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# The Rule of the Road

by "ROVER"

**B**EFORE taking charge of a ship, every officer must thoroughly understand the "rule of the road" at sea, and he must know exactly what to do on meeting another vessel. Altogether there are 31 rules, all of which must be learnt by heart by ships' officers. Although cyclists have no such formidable task before them, there are several fixed rules that every rider should know. His own safety, and that of others, depend upon his observance of these rules, and a sound knowledge of the correct thing to do in an emergency may often turn a threatened disaster into only an incident.

### Passing a Tram-car

The first and most important rule for all traffic is to keep on the near or left-hand side of the road. The rider must keep to the left also when passing vehicles travelling in the opposite direction to him, but traffic must always be overtaken on the right, or off side. The exception to this last rule, however, is a tramcar, and great care is necessary in overtaking these vehicles. Tram-cars should always be passed on the near side owing to the fact that passengers boarding or alighting must cross the road. By passing on the near side the rider has all the passengers in view and can act accordingly, whereas, had he taken the off side of the car, there would have been the risk of collision with another vehicle or a hidden pedestrian.

### Signal Your Intentions

Another important detail is the signalling of your intentions to those behind you. When turning a corner you should always remember to extend your right or your left hand, according to which way you intend to turn. This action gives following cyclists or car drivers a warning of your intention and they are accordingly enabled to slow down or pull out to pass you.

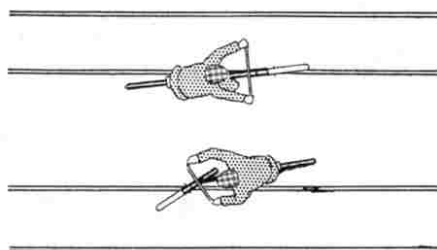
Cyclists should remember that a car driver always extends his right hand,

no matter to which side he intends turning, because the extension of his left hand could not be seen.

On seeing a driver's outstretched right hand cyclists should not attempt to pass him until they are quite sure which way he is turning.

Left-hand corners should always be taken at a very moderate speed, keeping fairly close to the kerb. Pedestrians often make the

### CROSSING TRAM-LINES



Always cross tram-lines at as wide an angle as possible.  
Incorrect (top) and correct methods (bottom).

mistake of stepping into the road with their backs to oncoming traffic, and so you should always ring your bell at a corner where people are about.

In turning to the right you should take as wide a sweep as possible, to clear all traffic coming in the opposite direction. Vehicles should never be overtaken at cross-roads or where a main road is cut by a side road. Whenever a constable is regulating the traffic, the rider is guided entirely by his signals.

### The "Right of Way."

There is also a rule that all traffic emerging from a side road on to a highway must give place to the traffic on the latter—in other words, vehicles on a main road have the "right of way" over those on side or branch roads. Nor should a cyclist ever shoot across a bisecting road, as there is the possibility that someone else may be doing the same thing at the same time, and meetings in such circumstances are seldom pleasant! Dis-mounting in the middle of the road should always be avoided, as it is one of the best-known means of inviting trouble. Even though absence of noise seems to indicate that no motor or horse-vehicle is following, it is quite possible that another cyclist is coming up behind, and a sharp or sudden turn may very easily result in an accident.

### Riding in Company

Cyclists out for a run with their club, or cycling with friends, should never ride more than two abreast, and they should

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FITTED TO YOUR BICYCLE  
TELLS YOU:—

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Beware of German Imitations.

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(Continued on page 235)

## Stamps for Sale

(For Advertisement Rates see page 236)

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Germany, 60, 80, 100, 120, and 5m., Workmen.

Germany, 150, 160, 10m., and 25m., Harvesters.

Germany, 10, 40p., 5m., 10m., and 25m., Airpost.

Germany, 20, 40p., 1, 1 1/2, 2, 2, and 5m., Dienstmarke.

Germany, 100m. on 5m. Rhein-Ruhr.

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Approval selections of genuine stamps, from 1d. each. Write me for those out-of-the-way varieties, so difficult to get elsewhere, stating your requirements. Lists free. Add postage.

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SEND POSTCARD ONLY.

25 diff. Hungary, many fine pictorials.  
25 " Germany, a collection itself.  
13 " Ukraine, all pictorials.  
15 " Austria, every one unused.  
6 " Poland and Silesia.

We leave you to judge the value of this stupendous offer.

R. WILKINSON, Provincial Bldgs., Colwyn Bay.

## Small Advertisements

(See also page 236)

**SEND 10/-** for Castings of 1/2 Horse-power Petrol Motor. Cylinder Bored Free.—Littleover Motors, Derby. List 3d.

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**CINEMA FILMS.** 100 ft. 1/- Post Paid.—Phillips, 64, Ewart Street, Brighton.

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**BELL SETS,** complete, can be fixed up 5/6; Lighting Sets, 2/6; Luminous Paint, 2/9; Water Motors, 5/9; Electric Revolvers, only 7/6; but these are only a few of the bargains on our List, which is free. Send at once.—A. W. North, 47, Parchment Street, Winchester.

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## PAIR METAL STAMP TWEEZERS and THE "EXHIBITION PACKET" FREE!

This splendid offer includes all the following good stamps:—Travancore, Union of Africa, Hyderabad (Deccan), Mexico, obsolete Ceylon, Gwalior on India, Croatia (Jugo-Slavia), Mozambique, unused Bulgaria, Brazil, Philippine Islands, U.S.A. (commemorative), Fine Set 4 Belgium, Laibach; also, on every letter, one of the unique Exhibition stamps. Finally, with every parcel we include an invaluable pair of stamp tweezers, specially made for us, with rounded ends for use by stamp collectors. The whole lot is absolutely free to all genuine philatelists requesting our famous approvals.

LISBURN & TOWNSEND, 201a, LONDON ROAD, LIVERPOOL.

(Collections purchased).



## HOW STAMPS ARE PRINTED

ONE of the most interesting subjects that invite the attention of stamp-collectors is the printing of postage stamps. There are five chief methods, namely, recess-plate or line-engraving, typography or surface-printing, lithography, embossing and photogravure. In times of emergency, however, other methods have been resorted to, including typewriting (illustrated by stamps of Uganda, typewritten by the Rev. E. Miller, a missionary at Mengo, from March 1895 to June 1896), and photography (as when Dr. D. Taylor issued stamps during the siege of Mafeking, from 24th March to 17th May, 1900).

### Recess-Printing

From 1840 until 1880 most of the stamps of Great Britain were recess-printed, and every collector has a copy of the 1d. red that he can examine and compare with stamps printed by other methods. The first step towards recess-printing is to obtain a piece of softened steel about three inches square by half an inch thick. Upon this the design of the stamp is engraved, and those lines that are to be coloured are cut away. This engraved steel, called the "die," is now hardened. The words "hard" and "soft" with reference to iron and steel must, of course, be taken in a relative sense; to our touch, for instance, the softest of iron and the hardest of steel feel equally "hard."

The die is now impressed by hydraulic machinery a number of times on the rim of a wheel of soft steel, which rim is rather wider than each stamp. These designs are in perfect alignment and are reversed with reference to the original die, so that what were sunken lines before are now raised. The designs are now hardened, and a sheet of steel to form the printing plate is prepared and softened in readiness to receive the impressions obtained by rolling the wheel over the plate several times under great pressure. In this manner any number of exact copies of the original die may be obtained on the printing plate, the lines of the design again being recessed or sunk. This plate is now hardened and the printing proceeded with.

All recess-printing was at one time done by hand, but now machines have been invented that perform the whole process mechanically. Ink is rubbed over the plate and then wiped off, leaving the ink in the sunk lines only. A sheet of paper, previously dampened, is placed on the plate, and the paper is pressed into the lines, where it takes up the ink. These sheets bearing the impression of the stamp are then dried in a hot room, pressed flat, gummed, perforated and checked, ready to be sent out to post offices.

Recess-printing may be distinguished from surface printing by its sharper, finer lines, clearer detail, and by the fact that the inked lines often appear to be raised somewhat above the level of the plain paper. The current, un-surcharged, pictorial issues of Iraq (Mesopotamia) usually shows this last point very clearly.

### Typography or Surface-Printing

Surface-printing has become the most popular form of stamp printing owing to the rapidity with which the impressions can be run off. The original die is engraved with the printing lines raised instead of sunk, and the design from this is impressed on a number of blocks of lead, gutta-percha, wax, or other similar substance. Several of these blocks are clamped together and a layer of copper is deposited upon them by electro-chemical action. When this coating is sufficiently thick the blocks are removed, and the copper, after being reinforced by a backing of type-metal, is mounted on an iron plate. Next, the printing surface is hardened by immersion in a second deposit bath, where it receives a thin coating of nickel or steel.

In printing, an ink-charged roller passes over the plate, a sheet of paper, dry and already gummed, is placed on top and pressed, and the sheet of stamps is removed, only requiring to be perforated to be completed. The current stamps of Great Britain up to the 1/- value are typographed, the high values and the Exhibition stamps being recess-printed. Typography, surface-printing and electro-typing are three terms for the same method of printing.

### Rotary Printing

A modern branch of surface-printing consists of rotary stamp printing. The machines, mostly used in the United States, print from round cylinders on a continuous roll of paper, and the same machine dries, gums and perforates vertically the roll of stamps.

### Lithography

Lithography, or printing from stone, is a rough-and-ready method of stamp-printing, now almost obsolete. The design is transferred to a special stone in one of a variety of ways, and printed from while damp. A greasy ink is used which adheres to the lines of the design only, being repelled by the water that covers the blank parts of the stone. The stones soon wear out, and thus uniformity, the essential factor in the prevention of forged stamps, is not obtainable. Lithographed stamps are usually in pale colours and have a flat, dull appearance.

### Embossing

The procedure for embossing is similar to that of typography. The coloured portions are left raised and the embossed parts cut in deeply. The plate is made from the original die in the same manner as for typography, and a "counterpart" or "force-plate" is made of leather or gutta-percha. This is the reverse of the plate, and upon the paper being placed between and the two pressed together, the paper is forced into the deeply-sunk portions of the design and thus becomes embossed.

The force-plate is occasionally made of copper, but exceptionally accurate machines are required to ensure that the two metal plates do not damage each other in coming

repeatedly together. The paper usually is gummed first and is embossed sometimes dry and sometimes wet. Embossed stamps are produced singly, or only in very small sheets, owing to the high power required.

### Photogravure

Photogravure is the latest triumph of the printer's art, and we find it used for printing the stamps of the current issue of Egypt (King Fuad). The process consists briefly of placing on copper a layer of gelatine obtained with the aid of photography and showing the designs in relief. Ferric chloride is then allowed to act upon the gelatine and the copper is eaten away in proportion to the thickness of the gelatine.

Photogravure is a costly and slow method of printing, and until these two drawbacks are removed there is little hope of its being widely used for stamp-printing. The results, however, are greatly superior to those obtained by any other means, and doubtless photogravure is the process of the future, both for stamps and illustrations in books and magazines.

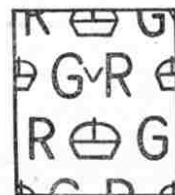
With this article we conclude the series of introductory articles on stamp collecting, in which we have described the various technicalities of our hobby. Next month we shall commence a Stamp Tour round the World, in which we hope for the company of every Meccano boy—his stamp album and catalogue being the only tickets and passports required! We shall visit those places pictured on stamps and, in addition to describing the views themselves, we shall describe the countries through which we have to travel to reach them, imparting much useful stamp information on the way. We shall pay particular attention to the great engineering achievements to be seen on our tour.

## NEW STAMPS FOR GREAT BRITAIN

For the next ten years Great Britain's postage stamps will be printed by Messrs. Waterlow and Sons Ltd., at Watford, London, instead of by Messrs. Harrison and Sons Ltd., who, until now, have printed all the low-value Georgian stamps, with the exception of the 6d. value. This value has been printed at Somerset House, Strand, by the Inland Revenue, where, we understand, it will continue to be printed.

Messrs. Waterlow and Sons are the printers of the £1 and 10/- Treasury Notes, and in addition to the postage stamps, they have contracted to supply the Health, Unemployment and Entertainment Tax Stamps—a total of seven thousand million stamps every year!

The lowest three values (½d., 1d., and 1½d.) of the new postage stamps have already appeared, being on sale on 1st March last. The most noticeable change, apart from the differences in shades, is the new watermark. The initials, "G v R." of the Royal Cipher in the watermark now appear in block type instead of in script characters as previously. If our illustration of the new watermark given here be compared with the old one (Fig. 3 on page 51 of the



(Continued on page 229)





### The Secretary's Notes

Next month will bring us once more to the opening of the First Winter Session, and those members whose clubs have been closed during the summer are eagerly anticipating the joys of club-night, and meeting their old friends again. The next few weeks will be busy ones for Club Leaders and Secretaries, for behind those merry celebrations that are such happy features of a first club-night there has been a great deal of work and organisation necessary. These preparations vary according to the requirements of each particular club, but in most cases it is advisable that a postcard should be sent to every club member some time this month reminding him of the opening of the first winter session, and giving the time and date of the first meeting. Then if the club-room has not already been secured for the session, a suitable room must be engaged for certain nights throughout the winter months and all arrangements for heating and lighting should be settled.

### The Coming Session

Full particulars of lectures, plays, and special awards available will be sent to Club Leaders before the opening of the session, to enable them to take full advantage of the assistance from Headquarters. I trust that the coming session will prove even more successful than the record of last year. I would again say that I am always ready to assist unaffiliated and Leaderless clubs in arranging their club syllabus, and to help any member requiring information on any branch of the Guild activities.

### A Record Session

As club funds have a disconcerting habit of becoming somewhat low about this time of the year, owing to the expenses of sports gear, etc., having to be met, a means of raising money is often an urgent necessity. An indoor exhibition is not likely to be popular at this season of the year, but instead, a sound plan is to arrange for some outdoor sports, with, perhaps, a Drill Display by the club members. Most schools teach Swedish drill, and it should not prove difficult to find a local gentleman to instruct and drill the club occasionally, if the Club Leader himself is unable to do so. Club-swinging, fencing and boxing may also be introduced with advantage, and all add interest to the event. The club cricket-field, or some fortunate

### Raising Club Funds

member's garden, could be used for the display, and with effective notices and good local publicity, there should be no difficulty in obtaining a satisfactory attendance of parents and friends. Entrance should be by a programme, which may be printed or duplicated according to the funds available for expenses, and a small inclusive charge made. If the entertainment has been capably organised the proceeds should relieve the club from financial worries for the remainder of the session.

## Meccano and King Carnival



Enthusiastic members of the Blackpool Meccano Club took full advantage of the town's Annual Carnival to spread the news of the Guild and to gain new members for their club. A cart was cleverly decorated to represent Meccano strips, and attended by club members in fancy dress, was entered in the Carnival procession. The chief attractions on the cart were a Meccano Windmill (over 100 nuts and bolts were used in making the sails alone), a Roundabout, Tramcar, Engine, and Steam-ship. One of the members wore pieces of wood representing Meccano strips and plates, while another carried a large triangular Guild badge which attracted considerable attention.

There were some 150,000 spectators along the route of the procession, and they accorded a splendid reception to the Meccano entry. "Good old Meccano!" "Three cheers for Meccano!" and "Have you won a prize?" were some of the expressions of encouragement that greeted the club members along the full three miles of the procession's route.

Although the entry did not receive a prize, the members received numerous congratulations on their original and clever turnout. Newspaper reporters in particular were very interested, and asked numerous questions about the club, while a large photograph of the exhibit was published in the local paper the next day.

Mr. Slingsby, the able Leader of the Blackpool Meccano Club, was responsible for the organisation and arrangement of the club's entry. He is seen in the accompanying illustration, surrounded by

a group of happy members. Mr. Slingsby considers that the turnout will prove of considerable value to the club, and he has already received several new applications for membership.



**Parkstone Congregational M.C.**—Owing to the success of a recent club concert, it has now been possible to purchase a new cricket set. Meetings are held daily at 5.30 p.m., and after an hour in the club-room, cricket is played for the remainder of the evening in fine weather. Club roll: 22. **Secretary:** Master Stuart Bridle, "Newton Glen," Sandbanks Road, Parkstone, Dorset.

**Claygate Juvenile Club (Meccano Section).**—Continues to be one of the most energetic and active clubs in the country. A party of 100 members was recently taken to Wembley. A Carnival and Sports Meeting was thoroughly enjoyed by all club members a few weeks ago. Meccano Section Club roll: 32 girls, 30 boys. **Leader:** Mr. J. W. Haynes, Bee Hive Hut, The Causeway, Claygate, Surrey.

**Holy Trinity (Blackburn) M.C.**—The last session ended with a Concert and Exhibition of Models, which attracted considerable interest. A country ramble has also been enjoyed, and a fund is now being arranged with a view to obtaining the necessary expenses for a club picnic. Club roll: 18. **Secretary:** Master H. Jepson, 11, Pine Street, Blackburn.

**New Malden M.C.**—Some weeks ago the members visited the Exhibition at Wembley and spent a very enjoyable day. The club is now firmly established and is well known in New Malden. Several new members will be enrolled at the beginning of the Winter Session. Club roll: 50. **Secretary:** Master C. Alcorn, Springfield, 7, Poplar Grove, New Malden.

**Small Heath M.C.**—Outdoor games and sports meetings are being well attended. The club is fortunate in having the use of two large play-grounds and a schoolroom, and new members are always welcome. Club roll: 30. **Secretary:** Master W. Edge, 131, Whitehall Road, Small Heath, Birmingham.

**1st Herne Bay M.C.**—Meetings have been held at regular intervals for outdoor games and discussions. The Club Magazine, "Strips and Cranks," edited and written by the Club Secretary, is a well-written Club organ. The Secretary was recently awarded a Special Merit Medallion for good work. Club roll: 11. **Secretary:** Master C. W. Russell, 4, Clifton Villas, South Road, Herne Bay.

**Boston Model-Making M.C.**—Has recently come under the guidance of a new Club Leader, Mr. Sharman, and is making very satisfactory progress. Several outings have been arranged for the summer months, and the club roll is now 18. **Secretary:** Master R. Robinson, 30, Woodville Road, Boston, Lincs.

**Boston Model-Making M.C.**—Has recently been successful in obtaining a new and considerably larger club-room. More members can now be enrolled and a record Winter Session is anticipated. A Cricket Club has been formed by the Leader, and the team is shaping very well. Club roll: 30. *Secretary*: Master R. Robinson, 30, Woodville Road, Boston.

**St. Mark's M.C.**—Recently moved into their new club-room, where several visitors have been entertained. Have formed a summer club called the "Albion Rambling Club," for which others, besides the members of the Meccano Club, are eligible. Fixtures for the season include visits to the South Metropolitan Gas Works, the Mint, the Tower of London, the B.B.C. Station, G.P.O. Telegraphy Department, and the County Hall, Westminster. The *Secretary* of the Rambling Club is Master T. Wase, of 25, Slaitwaite Road, Lewisham, S.E.13. The Meccano Club roll now stands at 14. *Secretary*: Master Laurence Jones, 39, Wellmeadow Road, Hither Green, Lewisham, London, S.E.13.

**New Malden M.C.**—Club members have proved very capable and enthusiastic lecturers, and some of the very varied subjects covered were:—Football and Baseball, Fishing, Tracking Submarines by the Hydrophone, Frogs, A Glass of Beer, Hornby Trains, Stars and Sticklebacks. At a recent exhibition of working models the First Prize was won by Master C. Adams with his model of a windmill. Following the exhibition, a lecture on Cranes and Giant Steam Shovels was given to a large audience. *Secretary*: Master E. Alcorn, 7, Poplar Grove, New Malden.

**Holy Trinity Meccano and Radio Clubs.**—The last report and balance sheet show that steady progress has been maintained. Merit Medallions were awarded to Masters P. Petri and H. V. Small for lectures and good work respectively. The great event of the past session was the affiliation of the Radio Section with the Radio Society of Great Britain. This is the first Meccano Radio Club to be affiliated with the Society, and though the Senior Section of the Radio Club was temporarily disbanded during the past session, it will be recommenced with the First Winter Session. At the present time, visits to works and outings are being enjoyed, while preparations are already being made for several important events due to take place in the coming session. Club roll: 21. *Secretary*: Master Stanley A. G. Bone, "The Rosary," Kents Hill Road, South Benfleet, Essex.

**St. Mark's M.C.**—The Rambling Club, which in summer takes the place of Meccano model-building, is enjoying a very successful season. The latest visit was to the Head Works of the South Metropolitan Gas Co., while outings to Peek Frean's Biscuit Factory, the Mint, the Tower of London and the B.B.C. Station are also being arranged. A Club Library, recently started, is being well patronised by members. Subscriptions to the Rambling Club have been abolished and members now pay their own fares, the club finding any necessary extras. Club roll: 15. *Secretary*: Master Laurence Jones, 39, Wellmeadow Road, Hither Green, Lewisham, S.E.13.

**West View M.C.**—Recently visited the Nottingham Fire Station, by kind permission of Lieut.-Colonel F. Brook, D.S.O. The members were shown over the station by the Chief Superintendent, and were greatly interested in the explanation of the working of the fire-engines, escapes and motors. A prize offered for the best answer to a question in connection with switches was won by Master Jack Davies. Club evenings have been devoted to fitting-up telephones, electric bells and electric lights, while cricket and other outdoor games are not neglected. Club roll: 30. *Leader*: Mr. M. W. R. Cousens, 494, Mansfield Road, Sherwood, Nottingham.

### Clubs Recently Affiliated

**Ilfracombe M.C.**—At an Exhibition held some few weeks ago by this club, sets of railway lines, complete with points, curves and bridges, a miniature liner, various Meccano models of Derricks and Cranes, in working order, together with Bridges, Aeroplanes and Motor-Cars were exhibited. The setting was covered with sand and moss, and gave a very realistic representation of a busy riverside scene. The sum of £1 1s. 0d. was collected and added to the club funds, and very favourable press notices were given to this recently-affiliated and progressive club. *Secretary*: Master W. Webber, 14, Springfield Road, Ilfracombe.

**Loanhead Boy Scouts M.C.**—Recently came under the guidance of Scoutmaster P. R. Sinclair, w.e.n affiliation with the Guild was granted. Meetings for model building are regularly held in the Scouts' Clubroom. A visit to the Mechanical Section of the Edinburgh Museum is being arranged shortly, and two successful rambles in some local woods have already been held. *Secretary*: Master B. Warnock, R. P. Manse, Loanhead, Edinburgh.

### Clubs not yet Affiliated

**Bearwood M.C.**—Has now been in existence for about four months and has a membership of 25. The club has a good library, and several enjoyable outings have already been arranged. The loan of the Club Leader's one-valve set is greatly appreciated by the members. As soon as a suitable club-room is obtained application for affiliation with the Guild will be made. *Secretary*: Master C. White, 72, Katherine Road, Bearwood, Birmingham.

# How to Run a Meccano Club

by the  
Guild Secretary

(Continued)

## Lectures by Local Gentlemen

A very important feature of club activities is a series of interesting lectures. Local gentlemen should be approached with a view to requesting them to speak to the club members on some interesting topic. Managers of the local Gas, Electricity, and Water Works; Railway officials; factory managers and engineers—all these gentlemen have a wonderful story to tell if only they can be persuaded to tell it, and it is up to Club Leaders and Secretaries to apply the necessary persuasion.

Of course, it is not essential that subjects for lectures should be confined to engineering, for much enjoyment may be obtained from hearing about many of the other interesting things in this wonderful world. A short talk, say half-an-hour, on any interesting subject cannot fail to be beneficial to all the club members, and it is certain to bring forward ideas that will be new to some of them and which, at some future day, may lead to one or more of the members taking up that particular branch of work as their life work.

As a general rule local gentlemen do not need much persuasion to give a brief lecture when they are assured that they will have a really interested audience. If difficulty is experienced in this direction, however, I shall be pleased to endeavour to make some arrangements with these gentlemen, if full particulars are sent to me.

## Club Leaders' Talks

Apart from outside lectures the Club Leader himself will be able to fill a vacant evening with a talk on some hobby or subject in which he is particularly interested. Current events at home or abroad, or some new and notable scientific achievement, also make interesting subjects for a chat. Apart from such a talk being useful as an expedient, it will have the effect of broadening the outlook of the members of the club, and incidentally of

strengthening the position and influence of the Club Leader.

## "Meccano Lectures" Available

It is admittedly difficult to fill a whole session of evenings in the manner already described, and for this reason I have prepared several short lectures on a variety of interesting subjects. These

"Meccano Lectures" are available to the Club Leaders or Secretaries of all affiliated clubs for reading on club nights. At present the following lectures are available:—"Lives of Inventors"; "The Story of our Ships"; and "The Men who Gave us Radio." Also, two short stories which appeared as serials in the *Meccano Magazine*:—"A Night at the Pool," a Red Indian tale, and "Bulmer's Father," a story of public school life. A play particularly suitable for club members is also available, entitled "Nonsense Nana," and it has been repeatedly performed with great success.

Other lectures will be added from time to time as occasion permits, so that in due course we shall have a wide selection of those subjects that are of the greatest interest to boys. In special cases I shall be pleased to prepare and forward notes for short lectures on any subject particularly desired by club members. In some instances also I am occasionally able to arrange to pay a personal visit to certain clubs, and

to give a lantern lecture, or a talk on some interesting topic.

## Papers by Members

In addition to all this, every effort should be made to encourage all club members to prepare short lectures or papers on subjects in which they are particularly interested, and it is an excellent plan for the club to offer prizes for the best individual efforts in this direction. The preparation and reading of papers of this kind is splendid training for boys, and it has become one of the permanent and most successful features of club life.

(To be continued)

## Meccano Club Presidents

### No. 1. THE MAYOR OF DURBAN



COUNCILLOR W. GILBERT

The Durban Meccano Club, the latest addition to our South African Clubs, has indeed been fortunate in securing the Mayor of the City to act as its President. Councillor W. Gilbert, who has twice held the mayoralty, is a very firm believer in the value of Meccano, and willingly gave his support to assist in the formation of a Meccano Club. Presiding at the first meeting he generously placed a room in the Town Hall at the disposal of the Club until a permanent headquarters should be found.

The splendid progress and the enthusiasm of members and committee enabled the Durban M.C. to be affiliated with the Guild in May of this year, only a few weeks after the preliminary meeting. The membership, which is steadily increasing, is already over 30, and under the valued patronage and guidance of its President and its Leader, the Durban M.C. should soon rank high in the Guild records.

# Results of the 1923-4 Championship Model Building Competition

This has been a most successful competition, and I want to commend all those who have entered on the general excellence of the models that have been submitted.

I warmly congratulate the Meccano Gold Medallist, the Cup holders and the Silver and Bronze Medallists in the various countries on their successes. I am sure that the handsome awards that are being despatched to them will serve as a pleasant reminder of a memorable contest.

I am arranging for a number of the prize-winning models to be illustrated in the *Meccano Magazine* from time to time as space permits. Whilst it will undoubtedly give pleasure to the winners to see their models illustrated and described, the models themselves will also provide happy hours of fun for the many, many thousands who daily follow the fortunes of Meccano. Every Meccano boy will certainly admire these models and wish to build them.

## GROUP DETAILS

- |  |                                     |
|--|-------------------------------------|
| 1 Great Britain.   | 4 *France, Belgium and Switzerland. |
| 2 Australasia, South Africa, Canada, India, and all Countries within the British Empire. | 5 *Scandinavia and Holland.         |
| 3 *United States and South America.  | 6 *Italy.                           |
|  | 7 *Spain and Portugal.              |

(\*Including Colonies.).

*Frank Hornby*

Managing Director,

MECCANO LIMITED.

## MECCANO GOLD MEDALLIST

Palmer, J. W., 20, All Saints' Green, Norwich. Meccano Tower, has been awarded the special Gold Medal for the best model submitted in the entire competition. He therefore holds the title of "Meccano Gold Medallist."

## SECTION "C": CHAMPIONSHIP CUPS

- Group 1.** Palmer, J. W., 20, All Saints' Green, Norwich. Meccano Tower.
- Group 2.** Whitney, E. H., Jr., "Holmes," c/o P. O. Maclear, Cape Province, S. Africa. Self-Feeding and Reversing Electric Lathe.
- Group 3.** Cecco, E. de, Rivadavia 5492, Buenos Aires, Argentina. Aerial Pullman.

- Group 4.** Soucin, B., 51, Rue Grande Tannerie, Troyes, Aube, France. Motor Plough.
- Group 5.** Vuurde, G. V., Malakkastraat 166, Den Haag, Holland. Switch Gear.
- Group 6.** Tremi, D., Corso Monte Grappa 32, Genova, Italy. Diesel Motor.
- Group 7.** Surroca, E., Fernando Puig 25 (torre), Barcelona (SG), Spain. Electric Motor Chassis.

## SECTION "B": CHAMPIONSHIP CUPS

- Group 1.** Shaw, J. A., 36, Randolph Street, Carlton Road, Nottingham. Twisting Machine.
- Group 2.** Brown, L. F., 202, Jarvie Street, Toronto, Canada. Cylinder Press.
- Group 3.** No Award.

- Group 4.** Richard, J., 9, Grand'Rue, Vandoeuvre, par Nancy, France. Funicular Railway and Lift.
- Group 5.** Boerma, A. P. A., Bilstraat 118, Utrecht, Holland. Clock.
- Group 6.** Vassallo, E., Viale Attilio Frosini 357, Pistoia, Firenze, Italy. Switchback.
- Group 7.** Agusti-Coranti N., Mallorca 313, Barcelona, Spain. Drawing Machine.

## SECTION "A": CHAMPIONSHIP CUPS

- Group 1.** Walker, H. O., Knott Hall, Hebden Bridge, Yorks. Horizontal Tandem Condensing Steam Engine with Boiler.
- Group 2.** Kitto, F. E. A., Mount Pleasant, Bransgore, near Christchurch, New Zealand. Engineering Workshop.
- Group 3.** No Award.

- Group 4.** Bruère, P. de la, 76, Rue de la Bastille, Nantes, France. Travelling Gantry.
- Group 5.** Paalman, W., Jacob Cramerstraat 44, Arnhem, Holland. Electric Tram.
- Group 6.** Rognato, C., Piazzetta Carbone 18a, Ferrara. Cutting Machine for Vermicelli or Spaghetti.
- Group 7.** Viñamata, L. A., Mallorca 308-2°, Barcelona, Spain. Electric Tram.

## SECTION "C": SILVER MEDALS

- Adam, P., 2 Rue Louis Blanc, Bellevue, S.-et-O., France. Percussion Sounding Machine.
- Aillaud, V., Agent Technique, Quartier Antelme, Six-Fours-la-Plage, Var, France. Electric Recording Chronograph.
- Appert, P., 4, Boulevard de Cimiez, Nice, France. Mechanical Wool Rake.
- Baché, L., 15, Avenue de la République, Colmar, France. Coal Loader.
- Barrett, W. G., "Guernsey," 6, Irwell Street, Observatory, Capetown, S. Africa. Coal Transporter.
- Bonfilhon, E., 18, Boulevard du 4 Septembre, La Seyne-sur-Mer, Var, France. Arc Lamp.
- Boudier, P., 5, Rue Jeanne d'Arc, Rouen, France. Fair Amusement.
- Brend, M., 83-5, Boulevard de Charonne, Paris XI. Funicular Railway.
- Busoni, E., Via del Castagno 3, Firenze 22, Italy. Typewriter.
- Chesters, H., 74, Ford Lane, Crewe. Boiler Lifting Crane.
- Ching, E. J., 153, White Hart Lane, Barnes, London, S.W.13. Concrete Surface Crusher.
- Corby, G., 99, Gatley Road, Cheadle, Ches. Variable Power Transmission.
- Corsi, M., Lungarno Vespucci 2, Firenze, Italy. Express Locomotive.
- Cosslett, V. E., 55, Dyer Street, Cirencester, Glos. Planimeter.
- Couderos, P., Cosne d'Allier, France. Radial Travelling Crane.
- Crankshaw, D., 5, Macleod Street, Nelson, Lancs. Station.
- Dawber, S., 40, Harrogate Street, Wigan. Air Boats.
- Degand, P., 61, Rue des Saints Pères, Paris 6. "Stock" Motor Plough.
- Domenech, E. P., Calle de Aribau 98, Barcelona, Spain. Locomotive and Wagon.
- Eccleston, E., 123, Parliament Street, Burnley, Lancs. Mortar Mill.
- Ferraro, G. O., Via Roma 58, Casale Monferrato, Alessandria, Italy. Double-Movement Revolving Swings.

- Fong, C. S., 18, Middle Road, Singapore, Straits Settlements. Lock and Railway Drawbridge.
- François, F., Perception, Viviers, Ardèche, France. Electric Crane.
- Gardini, A., Machiavelli 25 int.5, Roma, Italy. Ironclad.
- Garnier, A., Chez Mr. Sergeant, Bontecourt, par Blangy s/Bresle, Seine Infre., France. Shaping Machine.
- Glauser, H., Quai de la Thièle 27, Yverdon, Switzerland. Concrete Mixer.
- Goiffon, G., 61, Boulevard de la Madeleine, Marseille, France. Motor Loading Elevator.
- Hilsum, M., Godelinderweg, Hilversum, Holland. Rack Railway.
- Jacini, G., Via del Lauro 3, Milano 1, Italy. The Smiths.
- Janne, E., 17, Rue d'Algésiras, Brest, Finistère, France. "Massicot" Paper Cutting Machine.
- Jovellar, J. & J., Coso 176-3, Zaragoza, Spain. Motor Cycle and Sidecar.
- Kennelly, F. T., 10, Bennetts Castle Lane, Chadwell Heath, Essex. Concrete Mixer.
- Knowles, A. V., 20, Penrith Road, Basingstoke. Constantinesco Torque Converter.
- L'Estrange, G. B., The Rectory, Killvea, Co. Armagh. Floating Crane.
- Lake, R. A., Cranbrook, Albany Road, Harpfields, Stoke-on-Trent. Dragline Excavator.
- MacGowan, G., 25-6, Luker Road, Allahabad, U.P., India. Combined Letter Balance and Weather Indicator.
- Mackenzie, G., 9, Cowgatehead, Edinburgh. Triple Expansion Marine Engine.
- Manduca, J. de Conti, Eltham House, 54, Sda Ridolfo, Sliema, Malta. Ship Coaler.
- Mateos-Aguirre, O., Claudio Coello 109, Madrid, Spain. Bale Press.
- Muñoz, R., Calle General Lopez 60 (oeste), Santa Fe, Argentina. Flax-Cutting Machine.



## SECTION "C": SILVER MEDALS—(Continued)

Nigris, G., S. Vito al Ragliamento, Udine, Italy. Aerial Telfer Line.  
Ovale, P., Thos. Heftyest 31-111, Kristiania, Norway. Triple Action Crane.  
Pauwels, M., Rue de la Louche 9, Anvers, Belgium. Electric Crane.  
Pearce, C., 103, Lytton Avenue, Letchworth, Herts. 16th Century Sailing Vessel.  
Raynor, G. F., Cholesey, Berks. 4-4-4 Kitson Meyer Type Engine.  
Reynolds, H. V., 93, Duke Street, Georgetown, British Guiana. Dredge.  
Rousseau, R., 34 Rue Saint André, Le Mans, Sarthe, France. Tournament.  
Short, D., Box 137, Stanley, Ontario, Canada. Monorail and Tower.  
Sibley, J. E., 42, Russell Rise, Luton, Beds. Torsion Balance.  
Slade, H. R., 4, Weight Road, Redfield, Bristol. Electric Lighting Plant.  
Sluis, H. van der, 108, Stadhoudersplein 108, Den Haag, Holland. Electric Loco.  
Stewart, N., 12, Gundry Street, Newton, Auckland, New Zealand. Concrete Mixing Machine.

Traullé, P., 2, Rue Blieriot, Hénin-Liétard, Pas-de-Calais, France. Winding Gear with Cylindro-Conical Drum.  
Vulliemin, P., Rue des Pêcheurs, Yverdon, Switzerland. Apparatus for Refilling Retorts.  
Wattrelo, A., Place de l'Hôtel de Ville 12, La Ferté s/s Jouarre, P-et-M., France. "Minerva" Printing Press.  
Wells, J. P., 97, Belmore Road, Randwick, Sydney, Australia. Arch Type of Bridge.  
Westerveld, J. D., Elis. Wolfstr. 7, Amsterdam, Holland. Lighthouse.  
Wijffels, R., St. Kruis, Zeeland, Holland. Plank Saws.  
Woodman, H., 10, Spa Road, Melksham, Wilts. Big Wheel.

## SECTION "B": SILVER MEDALS

Anderson, A., 27, Mundella Terrace, Heaton, Newcastle-on-Tyne. Ice-Cutter.  
Arañedo-Rodríguez, J., Plaza de Abada 10-2-izqda, Madrid, Spain. Wheat Crusher.  
Beuret, M., 23, Rue Marceau, Dijon, Côte d'Or, France. Propeller-Driven Car.  
Boromee, R., 6, Rue de l'Industrie, Valence, Drôme, France. Caterpillar Motor with Machine Gun.  
Bouchenoir, J., 66, Avenue Marceau, Drancy, Seine, France. Cyclist.  
Burbano, J. M., Calle Alfonso 1-14-2-izqda, Zaragoza, Spain. Morse Telegraph Receiver.  
Clisby, H. W., Sea View Road, Grange, S. Australia. Motor Repair Shop.  
Costas, J., Avogado Cirera 14, Sabadell, Spain. Swing.  
Dean, D. E., Koorine, Kalangadoo, S. Australia. Motor Drag Saw.  
Fleutrop, D. A., Westzijde 57, Zaandam, Holland. Instrument for Recording Vibrations of Tuning Fork.  
Foster, J. G., Ivydene, Cable Road, Whitehead, Co. Antrim. Mechanical Wind-Screen Wiper.  
Fromageot, A., 6, Avenue de l'Eglise, Le Chesnay, S-et-O., France. Crane.  
Gage, M., 25, Windmill Road, Mt. Eden, Auckland, N. Zealand. Anemometer.  
Galan, J., 4, Avenue de St. Eugène, Oran, Algeria. Men Sailing.  
Gautheret, R., 40, Boulevard Voltaire, Paris XI. Looping-the-Loop.

Gibson, H., 11, Belmont Terrace (North), Port Elizabeth, S. Africa. Master of the World.  
Gregory, G., 105, Kingsbury Road, Erdington, Birmingham. Yard Crane.  
Harvey, W., 34, Parchmore Road, Thornton Heath, Extinct Diplodocus.  
Humphreys, J., Moorside Farm, Widnes, Lancs. Balance Plough.  
Lorenzi, B. de Rivadavia 5492, Buenos Aires, Argentina. Theatre.  
Mussi, G., Via Pio Quinto 4, Torino 6, Italy. Shaping Machine.  
Neve, C., Holly Lodge, North Malvern. Diesel Oil Engine.  
Pereyra-Yraola, J. R., Florida 888, Buenos Aires, Argentina. House.  
Pigouri, G., 36, Rue du Président Wilson, Clamecy, Nièvre, France. "Marinoni" Semi-Rotating Printing Press.  
Plaisance, G., 1, Rue St. Lambert, Nancy, M-et-M., France. Tumbling Acrobats.  
Ray, E., Windwistle, Icknield Way, Letchworth. Latest Largest Meccano Crane.  
Robinson, C., Westfield, Clarksville, Milton Otago, N. Zealand. Windmill.  
Roulet, J. L., 1, Beaux-Arts, Neuchâtel, Switzerland. Clock with Weights.  
Sabbatini, S., Corso Vittorio Emanuele 37, Ancona, Italy. Clown with Cymbals.  
Stockham, F. C., 51, Skidmore Avenue, Birches Barn Estate, Wolverhampton. The Kraa Electric Stamping Machine.

## SECTION "A": SILVER MEDALS

Banks, D. K., East Down Rectory, Barnstaple, N. Devon. Submarine.  
Barr, E. L., 103, 7th Avenue, Maylands, W. Australia. Twin Trip Hammer.  
Bougin, M., 36, Turney Street, Trent Bridge, Nottingham. Motor Fire Escape.  
Calenda di Tavani V., Riviera di Chiara 257, Napoli 1, Italy. Donkey Cart.  
Clayton, W. J., Cheeverstown House, Clondalkin Co. Dublin. Marshall Threshing Mill.  
Doumain, E., 114, Rue Marengo, Marseille, France. Apparatus for Automatic Loading and Unloading of Barrels.  
Führlinger, A., Faubourg de Belfort, Altkirch, Alsace, France. Mincing Machine.  
Godfring, J., 29, Rue de Metz, Longuy, M-et-M., France. Toboggan Slide.  
Greenberry, H. W., 1, Disraeli Road, Putney, London, S.W.15. Stores Passenger Lift.  
Hanus, C., 19, Rue Eugène Berthoud, St. Ouen, Seine, France. Catapult.

Harbard, G. V., 29, Belgrave Road, Slough, Bucks. Mountain Railway.  
Innes, G., 5, Essex Court, Temple, London, E.C.4. Railway Breakdown Crane.  
Jacquier, R., 8, Rue Louis Grignon, Châlons s/R., Marne, France. Sandow Developer.  
Manning, —, 6, Sturdon Road, Ashton Gate, Bristol. Swing Boat.  
Pasquet, R., 31, Rue de l'île Dijon, Côte d'Or, France. Metallurgist's Workshop.  
Pugh, B., 20, Clarence Road, Southend-on-Sea. Southend Street Tram.  
Ruffer, R., 3, Jeu de Paume, Château-Thierry, Aisne, France. Simple Expansion Engine.  
Schmitt, J. P., 7, Place de la Liberté, Schiltigheim, Bas-Rhin, France. Strasbourg Cathedral.  
Shields, J. M., 570, Moseley Road, Birmingham. Factory for Working Wood and Metal.  
Viney, R., 3, York Street, City, Manchester. Submarine Wheel.

350 Bronze Medals have also been awarded, and a full list of the winners of these will be sent (post free) on application.  
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PEA REPEATER

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R. DILNOT, 125, Chiswick High Road, London, W.4.

## How Trains are Lighted and Heated—

(continued from page 219)

quickly became cold and useless. The railway companies, therefore, sought to find some means of maintaining the temperature of each compartment at an agreeable level according to the weather conditions prevailing, and this was successfully accomplished by steam heating.

In present-day railway coaches the heating is carried out by means of steam from the engine boiler, passed at a reduced pressure through a system of pipes throughout the train. The supply of steam is under the control of the driver and also of the guard, and there is in addition a valve that automatically releases steam from the pipes when the pressure exceeds a certain point. The steam pipes communicate with radiators under the seats in each compartment of the train, and steam is admitted to these radiators or cut off from them by means of the familiar small handle placed just below the luggage rack. When the handle is moved to the position marked "cold" it closes the radiator valve, and opens it when moved across to the "hot" position. In this way the temperature of each compartment is under the control of the passengers themselves.

## Stamp Collecting—(cont. from page 225).

"M.M." for February) the change will at once be noticed. The sheets also are smaller, but otherwise the stamps are the same as before.

Messrs. Waterlow and Sons have had a wide experience in stamp printing, having contracted for a great number of years to print the stamps of many of the British Colonies and also of many foreign countries. Even if this firm cannot boast that they have printed stamps for countries from "China to Peru," they can with truth say that they have printed them for countries from China to Chile—which is just as far, if not farther!

In view of this wide experience we may expect that the new British stamps will be of the same high quality and enjoy the same freedom from errors as those so splendidly printed by their predecessors.

## A Hero of the Indian Mutiny:—

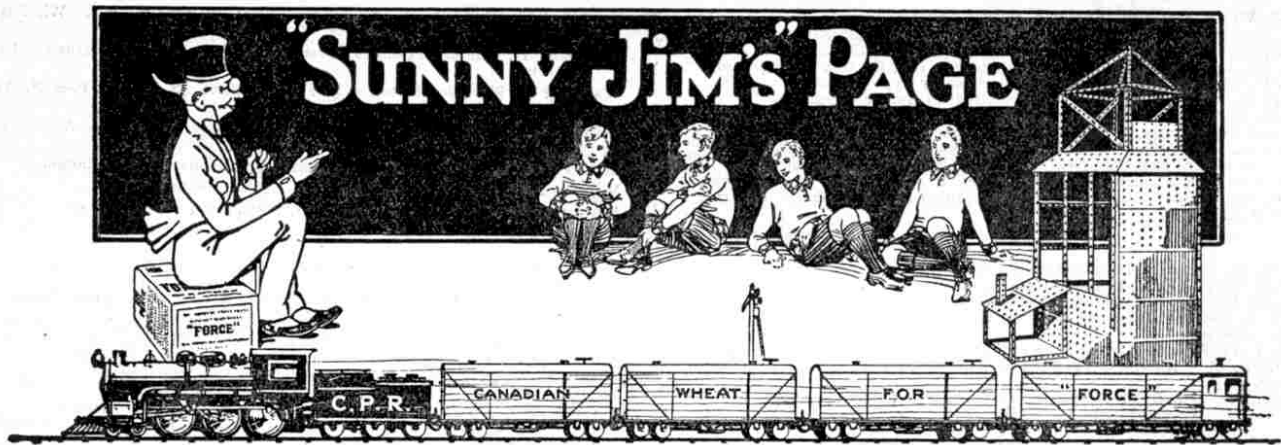
(Continued from page 217)

Comptroller and Treasurer of the Household from 1877 to 1891, and Keeper of the Privy Purse from 1891 to 1910, the year of King Edward's death. From that time up to his death Sir Dighton was Comptroller of the Household of Queen Alexandra, and his venerable appearance with his flowing white beard made him a conspicuous figure at the various public functions that Queen Alexandra attended.

Altogether Sir Dighton served the Royal House for over half-a-century, and his unswerving loyalty won for him the complete confidence and affection of all the members of the Royal Family. Even in this capacity he had opportunities of showing his bravery, and on one occasion saved Queen Alexandra's life when her horse bolted and she was thrown with her foot caught in the stirrup.

## Our Deathless Armies

With the new conditions that developed during the Great War, the importance of cavalry appears to have been greatly diminished, but British boys will never forget the glorious deeds of our armies of the past. The death of this V.C. hero may well serve to carry our minds back to the heroism of the small British force that quelled the Indian Mutiny, and to bring before us a mental picture of the thrilling spectacle of "Probyn's Horse" at the charge, sweeping down the enemy on the plains of the Ganges.



## "DID YOU KNOW?" said Sunny Jim

Our body is, in many respects, similar to the railway engine.

Think of the great Canadian Pacific Loco thundering across the wheatlands of the West, swiftly drawing a heavy train of freight cars laden with golden wheat. The engine driver, or "engineer" as they call him over there, stands with his mate on the rocking foot-plate controlling this vibrating power-plant as it hurtles through the night. See the flash of the shovel in the glare of the open furnace door as the hungry giant is replenished with the coal that is its very life.

How important that coal is. Poor quality fuel would not do here. Clinkers would choke the bars and damp the fire. Our engine would lose her greatest pride—her power to move with speed despite the heavy train she draws behind.

So with you boys. Your body is the engine and you the engineer and fireman all in one. That Canadian Pacific Loco has lots of power she never could use were her fuel not kept up to the highest standard. If you aren't eating a "high power" food you can be sure that there's lots more in you than you ever thought of. The food that gives the same power to the human body as the best

fuel gives to the railway engine is WHEAT. To get the most out of wheat you must eat **WHOLE** wheat. Whole wheat is nicest when it is flaked and toasted for delicious flavour and malted for easy digestion. Wheat prepared this way is appropriately called "**FORCE**." Eat "**FORCE**." You'll like it. There's nothing so fine as a plate of this health-giving food with rich creamy milk. Try "**FORCE**" with your favourite fruit, fresh, tinned, bottled or stewed, and taste something nicer than you've ever had before. Mother will get you "**FORCE**" if you ask her, it saves her heaps of trouble because it needs no cooking. "**FORCE**" can be had from your grocer. If you'd like to try it free don't hesitate to send in the coupon below. Send it now addressed to me personally.

### Coupon for Free Sample of "Force"

Free Sample of "FORCE" will be sent you if you fill in and post Coupon to "Sunny Jim," Dept. A.Y.10, 197, Gt. Portland Street, London, W.1.

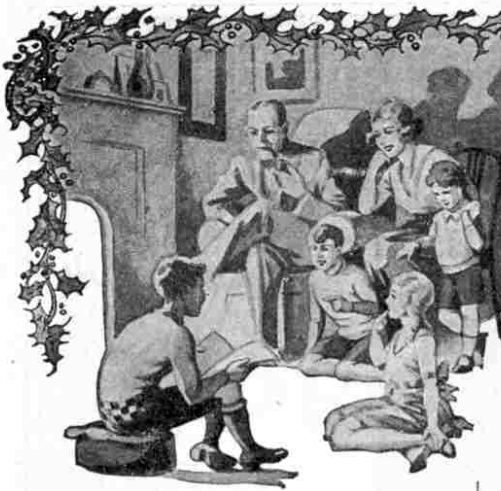
Name .....

Address .....



*Sunny Jim*





# Fireside Fun

**T**ONGUE Twisters continue to form a large proportion of my morning mail, and during the past week I have received one or two that are new to me. Master James McManus, of Derry, informs me that "*Fannie Fisher fried five floundering frogs for Francis Foulter's father.*" (I hope Mr. Foulter enjoyed his meal!) Master C. R. Wilkes, of Bristol, tells me that "*Fidgetty Freddie fought a frey firefly.*" Master F. Grant, of Northampton, has written to tell me of a heroic deed. It seems that "*Sammy Samson saw Sylvia sinking. 'Save Sylvia, she's sinking!' shouted Sammy. Sally Samson said, 'Sammy you should save Sylvia yourself!' So Sammy slung Sylvia some strong string and soon Sylvia stood safe. So Sammy saved Sylvia!*" Master Crofts, of Birmingham, sends me a tongue-twister, which although an old one is no less interesting:—"*The Leith police dismisseth us.*" (No doubt my readers will "dismiss" Master Crofts after they have attempted to say this quickly twelve times!)

These and hundreds of other equally interesting tongue-twisters have been inflicted on me, and last month I promised to print a specially good tongue-twister, as I think it is now my turn to inflict one upon those who have been trying to catch me out during the past few months. This tongue-twister deals with the touching story of a boy called Esau Wood! Here it is:—

Esau Wood sawed wood. Esau Wood would saw wood. All the wood Esau Wood saw Esau Wood would saw. In other words, all the wood Esau saw to saw Esau sought to saw.

Oh, the wood Wood would saw! And oh, the wood-saw with which Wood would saw wood

But one day Wood's wood-saw would saw no wood, and thus the wood Wood sawed was not the wood Wood would saw if Wood's wood-saw would saw wood.

Now, Wood would saw wood with a wood-saw that would saw wood, so Esau sought a saw that would saw wood.

One day Esau saw a saw saw wood as no other wood-saw Wood saw would saw wood.

In fact, of all the wood-saws Wood ever saw saw wood Wood never saw a wood-saw that would saw wood as the wood-saw Wood saw saw wood would saw wood, and I never saw a wood-saw that would saw as the wood-saw Wood saw would saw until I saw Esau Wood saw wood with the wood-saw Wood saw saw wood.

Now Wood saws wood with the wood-saw Wood saw saw wood.

Oh, the wood the wood-saw Wood saw saw would saw!

Oh, the wood Wood's wood-shed would shed when Wood would saw wood with the wood-saw Wood saw saw wood!

Finally, no man may ever know how much wood the wood-saw Wood saw would saw, if the wood-saw Wood saw would saw all the wood the wood-saw Wood saw would saw

## This Month's Short Story.

Small boy  
Stole plum.  
Stomach-ache;  
Kingdom-come.

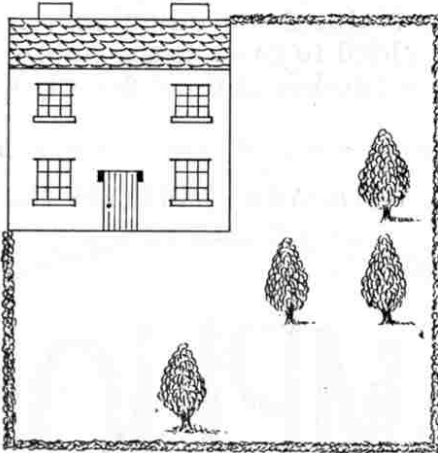
## Puzzle No. 28.

A deer was sixty of her own leaps in front of a cheetah, and took three leaps while the cheetah took two, but the cheetah went as far in three leaps as the deer did in seven. In how many leaps did the cheetah catch the deer?

(Contributed by Master J. W. Glover, Stoke-on-Trent, to whom 2/6 has been awarded.)

## Puzzle No. 29.

A gentleman died and left his four sons each an equal portion of his land. It was a condition of his will that the land was to



be so divided that each son had a piece exactly equal in size and shape, and each containing one tree. Above is shown a sketch-plan of the land, and it only remains to say that it is not permitted to transplant the trees. How did the sons carry out the terms of the father's will?

(Contributed by Master A. Spraggon, Durham, to whom the monthly prize of 5/- has been awarded.)

## Puzzle No. 30.

If a clock takes six seconds to strike six, how long will it take to strike eleven?

(Contributed by Master Leslie J. Edgley, Sault St. Marie, Ont., Canada, to whom the equivalent of 2/6 has been sent.)

## Answers to Last Month's Puzzles

No. 25. 1. Yorkshire. 2. Ulster. 3. Ayr. 4. Cork. 5. Redcar. 6. Stirling. 7. Nuneaton. 8. Worcester. 9. Wales. 10. Dereham.

## No 26.

ESCAPE  
STOVES  
COVERT  
AVENUE  
PERUSE  
ESTEEM

## No. 27 A Mistake.



"And now, children," asked the teacher, at the end of the lesson, "can you tell me the English national flower?"

"The rose!" came in an eager chorus

from her pupils.

"And the French?"

"Lillies!" was the response, after some hesitation.

"And the Spanish?"

Dead silence. The pupils looked blankly at each other. Then a hand was waved frantically in the air, and a shrill voice piped out: "Onions, miss!"

## THE ABSENT-MINDED RECTOR

"Do you like your beef under or well done?" the rector was asked by his host.

"Well done," replied the good rector, and added absent-mindedly, "good and faithful servant."

## NOT AS SOFT

An Italian who kept a fruit shop was much annoyed by possible customers who made a practice of handling the fruit and pinching it, thereby leaving it softened and often spoiled. Exasperated beyond endurance he finally put up a sign which read: "If you must pincha da fruit—pincha da cocoanut!"

First Cannibal: "Our chief has hay fever."

Second Cannibal: "What brought it on?"

First Cannibal: "He ate a grass widow."

## THE IRISH COAST

An officer was drilling his men on board a warship.

"I want every man to lie on his back, put his legs in the air, and move them as if he were riding a bicycle," he explained. "Now commence."

After a short effort, one of the men stopped.

"Why have you stopped, Murphy?" asked the officer.

"If ye plaze, sir," was the answer, "Oi'm coasting."

## Products of the House of GRAHAM

### The AMPLION JUNIOR

with Floating Diaphragm  
Formerly  
**27/6** £2 : 2 : 0



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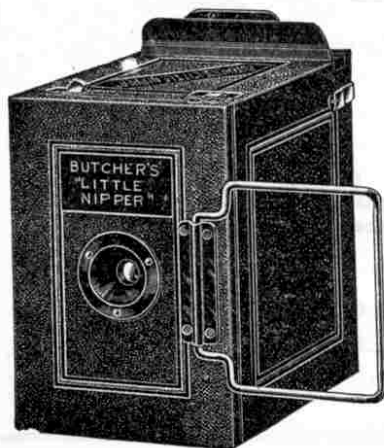
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Catgreen, London."

# 5/6

BUYS A

## LITTLE NIPPER CAMERA Complete



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It takes pictures  $2\frac{5}{16} \times 1\frac{1}{2}$

It's British Made.

Plates cost 1d. each (in packets of six).

Each purchaser of a "Little Nipper" gets the following advantages:—

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"Little Nipper Club" Membership,  
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Entry into PRIZE COMPETITIONS in which all have equal chances.

OF ALL CHEMISTS AND PHOTO DEALERS.

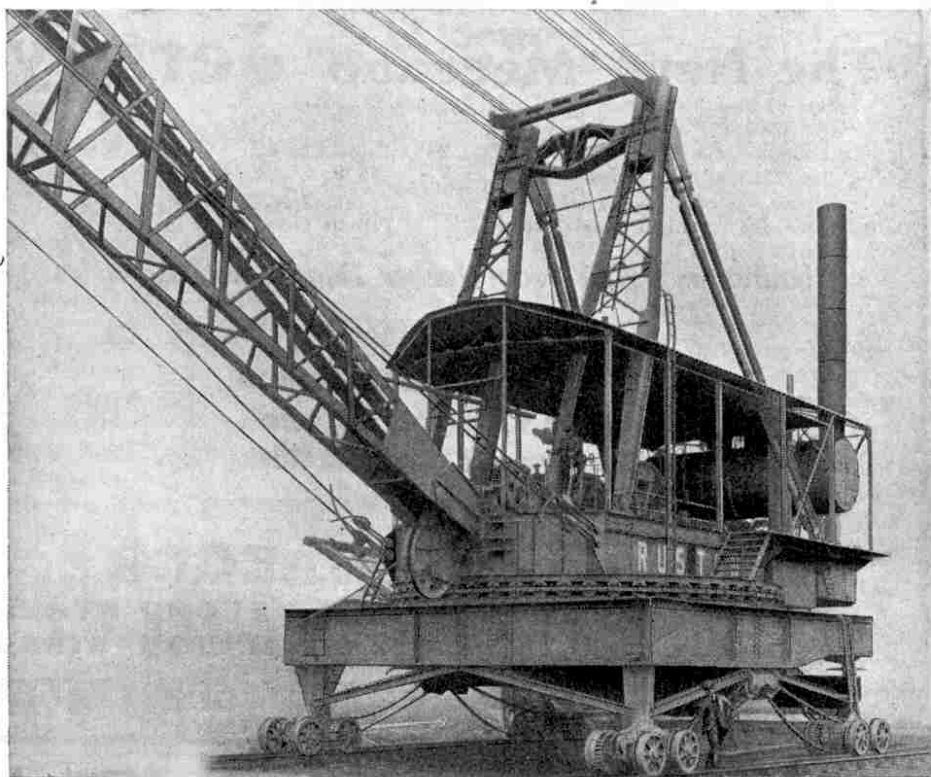
Write for Leaflet MLN—it's free.

**W. BUTCHER & SONS LTD.,**

Camera House, Farringdon Avenue,  
LONDON, E.C. 4.

## £5 for a Model Dragline

Second and Third Prizes value £5:5:0



In our April issue we described the heaviest Dragline in the world, and we announced that Messrs. Ruston & Hornsby Ltd., the makers of the great machine, have offered a prize for the best Meccano model of their Dragline. The prize is a cheque for £5, with second and third prizes added by Meccano Limited of Meccano products to the value of Three Guineas and Two Guineas respectively, to be chosen by the winner from the current Meccano catalogue.

### Draglines at Panama

Draglines are excavators something after the design of steam navvies, which were described and illustrated in a recent issue of the "M.M." A Dragline obtains its name from the fact that the bucket is dragged towards the machine on a flexible rope, instead of being mounted on an arm that pivots on a jib as in a steam navy.

Draglines excavate below the level on which they stand and work towards themselves, travelling backwards when they have excavated all the material within reach. They are used principally for drainage work where the ground is too wet to allow a steam navy to stand. Draglines were extensively used in the construction of certain parts of the Panama Canal, and in conjunction with steam navvies they accomplished the work of thousands of labourers at a fraction of the cost.

### A Monster Excavator

The heaviest Dragline in the world is that known as the Ruston & Hornsby No. 250. It weighs over

300 tons when fully equipped and in working order, and the bucket has a capacity of eight cubic yards. The jib is 120 ft. in length, and a cutting power of 30 tons is exerted on the bucket teeth. The coal bunker of this giant has a capacity of four tons and is filled by a special hoist. The main engines are upwards of 400 h.p., and separate engines of 200 h.p. are fitted for the slewing motion.

We have already illustrated this machine in its entirety and in detail, and this month we are able to give a further view, which clearly shows the method of mounting the jib, and other interesting details.

### Suggestions for Competitors

We hope that a large number of our readers will enter for this competition. Those who intend doing so will note that the jib and the engine platform rotate on the base by means of a wheel-race, which may be seen in the accompanying illustration. This base itself is mounted on flanged wheels which run on rails. These wheels are driven by sprocket chain from gear wheels centrally mounted immediately under the platform. The gear wheels themselves may be driven by axle rods, deriving their power—through bevel gearing—from a vertical shaft, gearing directly to the engine on the platform above.

Those who do not wish to make their model so intricate as to embody this driving mechanism may very well dispose of the driving shaft and chains and simply fix their model to a base mounted on wheels. The wheel-race, on which the platform and jib pivot, might even be eliminated if desired, such modifications as these being quite at the discretion of the model-builder.

### Competition Conditions

There is no age limit, and any size of Meccano Outfit may be used. Entrants should state their age and the number of Outfit used, however, as this will be taken into consideration in making the awards. The competition will close on 30th September next. Actual models should not be submitted, but drawings or photographs may be sent together with a description of the special features of the model entered, and on these the awards will be made. We shall illustrate a Meccano model of this 250 Dragline when announcing the results of this competition in our November issue.

### For Photographers

Covering the many branches of the photographic art and brightly written in non-technical language, *Photography in the Home* should be included in the kit of every Meccano photographer. Published by Messrs. W. Butcher & Sons Ltd. (Camera House, Farringdon Avenue, London, E.C.4), the well-known makers of cameras and photographic apparatus, this handy booklet describes everything from the use of flash-powder to the art of micro-photography. In addition, there are many illustrations of cameras, as well as a variety of accessories. Those interested in photography are strongly advised to obtain this booklet, which will be sent post free to any reader mentioning the "M.M."



# JAEGER

*Pure Wool*

## The New "Meccano" Jersey

*By Arrangement with Meccano Ltd.*

24"	26"	28"	30" Chest
7/6	8/3	9/-	9/9
Navy/Saxe		Mid Grey/White	
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## FOR MEN

MEN use Seccotine for numberless things. A yacht mast has been mended with it. Carpenters—amateur or professional—find in it the best and strongest glue, requiring no heating. The repairs to musical instruments, billiard cues, golf clubs, house furniture, are made with Seccotine; rubber tyres are affixed to rims of racing cycles. Uses are innumerable.

# SECCOTINE

## FOR WOMEN

WOMEN use Seccotine to save sewing in making all kinds of fancy articles, in patching clothes, mounting photographs, trimming hats, repairing brushes, and all kinds of house articles. Laces and all light garments of silk or muslin are stiffened by it.

# SECCOTINE

## FOR BOYS & GIRLS

CHILDREN mend their toys or make new ones. There is a Seccotine box (1/6) which contains models of church, school, and houses, of varying size. By use of these hand and eye are trained to work together.

FIRMAS (Heat Seccotine) should be used if the repaired articles are required to hold liquids, hot or cold.

Tubes 4½d., 6d., 9d. everywhere. Booklet of interesting information, free on application to

M'CAW, STEVENSON & ORR, LIMITED, THE LINENHALL WORKS, BELFAST

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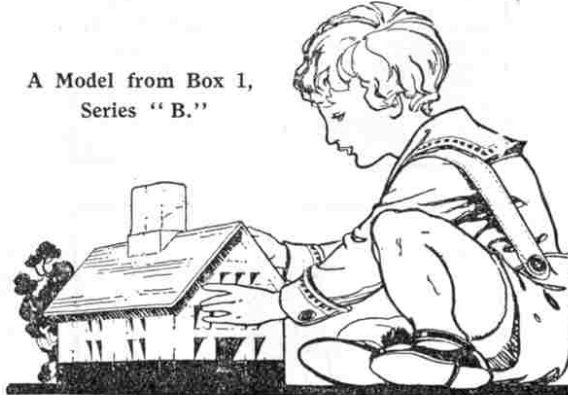
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Containing Trees, Fences, Roofs, Shells, Shrubs, etc.

Box 1 4/- Box 2 6/-

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"SENIOR"  
£3 15 0

Height overall 22"  
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Height overall 19 1/2"  
Diam. of Trumpet, 14 1/4"  
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SOME HOWITZER! A BRITISH TOY!!

4/9 post free.

Money returned if you do not approve.

**HANWELL'S TOYS,**  
38, Alexandra Road,  
NORTHAMPTON.

## The Rule of the Road—(cont. from page 223)

always have pre-arranged plans for passing each other or being passed.

The best plan for being passed by another vehicle when riding two abreast is for the off-side rider to drop behind his companion. When overtaking a vehicle the reverse is the case, and the near-side rider falls in behind the other and is thus able to avoid any chance of fouling his companion. In the case of clubs, therefore, there should always be enough room between the ranks riding two abreast to allow each rider to drop behind the companion alongside whom he has been riding, and thus the whole party can form single file almost immediately. It is good to practise this movement on some quiet road at a signal from the leader.

(Continued in next column)

## SOME USEFUL BOOKS:

**Model Steamer Building.** A practical handbook on the design and construction. Fully illustrated. Post free 10d.

**Machinery for Model Steamers.** A practical handbook on the design and construction of engines and boilers. Fully illustrated. Post free 10d.

**Mechanical Drawing Simply Explained.** Shows how to read, set out, ink-in and finish a drawing. Post free 10d.

**Every Boy's Book of Electricity.** Written so that boys can understand the workings of all sorts of electrical apparatus; 48 pages and 21 illustrations. Post free 3d.

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**ELECTRO POCKET CINEMAS,**  
(Dept. B), Raglan Rd., LOWESTOFT.

Tram-lines may appear somewhat dangerous in wet weather to cyclists with narrow tyres, but if care is taken to cross them at as wide an angle as possible—as shown in our sketch on page 223—there is little danger of a skid or slip.

## Readers' Sales and Wants

If you have anything to sell or wish to buy anything, take advantage of the service offered by a small advertisement in these columns. (Advertisements of Meccano goods cannot be inserted).

The rates are one penny per word, with a minimum of 1/- (cash with order).

Your advertisement must be received before the 10th of the month for insertion in the following month's issue.

Houton's Quarter-Plate Camera, good condition, 10/-. Apply A. Clay, Wellhouse, Banstead, Surrey.

Electric Railway, gauge 0. Locos, passenger, goods, trains, lines, points, signals, station, electric lights, M.R., L.N.W.R., can send photo.—Bowering, Fernleigh Lodge, Mannamead, Plymouth.

Horizontal Steam Engine, whistle, safety valve, speed regulator, 15/-. Cost 25/-.—Ridge, Brockley, Bristol.

Mice. Black, white, brown, mixed colours, 4d. each.—Taylor, Bevingford, Uckfield, Sussex.

Wooden Crane and Motor Van, 4/- each.—George Anderson, 21, Calderstones Road, Liverpool.

For Sale. A Powerful Clockwork Locomotive with Tender, gauge 0. Also four high-class coaches, each 11½ ins. long, 5 different trucks, 2 doz. straight rails. What offer? Write for particulars, L. Feltham, Laye, Lyme Regis, Dorset.

"Meccano Magazines." Early numbers, 8 onwards. What offers?—Mare, Hedgecot, Yardley, Birmingham.

Back Numbers. Model Engineers, 17th March, 1921—23rd June, 1923. Condition as new. What offer?—Laurence Hough, 2, Maxwell Street, Crewe.

M.M.'s Nos. 1 to 11 and 13. Offers.—Guy, "Kimberley," Hailsham, Sussex.

Powerful Vertical Steam Engine, 5/-. Cost double, also new Angling Set, 7/6. Low price for quick sale.—Apply particulars, Richardson, Hook Norton, Banbury, Oxon.

Free. 15 Stamps to applicants for my Approval Sheets.—Dorling, Delamere, Shanklin.

Stamps. Packets all kinds. Approval Sheets. Apply G. Smith, Kingstons, Felstead, Chelmsford, Essex.

British Colonials, 500 for 2/-, 1000 for 3/6. Postage extra.—J. Pickering, Holt, Norfolk, England.

Model Railway for Sale, £1 10s. List on application.—Henderson, "Cairnyard," Dumfries, Scotland.

## Small Advertisements

(See also page 224)

### MAKE YOUR OWN METAL TOYS

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Mention "Meccano Magazine."



## For tank development

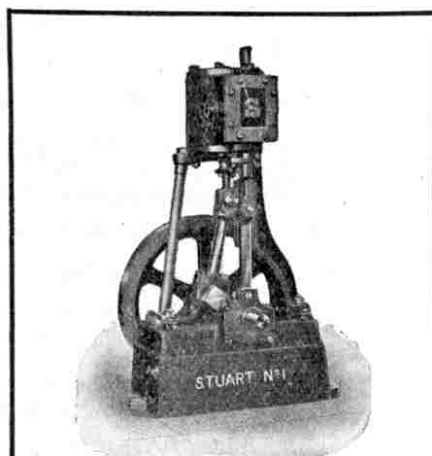
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TRADE MARK 'TANCOL' MARK  
**DEVELOPER**

Gives bright negatives on plates or films, in any make of tank.

All dealers 1/6

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HENLEY-ON-THAMES

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Registered at G.P.O., London, for transmission by Canadian Magazine Post.

EDITORIAL AND ADVERTISING OFFICES:—

BINNS ROAD, LIVERPOOL.

Telegrams: "Meccano, Liverpool."

**Publication Date.** The "M.M." is published on the 1st of each month and may be ordered from any Meccano dealer, or from any bookstall or newsagent, price 2d. per copy. It will be mailed direct from this office, 1/6 for six issues and 3/- for twelve issues (post free).

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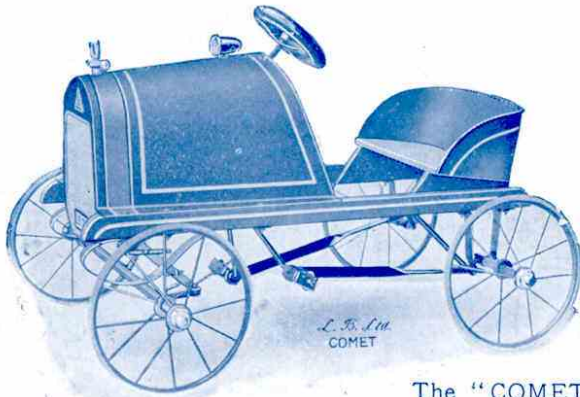
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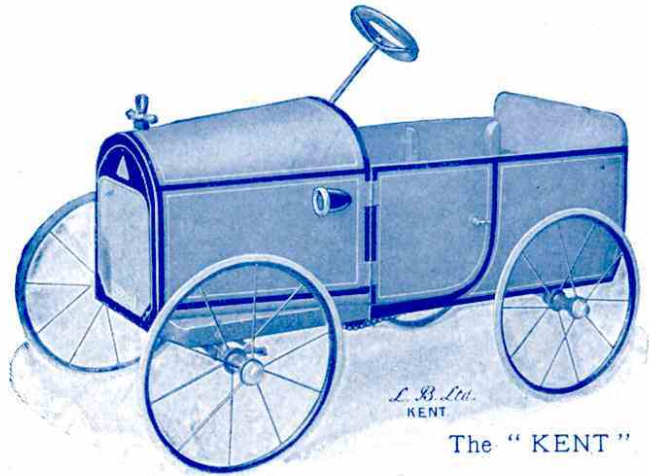
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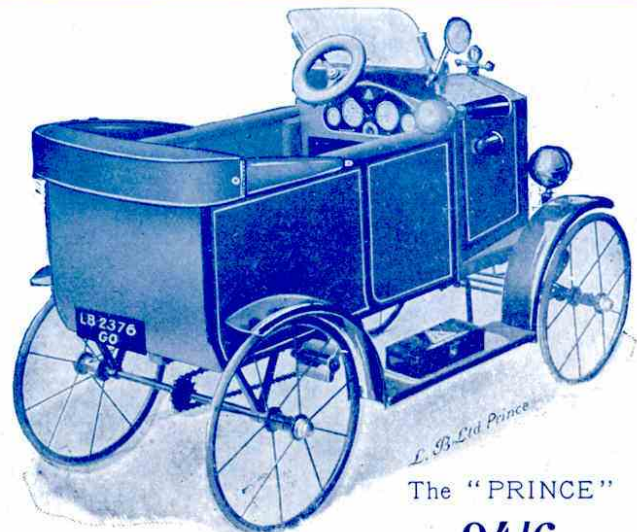
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The "MORRIS"

**78/9**

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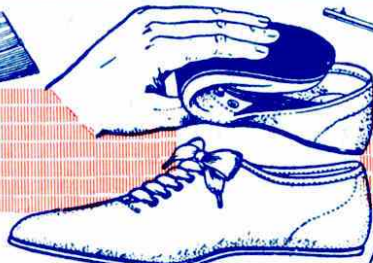
T.D.S.

### THE LIGHT 'DIANA' AIR GUN

Here's the Gun with which to start shooting, boys. Strong and powerful, yet light to handle. Exceptionally well made, with barrel, etc., finished bright nickel. Single Shot Carriage 1/-, Price

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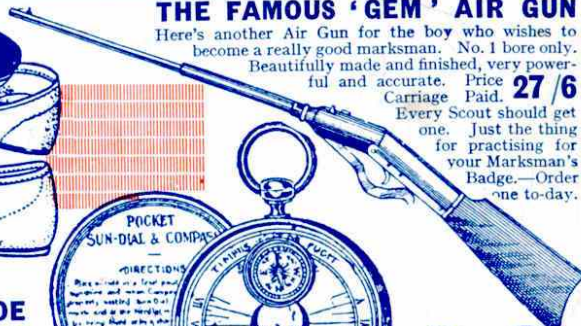
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