

# Freight Trains And Their Loads

OF all miniature train formations the most universal are freight trains, which, while by no means as orderly as passenger trains, are not without correct sequence. This is of importance to the railway layout operation. On full-size railways a freight train varies in length from 60 or so wagons for main line work down to one wagon and a brake van on country branch lines.

First, a brake van must be provided as the last vehicle in practically every instance. Next, such

## MINIATURE TRAIN FORMATIONS

By S. F. PAGE

explosive or inflammable traffic as petrol, oil, timber, straw, certain chemicals and gunpowder must not be marshalled next to the locomotive or the brake van. And in general no more than five gunpowder wagons must be hauled in a mixed freight at one time, and then they must be in the middle of a formation.

There are many variations in the classification of freight stock and the wide range provided in the



A mixed freight headed by a Type I Diesel hauls a night freight southwards on the author's L.N.E.R. layout.

Hornby-Dublo series will produce practically every type of freight train required.

Many real wagons are fitted with vacuum brakes, which makes possible the running of express freight, and such standard wagons are identified by their overall colouring of brown oxide, as opposed to the grey of non-fitted wagons. But there are variations of fitted wagons. Fuel and oil tankers such as the Hornby 4680 Esso Fuel Oil, 4677 Mobil, 4678 Shell and 4676 Esso are all finished in their respective colours, while milk tankers such as the Hornby 4657 are painted white. Then we have the refrigerator vans such as No. 4320 W.R. 6-ton Van and the "Blue Spot" Fish Van No. 4300, both of which are fitted vehicles.

While freight train formations depend largely on the destination of the vehicles,

it is important that as many fitted wagons as possible shall be marshalled next to the engine (except the special loads mentioned earlier) in order to provide the maximum braking power behind the locomotive.

Bearing these facts in mind let us marshal one or two freight trains behind suitable locomotives. For instance: Van 4325, Van 4325, Mineral 4656, Van 4325, Mineral 4656, Low-sided 4648, Low-sided 4648 and, of course, one of the fitted Brake Vans, 4310 or 4311. This forms a fully-fitted train to travel at express speeds.

Here are other examples: Van 4325, Refrigerator Van 4320, Refrigerator Van 4320, Low-sided 4648, "Lowmac" 4652, Open 4670, Open 4670. This forms a partially-fitted train, since the last wagons are not fitted.

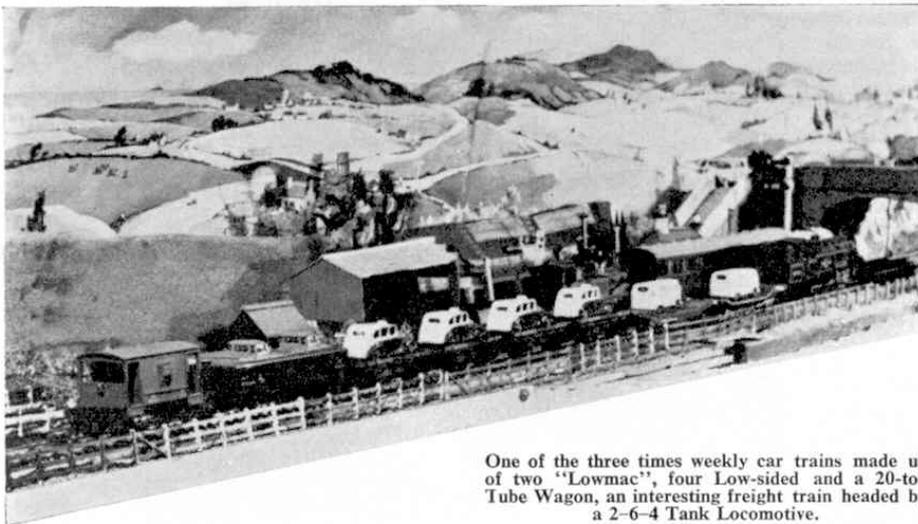
Slower freights can be made up by: Cattle 4630, Open 4670, Tanker 4676, Van 4325, Mineral 4655, Mineral 4655, Mineral 4655. Such a formation is common for local freight and branch line operation.

In recent years the practice of "block" freight formations has developed, and for this type of freight working Hornby-Dublo stock is particularly well suited.

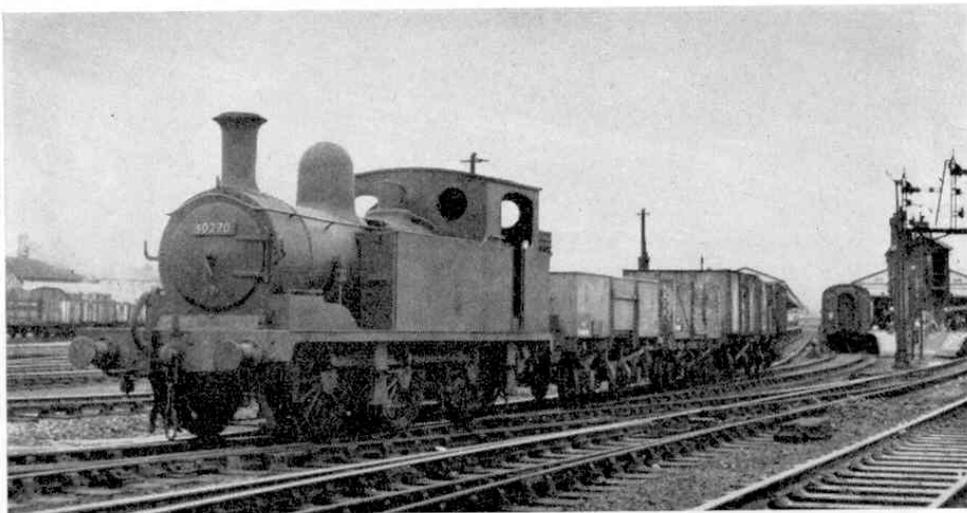
Such stock as the 20-ton "Presflo" No. 4626, the 20-ton I.C.I. Bulk Salt Wagon No. 4627, the I.C.I. bogie tanker, No. 4685 and the individual block trains of the fuel oil tankers mentioned earlier provide the layout with a wide range of block train stock.

To relate such block trains to actual working, there is the Class "C" Thames Haven to Rugby Mobil Oil train, running nightly. Such a train can be formed by several No. 4677 Mobil tankers, separated in the middle by a brake van. This is positioned at the end of the section to be

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One of the three times weekly car trains made up of two "Lowmac", four Low-sided and a 20-ton Tube Wagon, an interesting freight train headed by a 2-6-4 Tank Locomotive.



FOR THE TWO-RAIL  
ENTHUSIAST

# ELEMENTARY SHUNTING

By  
"LINESMAN"

**T**HIS Christmas, many of you will begin a Hornby-Dublo railway, and many others will extend layouts already in existence, so this seems an opportune moment to have a talk about one of the numerous fascinating aspects of miniature railway operation, the shunting and marshalling of trains.

I am sure all of you will have seen shunting and similar operations of various kinds taking place on real railways. Although a great deal of shunting and marshalling takes place in large yards specially laid down for the purpose, several modern examples of which were mentioned in *Railway Notes* last month, the kind of shunting with which most of us are familiar consists of the less involved operations that can take place in almost any local goods yard.

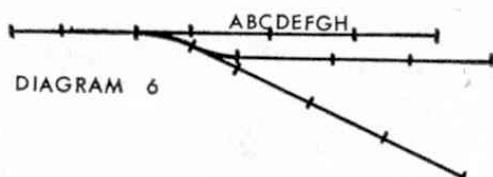
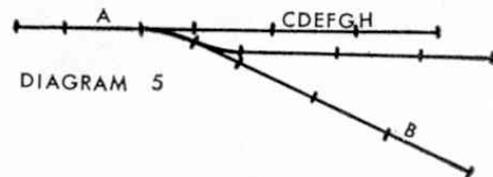
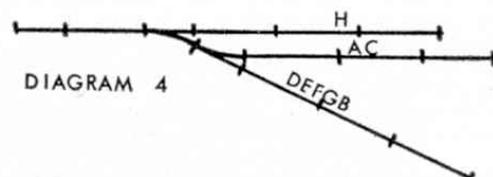
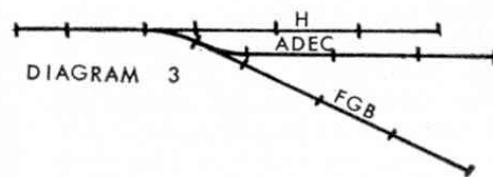
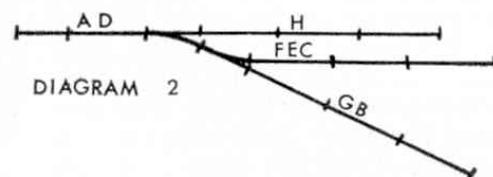
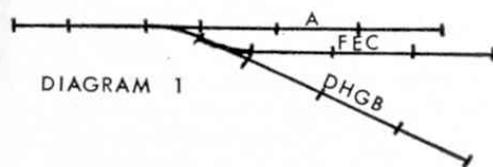
These operations usually involve various movements into and out of the sidings in the yard, so that the operations are carried out in as few moves as possible. In the course of such working the order of the vehicles composing the train frequently changes, and the movements that may be required at a later stopping point have to be borne in mind while the job is going on.

It is possible to reproduce operations of this kind in Hornby-Dublo, and plenty of fun is to be had even with a comparatively simple yard layout. An example is shown in the series of diagrams on this page, the purpose of which is to indicate the progression of various wagons which are being re-arranged from their original mixed order into correct alphabetical sequence. I should point out that the track in the diagrams does not represent the individual Hornby-Dublo components needed to complete the section shown. Rather, its purpose is to show the layout in schematic form only.

In the diagrams the letter A represents the locomotive and the letter H a goods brake van. The intervening letters represent an assortment of whatever wagons you choose to use. One way of carrying out the simple exercise of arranging the wagons in correct alphabetical order is to use the main line, as well as the two sidings in the course of the operations. It is possible to do the job using the two sidings only, but this is a little more difficult. If you are not an experienced hand at shunting I would recommend you to try the easy way first. To form the letters into alphabetical order the van H will have to be brought out and placed on the main line. This is simply done by moving both D and H together on to the main line, and then uncoupling H. The next movement is to shunt F from one siding to another, leaving A coupled to D, E, C in one of the sidings as shown in Diagram 3. A then moves D, E from the siding where they are shown in Diagram 3 to the other siding to join F, G, B. A then returns to wagon C as shown in Diagram 4. The sorting is now very nearly complete; all we have to do is to make the engine shunt C on the back of D, E, F, G, making sure that B remains uncoupled and to move them on to the main line, where A uncouples, and returns to fetch B, which is attached to the train.

A more interesting movement would be the complete reversal of a train, using only the oval and the two sidings. The movements involved in this would be very

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Top: S.R. 0-6-0 Tank No. 30270, an ex-L.S.W.R. locomotive of class G6, is here seen shunting wagons at Salisbury. Photograph by S. Creer. Right: The diagrams illustrate in schematic form the shunting sequence described in detail on this page.

## Road and Track—

(Continued from page 497)

of Earl Howe, who led the team that scored such a tremendous success. Later in the same year the great Tazio Nuvolari won the Tourist Trophy in one of these machines.

A road machine, often in saloon form, that gave many drivers their first taste of quicker motoring, was the tamer version known as the L type Magna. Last of the overhead camshaft engines was the PB, enlarged to 936 c.c. in 1936. It was a pity the firm dropped overhead camshaft engines after this model in favour of push-rod power units, the first of these being the 1292 c.c. TA which appeared in 1939.

Today, M.G. is part of the British Motor Corporation, which produced the 1½ litre M.G.A in 1955 and now has one of the world's finest sports cars in its class, the M.G.B. Recently the M.G. Midget has been revived and once more it is an extremely good, moderately-priced little sports car, but this time with a top speed around 90 m.p.h.

The present Managing Director of M.G. is John Thornley, a great enthusiast who has been with the firm since the early 'thirties, and has steered it through many triumphs. It is good to know he has some interesting ideas for the future.

## Dinky Toys News—

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vehicle being moved.

As I said earlier, both models will be on sale soon, so keep in touch with your local dealer.

Many complimentary things have been said about the Dinky Toys model of the Triumph Spitfire, which has a woman driver and a detachable safety belt. Among those who have offered their congratulations is Mr. R. A. Lovell, chairman of the National Automobile Safety Belt Association, who says, "One of the most important things this association has to do is to instil into the minds of the motoring public the wisdom of installing and wearing safety belts, and there is no better way of doing this than by educating the young in the habits they should form. Your excellent model should certainly do this."

## Air News—(Continued from page 517)

springbok sign means happy rotoring".

### BUILT TO BE SHOT AT

The Meteor aircraft shown in the lower illustration on page 517 looks so trim and businesslike that it is sad to think that it will spend its (probably short) life being shot at with guided missiles and other weapons. Yet, by offering a manoeuvrable high-speed target for such weapons, the drone Meteors produced by Flight Refuelling Ltd. are playing a big part in perfecting the products of our missile industry.

This particular Meteor is the 100th target conversion of a Mk.8 fighter built

by Flight Refuelling for the Ministry of Aviation. Ninety-two of these conversions have been to Meteor U.Mk.16 standard, for service at the Royal Aircraft Establishment, Llanbedr, North Wales. The eight others have gone to the Woomera Rocket Range as Meteor U.Mk.21s. Previously, Flight Refuelling built 91 U.Mk.15 drones, using old Meteor F.Mk.4 airframes.

Conversion of the aircraft into drones requires considerable structural modifications and the installation of much special equipment. In particular, the nose is lengthened by 30 inches to accommodate the radio control and automatic pilot.

In flight, the aircraft is "piloted" by a master controller in a mobile transmitting van on the ground. A camera system on the aircraft tracks the final stages of the missile's flight towards the target. Should the programme entail damaging or destroying the drone, the wingtip nacelles which contain the film records can be jettisoned and recovered by parachute.

The Meteors retain full normal cockpit equipment, enabling them to be test flown by a pilot in the usual way to ensure that everything works properly before they are sent up under remote control.



"Please hurry doctor... his dad's Christmas dinner's still in it."

## New Books for Christmas—

(Continued from page 510)

in that city—which led to many other railway explorations in due course, and the development through various stages of a remarkable miniature railway.

How this home railway became something of an embarrassment to the privacy of the home, because of the number of visitors, so that it was ultimately disposed of, is told by the younger writer, himself a journalist, author and publisher. In his section of the book—Part II—he covers a wide field, from the West Country to the Highlands, from the Border Counties to Northern Ireland, making a survey of various areas with special reference to railway branch lines, and rural transport in general.

From these joint writings, the reader is given plenty of entertainment in the many-sided observations of two keenly-interested portrayers of the world of British railways from the turn of the century to date.

There are plenty of well-chosen illustrations, many of which are half-tone reproductions. There are sketches, or rather impressions, too, that help to give atmosphere to the well-assorted subject matter. Not a history in the usual sense, but a very readable addition to the library of the railway lover.

## Miniature Train Formations—

(Continued from page 524)

dropped off first. But empty wagons must be employed between the engine and the brake van, and then again before the final brake van.

Or, again, there is the daily cement train on the Hatfield line, hauling a number of "Presflo" wagons which normally stay together as a complete train and, therefore, can have a brake van at both ends.

From this it will be seen that freight running is not just a collection of wagons on the end of a locomotive, but rather an interesting and practical miniature method of train running with an object in view.

## Elementary Shunting—

(Continued from page 525)

similar to those described in this article, except that the oval would be used to enable the locomotive to couple on to the other end of the train. This, in fact, is the only way that this can be done without the aid of either a run-round or some other form of by-pass line.

If any reader would like me to describe further shunting movements from time to time in the pages of the *Meccano Magazine*, please send a postcard to "Linesman", c/o *Meccano Magazine*, Binns Road, Liverpool 13.

## Calling All Bus Spotters—

(Continued from page 532)

half) and dark green (lower regions). This is now owned by Warner Motors Ltd. of Tewkesbury, who run a fleet of 33 double-deckers and 20 coaches on mainly contract and private hire work, but do work a stage carriage route from their base to Strensham, and a circular via Bushley or Chaceley.

Another private hire firm, in Cheltenham itself, is R. S. Marchant of 433 High Street. Here I was kindly shown round their garage, where I saw three ex-Eastbourne Corporation Crossley DD42 double-deckers with East Lancs. bodies (JK 9993/5/6), MTE 73 (a Maudsley "Marathon III" with a C37F body), XNY 347 (Bedford SB/Duple C41F), 510 FAE and 9304/5 AD (Bedford SB/Plaxton C41F) and XDD 194/5 (A.E.C. "Reliance"/Duple C42F).

I trust that I have whetted your appetite to visit colourful Cheltenham!

# DINKY TOYS®



FIRST  
AGAIN

TRIUMPH

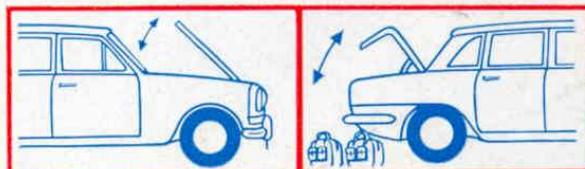
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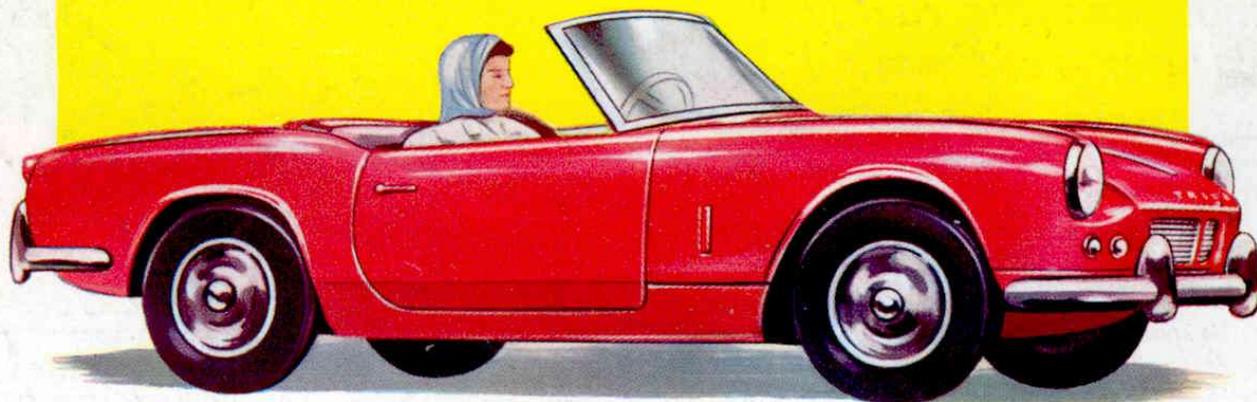
## No. 135 TRIUMPH 2000

Through close liaison with the Standard-Triumph Company, Dinky Toys designers have produced two of the year's outstanding cars: the Triumph Spitfire, with woman driver and, for the first time ever, a detachable safety belt; now comes the fabulous Triumph 2000, one of the most closely-guarded secrets of this year's Motor Show—and one of its brightest stars! This gleaming saloon, the car that everyone is talking about, can now be added to your Dinky Toys collection. Both models personify the grace and elegance of the actual cars. And they have all the latest Dinky Toys refinements too. Length  $4\frac{3}{8}$  in.

U.K. Price 5/11



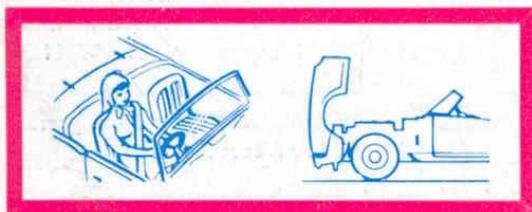
## YES—IT'S A DOUBLE TRIUMPH FOR DINKIES



## DINKY TOYS No. 114—TRIUMPH SPITFIRE

It's not the famous Battle of Britain fighter plane . . . but it IS the famous and revolutionary new sports car—the Triumph Spitfire. Features include: opening bonnet, detailed engine, steering, suspension, windscreen, interior fittings and, best of all, a safety belt which unclips to release the lady driver! Length  $3\frac{1}{2}$  in.

U.K. Price 6/6



Available at HAMLEYS, HARRODS, GAMAGES, SELFRIDGES and all good toy shops everywhere.

AVAILABLE LATER OVERSEAS