

Engine Duties on Miniature Layouts

Choosing Hornby Locomotives

THE Hornby Railway Company staff at Headquarters frequently have to deal with enquiries from readers who wish to know which engine in the range of Hornby Locomotives is the most suitable for certain kinds of work. The choice of a locomotive is not in general a difficult matter, but there are certain considerations that may influence the selection of the type to be adopted. For instance, the radius of the curves in use on the line and the kind of work the engine is to perform have both to be taken into consideration, for upon these the size and class of engine to be employed largely depend.

Another point to be borne in mind is that on real railways different types of engines are not now restricted closely to particular duties, as they were formerly, although there are still broad differences between the kinds of work undertaken by passenger and goods locomotives, and by tender and tank types. This is a great convenience to the model railway owner, as it enables him to use his relatively few engines for a variety of duties while following the practice of the line his railway is intended to represent.

The largest and most powerful engine in the Hornby Series is the splendid L.M.S. 4-6-2 "Princess Elizabeth." This has a 20-volt electric motor fitted with automatic reversing mechanism that affords complete remote control from the lineside, and a finer locomotive for the fastest and heaviest passenger traffic on any layout can scarcely be imagined. The imposing character of the engine is well brought out in the illustration on this page. Although it can be run on the standard Hornby 2 ft. radius curves and points, it shows its great power and speed to better advantage on layouts arranged with Hornby Steel Track, the curves and points of which have a radius of 3 ft. 2 in. measured to the outside rail.

Next in size are the engines of the various No. 3 types, which are available either as electric or clockwork models. Although these 4-4-2 engines are of large proportions, the central positions of their coupled wheels allow them to traverse the standard 2 ft. radius curves and points easily at speed, for the leading bogie and trailing pony truck provide the necessary flexibility in the wheelbase.

Each of the principal British groups is represented by this type of engine. They are of the same general design, the individual engines differing in accordance with the practice of the companies they represent. Similarly a different true-to-type tender is available for each one. Another member of the No. 3 class is the Hornby Riviera "Blue" Locomotive, also of the 4-4-2 wheel arrangement. This is a typical example of French locomotive practice and it represents very well the remarkable De Glehn compounds of the Nord.

We now come to the popular 4-4-0 wheel type. The latest representatives of this type in the Hornby Series are the E420 and No. 4C models of the S.R. locomotive "Eton" of the "Schools" class, probably the most popular series of engines introduced on the S.R. These are essentially express passenger engines, and the models have a special appeal for admirers of the S.R. They are also popular with those who develop their layouts on individual lines, and require a thoroughly modern design of 4-4-0.

The 4-4-0 E220 Special and No. 2 Special tender engines also are good representatives of this type. In each of these series there are four engines, each a true-to-type reproduction of a real locomotive, the real engines thus modelled being the Standard Compounds of the L.M.S., the "Hunts" of the L.N.E.R., the "Counties"

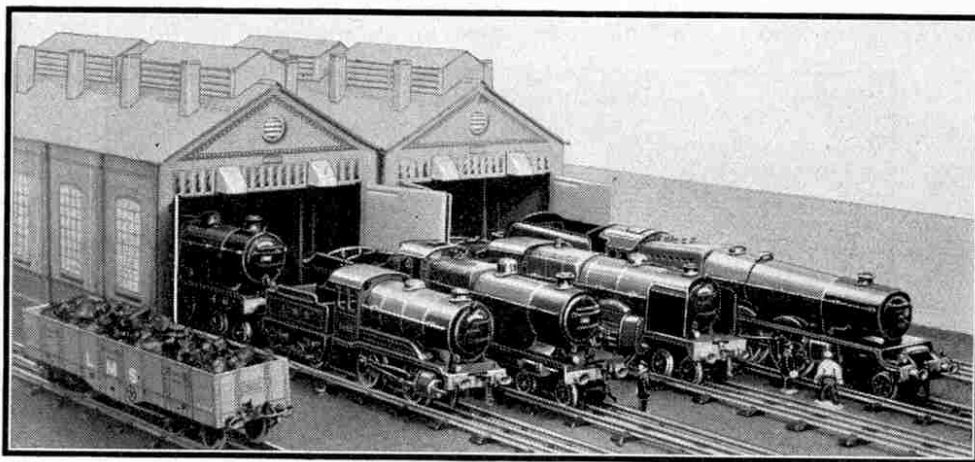
of the G.W.R. and the unnamed "L1" class of the S.R.

The two types just considered, the 4-4-2 and the 4-4-0, are primarily passenger engines well suited for general express duties on model systems, and each runs perfectly on the 2 ft. radius curves of the standard Hornby Tinplate Track. In addition they can be used quite well for the haulage of fast goods trains representing the important "fitted freights," or trains made up of vehicles fitted with automatic brakes, which are such a feature of modern railway operation.

Those who have layouts on which traffic of a shorter-distance character is worked require tank engines. These have the advantage that they take up less room than tender engines, and they do not require to be turned at terminal stations, for they can run equally well either forward or backward. Tank engines are suitable for all kinds of shorter-distance traffic, according to their types, so that they are in their element working suburban passenger trains, on local goods work or shunting.

The largest of the Hornby Tank Locomotives are the E220

Special Tank and No. 2 Special Tank types, both of which have the 4-4-2 wheel arrangement. Such engines represent a tank version of the 4-4-0 tender locomotive, rather than of the 4-4-2 as is sometimes supposed, for the bogie and driving wheels are under the bunker. The Hornby 4-4-2 Tank makes a very effective engine for short-distance express work, fast and heavy suburban service as well as for goods traffic.



Motive power in bulk! An interesting "line up" of Hornby Locomotives of various wheel arrangements that are suitable for a wide range of duties, as explained in the article on this page.

The remaining engines of the Hornby Series, both tender and tank types, are four-wheelers. The largest of them are the E120 and No. 1 Specials. These are very imposing in design, with outside cylinders and steam pipes, raised footplates and large boilers, and they are equally useful for either passenger or goods work. They are in fact ideal mixed traffic locomotives. The corresponding E120 Special and No. 1 Special Tank Locomotives have similar characteristics, and therefore are suitable for similar work of a lighter character.

The E120 and No. 1 Tender Locomotives and the corresponding Tanks are slightly smaller and less powerful than the No. 1 Specials, and are suitable for similar but lighter duties. The E120 Locomotives are not fitted with the automatic reversing mechanism characteristic of the E120 Special type, but they can easily be reversed by hand from the cab.

This completes the series of engines that require 2 ft. radius curves. The No. E020 and EM320 types are quite at home on 1 ft. radius layouts and are capable of performing all passenger and goods work, both main line and local, on simple systems. We can consider them and their corresponding clockwork versions together, as the mechanisms are similar. In each case reversing is effected by a hand lever in the cab, and this applies also to the M1 Clockwork Locomotive; the EM120 and EM16 are not provided with reversing motors. These engines and the MO engines for 9 in. radius layouts are intended for all duties, both passenger and goods.

Different rails are necessary for braking and reversing different types of engines. It is easy to arrange matters suitably, however. The MB9 Curved Brake Rail can only be used in conjunction with an MO layout. The BBI Straight Brake Rail can only be used to brake the M1, M3 Tank and No. O Locomotives. The AB2 Curved Brake Rail can only be used either to brake or reverse No. 1 Locomotives. The BBR1 Brake and Reverse Rail brakes or reverses the No. 1 Special, No. 2 Special, No. 3C or No. 4C Locomotives.

A Popular Type of Layout

Attractive Passenger and Goods Working

IN recent issues we have described layouts, one operated by the members of a Branch and the other owned by an individual member, that reproduce special portions of the tracks of particular railways. Such layouts have an air of realism, and lend themselves to very satisfactory operations. Equally good fun follows the building up of a miniature railway that represents no particular original, but includes features and follows practices characteristic of different real railways.

A layout of this kind is shown in the illustrations on this page of the model railway of Mr. R. H. Flockhart, of Bridge of Allan. Mr. Flockhart is fortunate in having the use of a large loft for his railway, which was first laid down permanently nine years ago. It was then solely a clockwork-operated layout, but since that time many changes have been made in the general design, and the whole of the track is now electrified. Clockwork locomotives and one steam locomotive are still used, however.

The layout is of the continuous type, and the whole of the main line consists of double track. There are three stations, all of them home-made. The main station is called "Central" and consists of three platforms, two of which are of the island type. It is a through station on the main line and also has terminal platforms served by buffer-stop roads. The three platforms are joined by an overbridge. Similar provision for crossing the line is made at "Exeter," the other main line station; both bridges are home-made and are very realistic in appearance. The third station, named "Windsor," is of the simple wayside design and has a single platform only. An air of realistic activity is given to the general scene at the stations by the use of Dinky Toys Passengers and Station Staff, and an interesting feature is a painted scenic background surrounding the track, which gives a very realistic appearance to the whole layout as can be seen in the illustration.

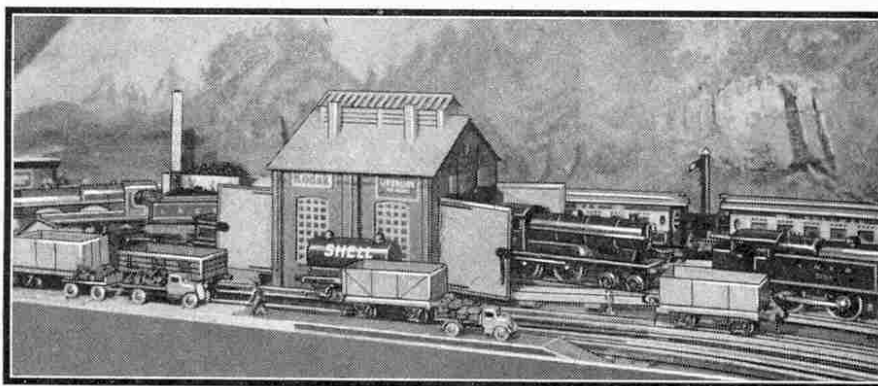
Both passenger and goods operations are carried out on the railway. The main passenger services are handled by a Hornby No. 3C L.N.E.R. "Flying Scotsman" Locomotive, and the trains are composed of three or more Pullman Coaches. This engine can be seen at



Express and local trains on the layout of Mr. R. H. Flockhart, Bridge of Allan. A Hornby No. 3C "Flying Scotsman" is at the head of the express, and a No. 1 Tank is on the other train.

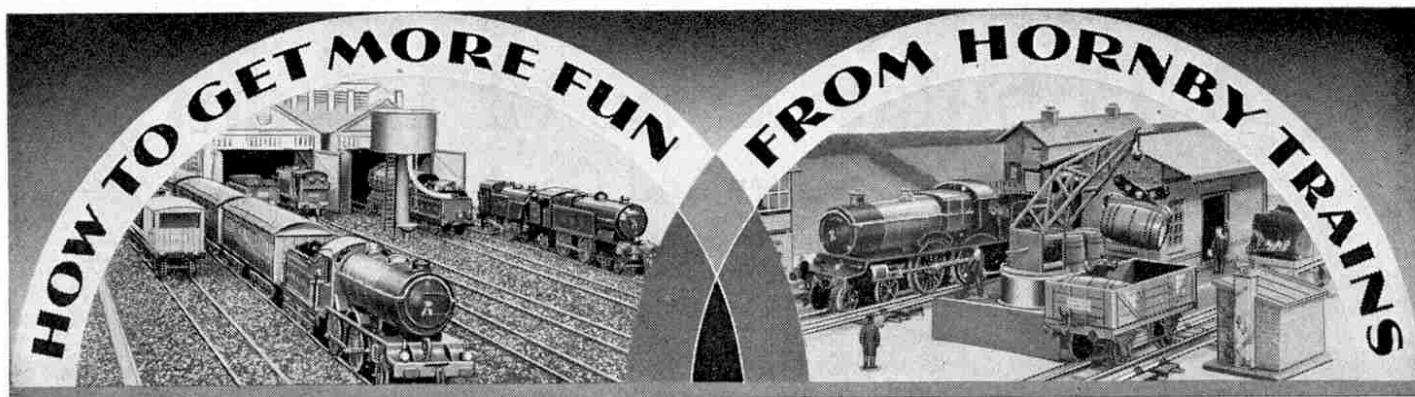
the head of a train of Hornby No. 2 Special Pullmans in both the illustrations on this page. Goods trains are worked by a Hornby S.R. No. 1 Tank Engine and a L.N.E.R. No. 2 Special Tank Engine, and in the lower illustration the second of these locomotives can be seen standing outside the locomotive sheds.

The trains are operated to a timetable, which is so arranged that a period is allowed between each passenger train for the operation of goods trains. The important expresses between "Central" and "Exeter" make several circuits of the track before completing their journeys. Local trains leave "Central" and travel to "Exeter" by making a number of circuits, with stops at intermediate stations, each halt of course being made actually at the wayside station. Local passenger services usually are made up of four-wheeled No. 1 Passenger Coaches hauled by a No. 1 Tank Locomotive, and two "locals," or stopping trains, and an express are often operated at the same time.



A busy scene showing part of the goods sidings and the Hornby No. 1 Engine Shed. A Pullman express is passing on the main line in the background.

Goods trains are prepared in sidings adjoining "Central" station, the marshalling work being carried out by the Hornby No. 2 Special Tank Locomotive that is used for working the goods trains. These trains often consist of a dozen or more wagons and a brake van. A considerable amount of coal is carried in the open wagons, and the transport of loads representing heavy machinery and "castings" is a feature of the line. Loads of this kind are carried on Flat Trucks or Trolley Wagons, according to their weight. The "machinery" loads actually consist of old car parts, which are carefully chosen to be as realistic as possible in appearance.



SUMMER SERVICES ON HORNBY RAILWAYS

EACH year in the summer months changes are made in the railway services in order to deal with the increased amount of traffic due to holidays. To the Hornby railway owner who follows closely the operations of real practice these present splendid opportunities of introducing novelties into his train service, and this article deals with the interesting and topical subject of "summer services" on Hornby railways.

On real railways regular trains are speeded up and numerous expresses are introduced to convey holiday-makers to seaside and inland resorts; in addition many excursions and special trains have to be fitted into services that already are complex. These changes present difficult problems to the railwayman, but the Hornby railway enthusiast is more fortunate, for he can alter his train services as he pleases and if the services are upset to a certain extent owing to traffic pressure, he will receive no complaints from his passengers. Dinky Toys people are very patient!

Long distance main line trains first call for attention. There are few Hornby L.M.S. layouts on which a miniature "Royal Scot" express does not run. This year the fastest-ever "Royal Scot" schedule gives a special interest to the train, and its working in miniature involves a series of interesting operations. The acceleration of the real train can scarcely be paralleled in miniature, but its conveyance of traffic from Euston for two separate destinations, Glasgow and Edinburgh, can be reproduced. In the working of this train the L.M.S. "Princess" 4-6-2s have made a special name for themselves, and the first choice in miniature of course will be the splendid Hornby "Princess Elizabeth" Locomotive. As the run from Euston to Carlisle is made in real practice without a stop, this working in miniature gives the Hornby Locomotive a fine chance to display its powers of sustained speed.

For the make-up of the trains the Hornby No. 2 Corridor Coaches are exactly what is required, for they are accurate reproductions of the latest L.M.S. steel-

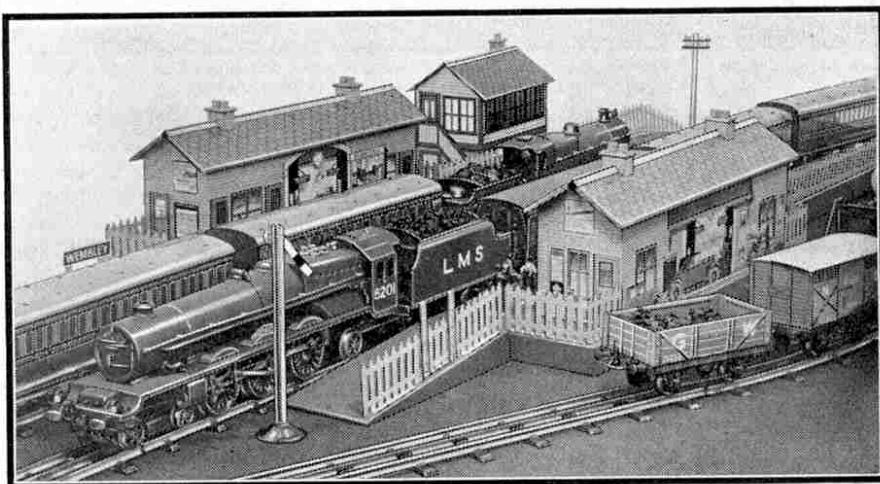
panelled stock. The number of coaches used will depend on the size of the layout and the resources of the individual model railway owner. A reasonable arrangement would be for the main or "Glasgow" portion of the train to consist of two L.M.S. No. 2 Brake Composites with a corresponding No. 2 First-Third between them; the "Edinburgh" section behind this could be formed of two further No. 2 Brake Composites. Then each part of the miniature "Royal Scot" is a complete unit that can be run correctly as a separate train after reaching the division point representing Symington, the halt where the real train is divided.

The Glasgow portion of "The Royal Scot" goes forward behind the 4-6-2 that works the train from Euston. The first part of the miniature train therefore must be separated after the corridor connection between the two sections has been removed, and standard end plates have been fitted to the coaches that become the rear of the "Glasgow" train and the front of the

"Edinburgh" train respectively. What is left of the train then goes on, and a suitable engine to haul the second portion to Edinburgh will be one of the popular Hornby E220 or No. 2 Special L.M.S. Standard Compounds. In actual practice there are many locomotives of this class at work north of the Border and they frequently appear on the Edinburgh portion of "The Royal Scot."

The operation of the various summer season trains provides points of interest for miniature working. For instance, on the L.N.E.R. there is the popular "Scarborough Flyer," which lives up to its title in bringing the famous Yorkshire coast resort within a four-hour journey from King's Cross. It is also one of the famous trains of the Hornby Series, for the E220 and No. 2 Special Train Sets bear this title. Those who operate "The Scarborough Flyer" on their Hornby layouts should not neglect to provide the coaches with the appropriate roof boards, for these are available in the series of Train Nameboards in the Hornby range.

An attractive feature of L.N.E.R. practice that can



An interesting station scene on a miniature L.M.S. layout. A long-distance express hauled by a Hornby "Princess Elizabeth" is running through while a stopping train is drawing up at the platform.

readily be copied in miniature is the use of a headboard bearing the name of the train on the front of the engine. These boards are painted white with black lettering, so that it is not difficult to make a miniature board from a piece of white card. The boards follow the curve of the boiler and are usually carried on the upper lamp bracket. An interesting photograph showing a miniature board of this kind in use appeared on page 348 of last month's "M.M."

During the summer there is a great deal of through working between the system of one company and another. Single coaches, complete trains and even locomotives are often to be found well away from their owning systems. Whole trains of one company's stock may be "borrowed" for a short period by another system that has some particular pressure of traffic to deal with. Through running now takes place between different sections of the same group, and also between the groups themselves, to a greater extent than ever before, particularly where trips are being run to some seaside or inland resort, possibly in connection with some special event.

Great fun is to be had in miniature if similar schemes are followed on a Hornby Railway. This is easily arranged where two or more H.R.C. members operate their engines and stock together on a layout, for locomotives and vehicles of different companies are then invariably represented. It is possible to perform such working also on the layouts of those who do not follow any one company's practice, but prefer to use the engines and stock of several on a layout serving quite an imaginary stretch of country. A good example of a system of this kind was described on page 349 of the "M.M." last month.

Many opportunities for the decoration of the engine front are afforded by the reproduction in miniature of the excursions and other special trains that are such a feature of summer traffic. A favourite form of decoration is a circular board fitting on the front of the smoke-box door giving details of the particular trip. Those to whom such features appeal will find no difficulty in making up one or two boards of this kind for their layouts. Engines of special trains often carry what are known as reporting

numbers, so that the staff at different points can readily identify them in the press of other traffic. Real or imaginary numbers can be made use of for this purpose in miniature. These numbers are usually displayed on a small oblong board attached to the engine smoke-box front.

The summer season is essentially the time for organised

outings and similar excursions, and in many instances special trains are chartered for the conveyance of parties. A development of modern times has been the complete tour or "land cruise," made by train, the journey occupying perhaps several days.

The trains used are of special

formation, according to requirements. In miniature good use can be made of Hornby No. 2 Saloon Coaches, for they are of the type that is popular in actual practice for work of this kind.

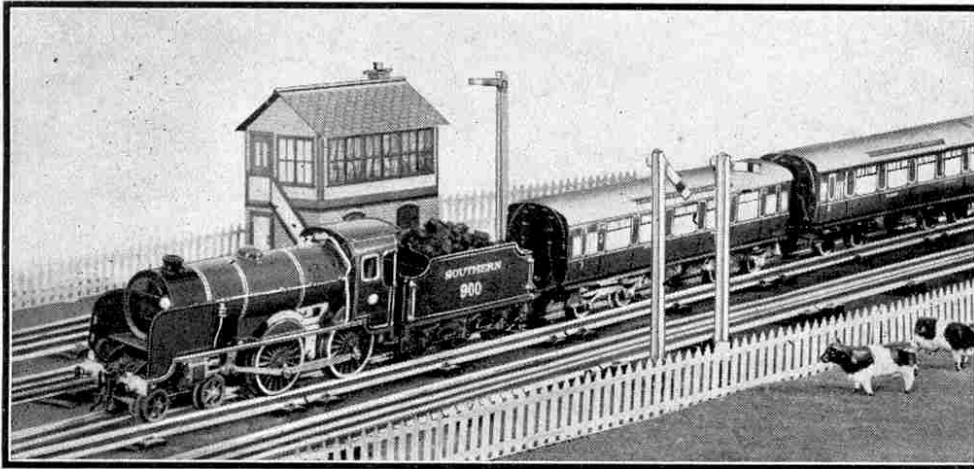
There is a great demand for Pullman service during the summer season. Good use therefore can be made of Hornby Pullmans, which are typical of the luxurious stock operated on the L.N.E.R. and S.R. by the Pullman Car Co. Ltd. In addition to regular all-Pullman services, such as the "Queen of Scots" on the L.N.E.R. and "The Bournemouth Belle" on the S.R., there are such special

workings as the "Eastern Belle" on the L.N.E.R. This provides an all-Pullman service between Liverpool Street, the London terminus of the Eastern Section, and different East Coast resorts, the destination being varied from day to day.

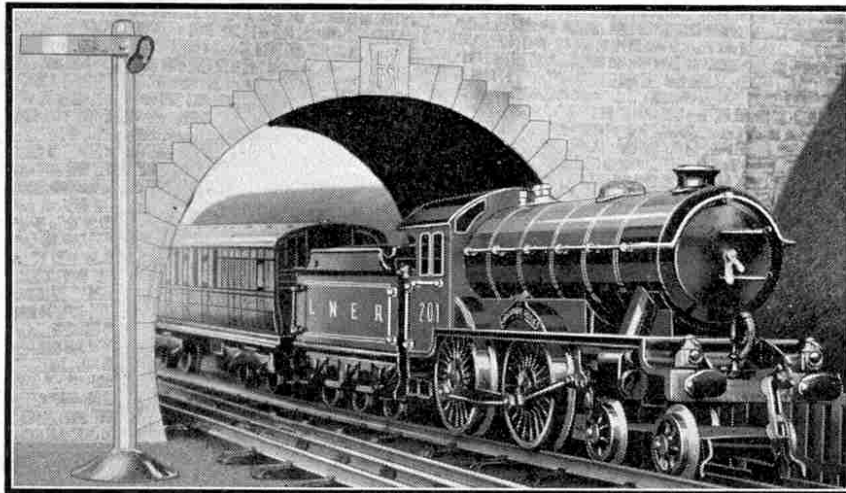
During summer there are lively "rushes" from the cities to seaside resorts, especially at weekends. For instance, intensive services to various re-

sorts are maintained by the S.R., and the G.W.R. put into force special arrangements for dealing with their Cornish and Welsh traffic. Miniature "Kent Coast" expresses and other trains are readily composed of Hornby No. 2 Corridor Coaches, possibly with a Pullman added; and with an E420 and No. 4C "Eton" Locomotive at its head such an assembly has a very good appearance.

Such famous G.W.R. expresses as the "Cornish Riviera Limited" can be assembled with Hornby No. 2 Corridor stock and can be hauled by a No. E320 or No. 3C Locomotive or an E220 or No. 2 Special "County of Bedford."



A Hornby S.R. express with the E420 Locomotive "Eton" at its head. The train consists of S.R. No. 2 Corridor Open Third Coaches that are specially suited to excursion work, as suggested in this article.



A Hornby "Hunt" in full cry! L.N.E.R. No. 201 "The Bramham Moor" at the head of an express dashing under a bridge constructed of cardboard and finished to represent brickwork.



Branch News

QUEEN ELIZABETH'S GRAMMAR SCHOOL.—A new Branch room has been secured, and a track designed by E. How has been laid down. After the hard work of preparing and fitting the room, normal activities have been resumed with renewed zest, and attendances have been excellent. A unique lighting system suggested by a member is to be incorporated in the layout. Secretary: R. S. Partington, Queen Elizabeth's Grammar School, Wimborne.

KEIGHLEY AND DISTRICT RAILWAY CLUB.—Two meetings are held each week. Timetable working was recently tried out for the first time, and proved so popular that it has been adopted for all track meetings. Electric and clockwork layouts are operated, and passenger and goods services are maintained. A station and goods depot have been built. Secretary: N. Birtwhistle, 9, Bronte Street, Keighley.

HORNSEA.—Regular track meetings have been held, and a miniature brickyard, stocked with Hornby Bricks, has been added to the layout. Special "brick" trains are run in connection with this. The "Flying Scotsman" has been off duty for repairs, its place being taken temporarily by two Hornby No. 2 Special Tank Engines. At one meeting a dock was laid out and boat trains run for both passengers and goods. Secretary: P. Richardson, "Summerleigh," Esplanade North, Hornsea.

NORTHAMPTON.—Several timetables have been compiled and allotted numbers, and one of them is run through at each track meeting. At one meeting the working of a "Surprise Timetable" exercised the skill and knowledge of members, and proved very popular. Shunting Competitions are held regularly, the winners holding a special Challenge Cup. The Third Anniversary of the formation of the Branch was celebrated by a special meeting, at which the finals of the Darts and Rings Knockout Contests were held. A Darts Match has been played against the Northants Model Aero Club. A Cinematograph Show included films on "Engine on the Shed" and "Passenger Trains of the L.M.S.," both kindly loaned by the L.M.S. Railway Company. Efforts are being made to obtain a larger clubroom. Secretary: P. C. Collier, 33,

Sandringham Road, Northampton.

ISLINGTON.—Hornby Steel Track and Points have been purchased, and track operations have been carried out on a layout incorporating it. A shunting problem exercised the ingenuity of members to the utmost. A number of interesting talks have been given, the subjects including "The Centralised Train Control on the Metropolitan," "How a Locomotive is Supplied with Steam" and "Transport Methods of the Future." Secretary: J. H. Cronin, 1, Aubert Park, Highbury, London N.5.

LOSTOCK GRALAM.—Regular train running has been carried out on the Branch

CROSBY.—Members of this newly-incorporated Branch have elected officials, and a programme is being drawn up. Duties in connection with train operations are interchanged to allow members to gain all-round efficiency. Secretary: D. Cail, 52, Eske Road, Waterloo, Liverpool 22.

HOUNSLOW.—The first meetings of this recently-formed Branch augur well for its future. A track has been laid down, and interesting trains run representing L.M.S. and S.R. services. Debates and Talks have been arranged and a visit is to be paid to the Feltham Engine Sheds. Friendly contests of various kinds are being arranged with the Isleworth Branch. Secretary: D. Manser, 24, Elmer Gardens, Isleworth.

Branches in Course of Formation

The following new Branches of the Hornby Railway Company are at present in process of formation, and any boys who are interested and desirous of linking up with this organisation should communicate with the promoters, whose names and addresses are given below:

BEXHILL-ON-SEA.—D. Ross-Slater, Collington Rise School, Bexhill-on-Sea, Sussex.

HIGH WYCOMBE.—H. D. Dymond, School House, King Alfred's School, Wantage.

KING'S LYNN.—D. L. Martin, 298, Wootton Road, King's Lynn.

LONDON.—L. Hurworth, 28, Manor Drive, Mill Hill, N.W.7.

PENKRIDGE.—T. Birks, Crown Bridge, Penkridge, Staffs.

SCUNTHORPE.—Mr. G. L. Rickatson, 15, Avenue Vivian, Scunthorpe.

WEALDSTONE.—W. Linton, 11, Wickham Road, Wealdstone, Middlesex.

Branches Recently Incorporated

347. **BIRMINGHAM.**—Mr. L. A. Strudwick, 4, Wentworth Gate, Harborne, Birmingham.

348. **LIVERPOOL.**—Mr. E. Cail, 6, Beach Bank, Waterloo, Liverpool 22.

349. **BURY ST. EDMUNDS.**—Mr. J. Forster, Norman Tower House, Bury St. Edmunds.

350. **NEW BARKING.**—Mr. G. B. Weightman, 47, Sherwood Gardens, New Barking, Essex.

351. **ISLEWORTH.**—Mr. Barnett, 8, Gunnersbury Lane, Acton, London W.3.



Members of the Crypt School (Gloucester) H.R.C. Branch, No. 342, with Mr. A. J. Healey, Chairman. K. T. Rogers, secretary, is on the left of Mr. Healey. This Branch was incorporated in March of this year, and already has a large stock of Hornby equipment, with which extensive train running is carried out on a clockwork layout. An electric system also is being built up. Railway visits and other outdoor activities are carefully planned to provide variety.

track. A Lecture has been given on "Railways" at which intriguing films showing the L.M.S. locomotive "Coronation" and the train "The Coronation Scot" were shown. "The History of the Telephone" was the subject of another Lecture, the explanation of the automatic telephone proving particularly fascinating. Two members who have visited the Meccano Factory at Liverpool gave an account of this experience. Secretary: A. Milligan, Wincham Hall, Northwich.

CRYPT SCHOOL.—Members have attained greatly-increased efficiency in train operation, and good timetable working is practised. The Branch has an excellent equipment of rolling stock and rails, in addition to a substantial locomotive stud. Work on an electric layout is progressing, and it is hoped shortly to obtain a Hornby "Princess Elizabeth" to operate on it. Outdoor games have been arranged for the summer session, and it is planned to visit points of railway interest. Secretary: K. T. Rogers, 9, Cheltenham Road, Gloucester.