a really thrilling sight. The real No. 4498 is famous as the hundredth Gresley "Pacific" to be placed in service on the L.N.E.R. It is the ideal express locomotive, and all the most important express duties on a Hornby-Dublo system should be performed by its splendid miniature, just as the real "A4" streamliners are the first choice on the L.N.E.R. to-day for both high-speed limited trains, and for the heavier but still fast trains.



An interesting scene on a Hornby-Dublo Railway, on which both Passenger and Goods Trains are operated, as suggested in the accompanying article.

The rolling stock available for operating with this locomotive consists of a Two-Coach Articulated Unit of the type that is used extensively by the L.N.E.R. in making up standard main line trains. The bodywork of these vehicles is really a marvel of tinprinting, as the graining that is such a feature of the varnished teak stock of the L.N.E.R. coaches is clearly reproduced. The two vehicles composing the Unit are of corridor type, one of the coaches having passenger accommodation only, and the other being a Brake Composite.

In addition to the latter Unit there is a separate First/Third Corridor Coach. It is similar in general design and construction to the coaches in the Articulated Unit, and is a most useful addition for making up an express passenger train. Actually on the L.N.E.R. a first/third corridor coach combined with a twin unit of the kind represented by these models forms the basis of many of the important main line trains.

Turning to goods trains, these are handled by a characteristic 0–6–2 Tank Locomotive, which is available in the colours of each of the four main line companies. The engines are of the same design, except that the G.W.R. model is fitted with a domeless boiler and correct type safety valve, features that are characteristic of G.W.R. locomotives.

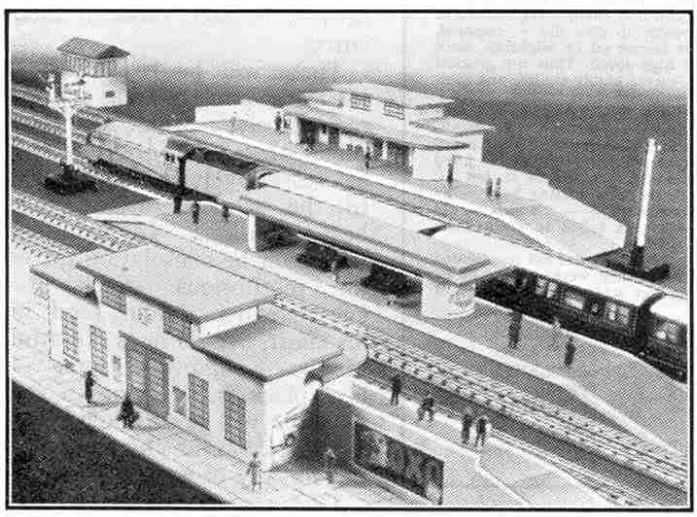
These engines are excellent in appearance, as can be seen from the illustration on this page. A wealth of detail is included, even to such minute but nevertheless important items as boiler bands, washout plugs on the firebox, and the whistle in front of the cab. On a layout on which both passenger and goods trains are operated the Tank Locomotive can be used for passenger work when it is not employed on freight trains. For instance, it can be made to bring the coaches from the siding to the station to form a train; to add or detach any extra vehicles that may be required, or to carry out the disposal of a train at the end of a journey. It can in fact undertake in a most realistic manner all the duties that tank locomotives do in actual practice.

The rolling stock for making up goods trains represents the most up-to-date standard type of wagons and covered vans, all of which are lettered in the latest style agreed to by the four groups, in which the company's initials, the tonnage and the wagon number appear together in the left-hand corner of each wagon side. All these goods vehicles have tinplate bodywork mounted on pressure die-cast underframes that are full of detail. The Goods Brake Van is a particularly interesting model, as a separate van has been constructed for each company and each is a true-to-type design.

Enthusiasts who wish to operate combined goods and passenger services should see that their line is well supplied with accessories. For the passenger section there is the Main Line Station and Island Platform. They are constructed of wood, and will accommodate a three-coach train. The Goods Depot is of similar up-to-date form, and is a very pleasing addition to any Gauge 00 railway. Another accessory made of wood is the modern-style Signal Cabin. There are also the splendid upper quadrant type Signals, all excellent scale models and available with either "home" or "distant" semaphores.

Stations and Other Buildings on Hornby-Dublo Railways

IN planning the operations that are to be carried out when a miniature railway system is being developed one is apt to take for granted the station buildings and other structures that are really necessary for the effective running of trains. In this article, as a change from the operations dealt with last month, we will talk about station arrangement and other lineside features.



A typical four-road station with a Hornby-Dublo express dashing through on the fast line. Two Main Line Stations and an Island Platform make an effective "outer suburban" or "residential" station.

The Hornby-Dublo railway owner is well provided for in the matter of stations, and by varying the manner of their use it is possible to secure quite a number of effective results. In addition, as we shall see, by means of a certain amount of "makeshift," any "sameness" of arrangement is avoided, and this makes for increased realism.

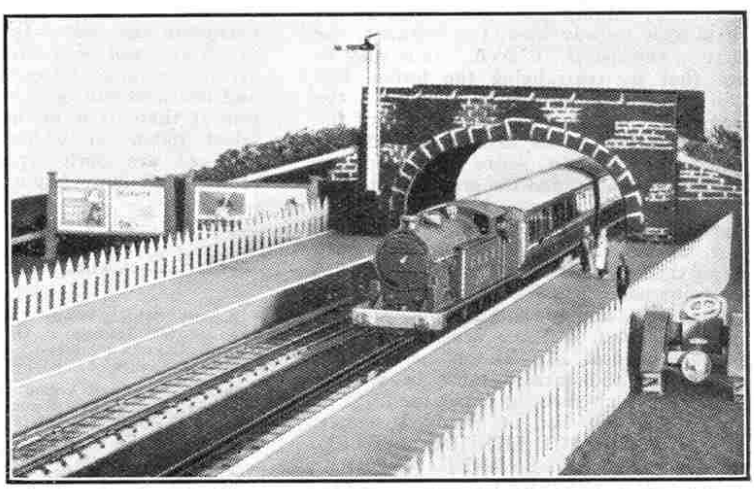
In the Hornby-Dublo System there is first the standard Main Line Station. This is a complete and self-contained station that can be used quite effectively alone alongside a single-track railway. It is modern in design and finish and attractive in appearance, and makes an effective halting place of the rather more important roadside or suburban type. Where the main line is double track, or even if double track is only provided "through the platforms" by means of a passing loop, two Main Line Stations used together opposite one another reproduce a typical situation that is quite commonly found on all the British main lines.

An alternative scheme is to make use of the Hornby-Dublo Island Platform. This is made to fit between two main lines, an arrangement that saves space and is therefore valuable to the miniature railway owner, who rarely has room enough to bring all his favourite schemes into being. It is quite a realistic scheme too, for, to give only one instance, most of the stations south of Nottingham on the Great Central Section of the L.N.E.R. are of the island type.

The Island Platform can be used also in conjunction with the Main Line Station. Its platform is the same length and it is of similar general design so that the two match one another very well. Often by the time a layout has been extended from single track to double track there is not much room to spare between the outer track and the edge of the table or baseboard on which the railway is situated. Then the Island Platform, by reason of its restricted width, is very useful. It can be used to form one side of a two-platform station by being placed on the outside of the track, a standard Main Line Station inside the track forming the other side of the complete station. Another advantage is that the Island Platform, having no buildings on it but only an open awning, does not spoil one's view of the trains or of the other side of the station.

On a big railway with separate tracks up and down for fast and slow traffic stations become rather elaborate. Two Island Platforms can be used, one between each pair of tracks. Alternatively the outer tracks can each serve a Main Line Station placed outside of them in each case, and the inner tracks can run on each side of an Island Platform. This gives a busy and realistic effect as will be seen from the upper illustration on this page. In this instance the tracks for fast traffic are those farthest away from the camera.

Another arrangement is possible where the secondary tracks form loop lines off the main up and down lines perhaps only for the distance through a station. Then platforms can be provided outside the outer tracks only for the accommodation of stopping trains, the main lines carrying straight on and having no platforms at all. This loop road scheme is a useful one, for it makes it possible for a slow train to run into a loop of this kind and stop at the platform; while standing there it can be overtaken by a fast non-stopping train. In situations like this on electric layouts the Isolating Rails are most useful, one being provided at each end of the loop. Only one such Rail need be connected to the controlling Switch, the other forming a permanent break in the centre rail circuit. There the



A simple station formed of the separate platform section of the City Station Outfit. A local stopping train is approaching.