Interior of Great French Radio Station

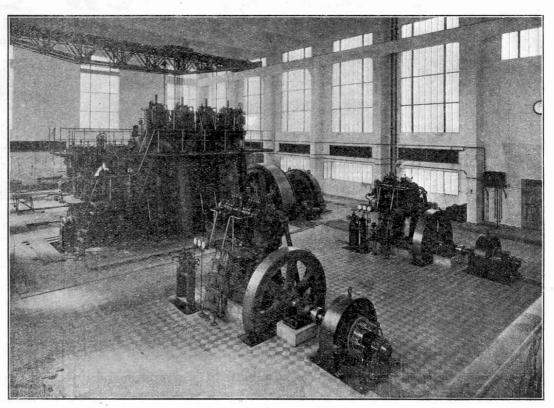
UR photograph shows one of the enginerooms at the powerful French radio station of Assise. How different a modern radio station looks as compared with the earlier stations which were often accommodated in make-shift premises and were equipped with large spark gaps and giant condensers of glass. To-day only the most modern appliances and machinery are used and the "lay-out" of the station is on recognised engineering lines.

At St. Assise huge aerials, suspended by 800 ft. masts, stretch like a huge net over the station buildings. buildings are commodious, beautifully lighted and ventilated, whilst the engines, dynamos and alternators are well kept and carefully looked after—as befits the world's largest radio station.

Our illustration shows three Diesel engines, one of 1,800 h.p. and two of 80 h.p. This type of internal-combustion engine is becoming increasing-

ly popular for radio work.

We hope to publish a
fully illustrated description this remarkable radio station in one of our future issues



Interior of Engine Room, St. Assise, France

Ibv S.I.B.



Austin N. Pooley (Cambridge).—(1) The wire mentioned will be quite suitable. (2) A buzzer in series with the primary will be quite suitable for an interrupter. (3) The spark length depends on several factors, such as the amount of primary voltage, the magnetic quality of the iron core, the material used as spark points, efficiency of condenser and quantity of winding. You will see, therefore, that the spark length can only be ascertained by actual experiment. (4) The secondary coil must be wound over the primary coil in the same direction as the primary.

J. McCaskell (Gairlock).—(1) Brass spacing washers may be used for the condenser in your receiving set. (2) It is not necessary that a 5½ " × 3½" plate should be used for the mounting of the condenser; you may mount directly on the board by means of Meccano brackets.

F. Lambert (Rothwell).—Owing to the screening effect of the intervening Pennine Range it will not be possible for you to receive telephony broadcast from Manchester.

Manchester.

E. C. Varch (Hull).—(1) The price of the $2\frac{1}{2}^* \times 2\frac{1}{2}^*$ special fibre plates is 2d. each. (2) You may connect up the fixed portion of the condenser by placing spring washers between the insulated discs. These discs are threaded on a screwed rod, and after all the parts are assembled the whole is bolted together by the fitting of nuts-on each projecting end of the screwed rod. (3) Yes, the holes are already drilled in the mounting board when you purchase it.

R. Goodfellow (Birmingham).—(1) The call letters of nearly all transmitting stations are to be found in the booklet published by the Radio Press entitled "The Call Book." This is obtainable at any bookstall, price 6d. (2) The Morse Code is illustrated in the Electrical Manual, price 1/8 post free.

J. Wilson (Manchester).—I am pleased to know that you are enjoying the nightly programme broadcast from Trafford Park. Your instruction leaflet will give you the other information you require.

R. Griffiths (Doncaster).—The No. 2 Crystal Receiver is constructed of Meccano parts. These parts are particularly suitable for carrying out experiments.

C. Andrews (Maidenhead).—(1) As you are approximately 26 miles from London you should have no difficulty in receiving broadcast from 2 L.O. with a Meccano Crystal Receiver, provided your aerial is erected as high as possible and carefully insulated. (2) Although it is possible to use two crystals on a set it would not materially effect its power of reception, and I would advise you to use one crystal only. (3) Marconi House is the nearest broadcasting station_to



Mr. Louis J. Frank, superintendent of a hospital in New York, has installed a complete radio outfit with 150 headpieces for the use of patients. He believes that by this diversion, the minds of many of the patients will be taken off their ailments and that it will do much towards helping them to recover,

The Marconi Office in Liverpool—which makes possible direct wireless communication with France, Spain, Switzerland, Canada or the United States—is the first of its kind in the provinces. It is equipped with high speed transmitters and customers handing in messages for transmission abroad may wait in the office for their replies.

The London Broadcasting Station is to have a new transmitting plant in the near future. This plant will not be situated in Marconi House, Strand, as at present, but in all probability will be in Wardour Street, half a mile distant.

Lancelot White is one of the youngest wireless concert artists. He is seven years old and broadcast from 2LO the other day. "I couldn't see the audience," he said later, "but I knew thousands were listening to me, and it just bucked me up. I put my mind on the stories and forgot mother and the others in the room."

The Sheffield Relay Station, now in operation, was originally intended to receive by radio the programmes from Manchester and Cardiff and then relay them to the transmitter in Corporation Street by means of a land line. Now, however, the microphones of the Cardiff and Manchester stations are connected by land lines direct to the relay station at Sheffield.

An illustration of "freak" reception is given by the experience of a listener living in Merton Park, London. With a three-valve set, and at about three o'clock in the morning, announcements and music were clearly heard from Havana, Cuba. A wireless sermon and organ recital from an American station were also re-transmitted over an ordinary telephone line to the offices of a well-known London newspaper.

A very successful transatlantic test was recently carried out when wireless enthusiasts at Long Island, New York, distinctly heard piano playing, music and voices broadcast from Liverpool. The words, "Hello, America!" were also heard several times, spoken in a man's voice. The tests were continued the next night, when an address by Mr. Henry Ford was easily picked up by many amateurs in this country.

The first regular wireless telephone service in Europe is that between Copenhagen and the Isle of Bornholm. The striking feature of this new service is that although it is a combination of wireless with ordinary wired telephones, the telephone subscriber at Copenhagen does not require any special apparatus to be connected, via wireless, with a subscriber in the Isle of Poetholes. Bornholm.

Many amateurs are listening for American broad-cast. American time is different to ours, and therefore the best time to listen is between 2 a.m. and 3 a.m. At this time it is dark both in the U.S.A. and in England, and there is also less interference from Morse. Under good conditions a two-valve set should succeed in receiving one or more of the large American stations.

A Rattling New Serial

Commences in

The BOY'S OWN Paper

FOR MARCH, 1924.

A Son of the Dogger

Sam Reed's Adventures on the Wild North Sea.

By WALTER WOOD. Illustrated by GEORGE SOPER.

This Number also contains:

Two other Serials, Complete Stories, Special Articles, Hobbies, Field Club, Coins, Stamps, Ju-Jitsu, COMPETITIONS, and a splendid large plate in colour, entitled: Beating the "Charge" AT DETTINGEN (1743).

 $1/ ext{-}$ monthly—and worth it!

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A thrilling incident in the New Serial, "A SON OF THE DOGGER."

> MAKE SURE OF YOUR COPY. Of all Newsagents.

Stamps for Sale

(For Advertisement Rates see page 82).

SIXTY DIFFERENT STAMPS FREE to applicants for approvals. All ½d. each. Send postage.—Cox, 135, Cambridge Road, Seven Kings.

STAMP COLLECTORS! Be sure you get The Philatelic Magazine, the fortnightly stamp newspaper, 3d. from any newsagent, or 4d. post free from Publisher, 63, Windsor House, Westminster, S.W.1.

110 GOOD STAMPS including Togo, Tchad, Gabon, Senegal, Sudan, 6d.—Kraus, 137, Cheapside, London.



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3000	,,	,,	!	50/-
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'ASIA' PACKET-FREE

25 selected issues including PERSIA (scarce Provisional), GWALIOR, Travancore, Ceylon, China (Ship), Deccan, Malay (Tiger), Patiala, Siam, Straits, etc. Ask for APPROVAL SHEETS and receive this fine packet FREE! Enclose 11d. postage.

FELIX SYKES, Stamp Importer, NEW BARNET.

GOLD COAST. ALL MINT.

KING GEORGE, Scripts, \(\frac{1}{2}\)d. green, 1d.; 1d. brown, \(\frac{1}{2}\)d.; 1\(\frac{1}{2}\)d. scarlet, 2\(\frac{1}{2}\)d.; 2d. grey, 3d.; 2\(\frac{1}{2}\)d. yelloworange, 3\(\frac{1}{2}\)d. 3d. blue, 4d.; 6d. purple, 7\(\frac{1}{2}\)d. POSTAGE DUES. 1d. black, 1\(\frac{1}{2}\)d.; 2d. black, 4d. 2d. black 4d.

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POSTAGE EXTRA.
ASK FOR MY NEW PRICE LIST.
ALEC KRISTICH (N.R.P. 279),
82, Marchmont Street, Russell Square, London, W.C.1.

FREE! 25 Poland Stamps to those sending postc. Florick, 179, Asylum Road, London, S.E.15.

see also

page 82

50 French Colonies 9d. 50 Roumania 1/-50 Argentine 100 United States 1/-300 Postage 150 Germany ...1/-500 Revenue 150 Austria ... 1/-50 Cards and 150 Hungary ... 1/-Envs. ... 1/-Fine selection of Postage or Revenue ready. I. Russell, Chetwynd, Shanklin Drive,

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Mr. J. R. D., Edinburgh, writes: "Please forward two more 'Diamond' Packets. THE LAST ONE WAS THE BEST PACKET I HAVE EVER BOUGHT."

THE "DIAMOND" PACKET contains 1,000 UNSORTED STAMPS, 1/3 (from Convents abroad).

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LOOK, BOYS 1 GRAND PACKET. Pictorials given away to applicants for approvals. Send postcard to-day. L. C. Jones, 13, North Road Bourne,

Bolivia

COMPLETE SET 1c. to 100c. presented EXTRA with every

"ILIXUM" PACKET-3d.

150 picturesque varieties,

Gratis INCLUDING OVER 50 UNUSED,

Triangular Fiume, Paraguay, Ivory Coast, Azores, Bosnia, Bulgaria, Malta, Jugo Slavia, Colombia, Gabon, Jamaica, Dahomey, Poland, Morocco, China, Philippines, Hyderabad, St. Pierre, Transvaal, Ukraine, Cape Colony, Mozambique, San Marino, Monaco, etc. Entire Collection for 3d. Only one packet allowed to each customer.

SEE our PRICE LIST for Bargains in Albums, Sets and Packets.

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25 Different—including 5 large Crete, 3 Bosnia, 2 Dutch Indies, large Persia, 8 N.W. Russia, large Hungary, etc., to all genuine approval applicants. Stamplies & Co. (Dept.M.M.), 45, Kitchener Rd., Ipswich.

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GENERAL STATES

20 Iceland, 1/-; 40 Finland, 9d.; 50 Czecho-Slovakia, 8d.; 50 Georgia and Ukraine, 1/3; 50 Russia, 9d.; 50 Roumania, 9d.; 50 Latvia and Esthonia, 2/-; 50 Austria (only Feldpost issues), 1/9; 40 Airpost, 1/6; 50 Central Lithuania, 1/6; 100 mint Germany Republic, 6d.; 25 Bosnia, 8d. Postage 1½d. extra. C. Faulkner, 90, Woodland Road, London, S.E.19.

12 BARBADOS CRATIS, postage 2d. Collectors Outfits 2/6 and 5/-. Neave, 25, Portnall Road, Paddington, W.9.

TRIANGULARS & TOWNSEND, 201a, London Road, Liverpool.



Watermarks

N our last issue we described what watermarks are, and how they are imprinted in the paper. We also gave some details of the watermarks of the stamps of Great Britain and promised in this issue to deal with the watermarks of the stamps of some of our Colonies. Before considering these colonial watermarks we may describe a few additional watermarks of the earlier issues of our own stamps that were not mentioned last month.

A Question of Detail

Many British stamps are identical in

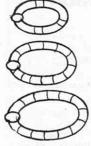


Fig. 5 Large Garters

every respect, except for the watermarks. Some of the more noticeable examples of these differences are as follows: the 1d. red and 2d. blue with Maltese Crosses in the upper corners, exist (perforated) with watermarks of a small or a large Crown. The 4d. rose of 1855 exists with three watermarks. namely, small, medium Small, Medium and or large Garter. (Fig. Large Garters 5). Various values of the 1865 set exist water-

The 5/-, 10/- and £1 stamps of 1867 are

marked Emblems or Spray of Rose.

watermarked either with a Maltese Cross or with an Anchor (Fig. 6). The $2\frac{1}{2}$ d. of 1873 exists watermarked an Anchor or an Orb; while other values of the same year are watermarked Spray of Rose or Imperial Crown. The £1 stamp of 1884 and 1888 appears



Fig. 6 Anchor

with the watermark of either three Imperial Crowns or three Orbs. The King Edward stamps only appeared on one paper, which was watermarked Imperial Crown. The 2/6, 5/- and 10/- values, however, were not printed on this paper, appearing solely on paper watermarked with an Anchor.

Watermarks of Colonial Stamps

Almost all the British Colonial stamps have been printed either by Messrs.



Fig. 7 Star (Early Colonials)

Perkins, Bacon & Co., or Messrs. De la Rue & Co. The former of these two firms printed the stamps until about 1860, and also printed the earlier stamps of Great Britain. Stamps printed by Messrs. Perkins, Bacon & Co., had a star for a watermark (Fig. 7). Three sizes of this star were used for different sizes of stamps, although sometimes the wrong paper was used. Sometimes the star was accompanied by letters as in the case of some of the New Zealand stamps (Fig. 8), but Star and in this case the printers were (New Zealand) not Perkins, Bacon & Co.

Fig. 8

Messrs. Thomas de la Rue & Co., who printed the stamps after 1860, used many

types of watermarks in printing the stamps. Most of them were formed of one of two designs, namely a Crown over the letters CC, or a Crown over the letters CA (Fig. 9).

The Crown over CC watermarks are now entirely out of date, the letters "CC" being the initials of the words, "Crown Colony." As (Single) all the stamps now pass through the offices of the Crown Agents, their initials "CA" have been substituted for the earlier "CC." Both the CC and

CA watermarks are found in two forms, one being used for stamps of ordinary size and the other for the larger sizes. The size of each individual design itself is the same for both types, but the spacing between the several designs in a whole sheet of stamps is greater for the largersized stamps, so that one design appears in the centre of each stamp.

Multiple Crown and CA

Fig. 9

Crown

over CA

To save the time wasted by the printer in arranging the paper so that the design of the watermark should appear in the

centre of every stamp a new watermark, the multiple Crown CA" (Fig. 10), was introduced in 1904. In this type the individual designs are smaller than in the single CA and portions of two, three, or even four designs may appear Crown over CA on each stamp.



introduced. This is known as "multiple known as "multiple Script CA" (Fig. 11) in which the "CA" is in Script, while the Crown has been con-siderably altered. The reason given for this Multiple Script CA change is that the old dandy-roll was worn out, and the authorities decided the new one should have a new design. Most of the stamps of the British Colonies have

In 1921 still another

type of watermark was

Finding the Watermark

few more have yet to arrive.

There are three ways of examining a stamp for its watermark. In each case the stamp is looked at from the back so that the printing on the stamp does not obscure the view. The stamp may be held to the light, but the disadvantage of this method is that, although we may be looking at the stamp from the back, the printing on the front shows through so strongly as to prevent the watermark being distinguished.

now appeared on this new paper, but a

Another method is to lay the stamp flat, face downwards, on a polished black surface. If this does not avail, a third resort is to pour a little benzine over the stamp. This is sure to show up the water-mark and will dry in a few minutes, without injuring the stamp. We must always remember, however, that benzine is a form of petrol and therefore catches fire very easily. It should never it used in a room where there is a naked light or

fire.
"Watermark Detectors" are sold by most stamp dealers, and consist of a small most stamp dealers, and consist of a small tray with a base of black porcelain or marble, and may be helpful in searching for watermarks. The raised edges of the tray prevent the benzine overflowing on to the table, and when benzine is not necessary the black surface shows up the watermark clearly.

Errors in Watermarks

In watermarks, as in everything else, there are errors. These usually consist of inverted, reversed, or inverted and reversed watermarks. Inverted watermarks are, as their name implies, upside down. Reversed watermarks mean that the stamps have been printed on the wrong side of the paper. In stamps printed correctly the letters or design of the watermark read backwards when examined from the back of the stamp. This is the same as in the case of printing or writing, when read by looking through the paper from the back. If you should come across a stamp in which the letters read the correct way round, you will have found a specimen with a reversed watermark and its value may be increased.

In addition to the watermark errors mentioned, there are others, including letters omitted, broken letters, wrong watermark, and so on. There is also the error of stamps that should be on watermarked paper being printed on plain These error specimens are very paper. rare and usually bring better prices than normal specimens.

RECENT ISSUES

NEWFOUNDLAND. NEW PICTORIAL ISSUE.

We here illustrate three of the recently-issued stamps of this enterprising British colony. Issued on 9 July, 1923, the stamps are of different types for each value. They are printed on thick wove paper without watermark, in sheets of 100 perforated



14 or 13\(\frac{1}{2} \times 14\), by Messrs. Whitehead, Morris & Co., of London. The values are from 1 to 12 cents

(omitting 7) and 15, 20 and 24 cents, although the last two values have not yet appeared. Of the values illustrated, the 3 cents shows the statue of the Fighting Newfoundlander. This statue was presented to the City of St. John's by Sir Edgar R.

St. John's by Sir Edgar R. Bowring, in 1922, and was placed in Bowring Park. The 5c. shows "Coast Scenery at Trinity," and the

8c. "Quidi Vidi Village near St. John's." The set is a handsome one, but the stamps would have been improved if they had been a little

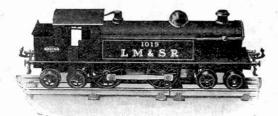
FINE GENERAL STATE OF THE STATE

NEWFOUNDLAND



larger, and it is to be regretted that a view of St. John's itself does not find a place on one of the values.

Hornby Tank Locos.



This magnificent Tank Loco is a splendid addition to any train system. A glance at the above illustration shows how beautifully this Loco is designed. It is thoroughly representative of the latest type of its class. Measuring 11½ in. in length, it embodies all the characteristics of the Hornby Trains. Suitable for 2 ft. radius rails only.

Beautifully finished in colours; lettered L.M.S and L.N.E.R. Fitted with reversing gear, brake and governor.

Price each 32/6

FROM ALL MECCANO DEALERS

Our Wireless Crystal Set is a Marvel!

 $\binom{Polished}{Box}$

Price 10/6

(Royalty included)

Money returned if not approved.

4,000 ohm Phones. Prices, 12/6, 15/6, 19/6, 25/Copper Aerial Wire - 100 ft., 2/4
List of Wireless Parts Free for Stamp.

C. LUCAS,

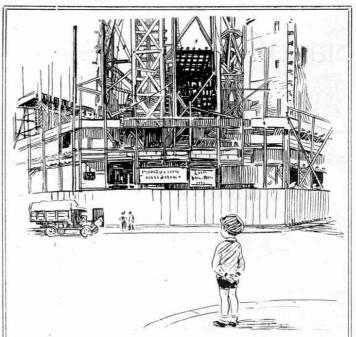
HOBBIES FAMOUS DEPOT, 35, MANCHESTER STREET, LIVERPOOL.

Bind Your Magazines

This spring-back binder for Meccano Magazines has a strong stiff back, covered with imitation leather, tastefully tooled. It takes a large number of copies and keeps them neat and clean. In black, lettered gold. Price 3/- each (post free).



Meccano Ltd., Binns Road, Liverpool



What is the first principle of building construction?

T does not matter how carefully a building is planned or how beautifully it is built; the skill of the finest craftsmen in the world may be lavished on it—all will be in vain unless the foundations are sound.

All over the world there are splendid buildings, which are cracking and collapsing because the foundations are giving way.

You yourself are rather like a building—it does not matter how clever you are with your brains or your hands. It does not matter how strongly you feel you will be able to do great things when you are grown up, unless your foundations are sound, unless you have good health, you will collapse.

Now the very foundation of good health is good teeth—you cannot be really fit and well unless you have sound teeth. Sound teeth are *clean* teeth.

It is a simple and pleasant matter to keep the teeth in perfect condition by the twice daily use of Gibbs Dentifrice. It cleans and brightens the teeth by removing the greasy food deposits and polishing the millions of tiny waves and facets into which the enamel of a normal tooth is divided.

It is these facets of the enamel (seen only through a powerful magnifying glass) which give the bright, sparkling appearance to clean teeth.

Gibbs Dentifrice is most convenient—a solid cake, protected by an aluminium case—it cannot spill or squeeze out.

Your chemist can supply you with Gibbs Dentifrice at the following prices: Large Size 1/-, De Luxe 1/6, Refills 11d. Popular Size $7\frac{1}{2}d$.

"The Fortress of Ivory Castles"

FREE! Your little brother or sister will be keenly interested in the Gibbs Fairy Book "THE FORTRESS OF IVORY CASTLES"—a sequel to the famous "Ivory Castle Fairy Book"—an enthralling story comprising 36 beautifully illustrated pages in black and white. Sent free, together with a useful size sample of Gibbs Dentifrice, on receipt of 3d. in stamps to cover cost of packing and

D. & W. GIBBS LTD. (Dept. 78 F.U.), Cold Cream Soap Works, London, E.1.



MECCANO CHAMPIONSHIP COMPETITION

21 Cups & 460 Medals: total value £250



URING the past two or three years our annual Model-building Contest has assumed such proportions and has attracted such world-wide interest that we are now able to run it in a form we have long had in mind, and which we think will be greatly appreciated by Meccano model-builders all over the world. For the purpose of this Competition we have divided the various countries into the following groups:—(1) Great Britain. (2) Australasia, South Africa, Canada, India, and all Countries within the British Empire. (3) *America. (4) *France, Belgium and Switzerland. (5) *Scandinavia and Holland. (6) *Italy. (7) *Spain and Portugal.

In each of these groups, three Championship Cups will be awarded for the best models submitted, and the winner of each Cup will hold the title of "Meccano Champion" for his particular group and section for twelve months from the date of the awards. The Cups, which have been specially designed for us, are of superb quality, very handsome in appearance, standing over 8-in. in height. Each Cup will be engraved with the name of the winner, and will form a valuable reminder of his prowess and skill. A suitable plinth will be provided with each Cup.

In addition to these special awards, there will be Silver and Bronze Medals in each section and Certificates of Merit to a limited number of other entrants. The total value of the prizes to be awarded will amount to £250.

Complete List of Awards

SECTION A.—For competitors under 10 years of age on 15th April next. Championship Cup and the title of Meccano Champion for his group and section for the year commencing 1st July next. 20 Silver Medals. 50 Bronze Medals.

SECTION B.—For competitors over 10 years of age and under 14 years of age on 15th April next. Championship Cup and the title of Meccano Champion for his group and section for the year commencing 1st July next. 30 solid Silver Medals. 100 Bronze Medals.

SECTION C .- For competitors over 14 years of age on 15th April next. Championship Cup and the title of Meccano Champion for his group and section for the year commencing 1st July next. 60 solid Silver Medals. 200 Bronze Medals.

In all there will be 110 Silver and 350 Bronze Medals awarded to the competitors in order of merit, and a number of special Certificates of Merit in each section.

(* Including Colonies).

In making the awards the judges will pay special attention to the following points :-

ORIGINALITY.—Special points will be given to those models showing initiative and originality and which are not simply variations of those illustrated in the Manual of Instructions.

CORRECT CONSTRUCTION .- Models which in their details are constructed on correct mechanical and engineering principles will receive higher marks than those which are built incorrectly or carelessly. No special knowledge is necessary to build models correctly other than that which may be easily acquired from the Meccano Book of Instructions.

GENERAL INTEREST.—Preference will be given to those models which are likely to prove most interesting to Meccano users throughout the world. We shall publish the best models in all civilized countries.

Meccano Gold Medallist

The competitor who, in the opinion of the Judges, submits the best model in the entire Competition, will be awarded a specially-designed solid Gold Medal, and will be the "Meccano Gold Medallist" for a year. His name and the year in which he gained the title will be engraved on the medal, which will remain his own property.

CONDITIONS

A competitor may enter any number of models for competition, but only in the section for which he is eligible.

Competitors may be of either sex, and there is no restriction or entrance fee.

Entries must be in the form of Sketches or Photographs, which should show clearly how the model is constructed. Written instructions for building need not be attached unless they are necessary to explain the working of the model. Actual models must not be sent in. The Photographs or the Sketches need not be the work of the competitor.

There is no restriction as to the number of parts that may be used in the construction of a model for the competition.

Each entry must be accompanied by an entry form properly filled in, and the competitor's name and address must appear on each photograph, sketch or sheet of instructions.

The judges will be Meccano Limited, Liverpool, whose decision is final.

No photographs or sketches will be returned to competitors, and no responsibility will be accepted in the event of an entry miscarrying.

Competitors enter on the distinct understanding that the sole copyright of the photos, sketches or models that win prizes, is vested in Meccano Limited.

If considered necessary, winners of prizes may be called upon to furnish proof that they have complied with the conditions.

The latest date for receiving entries from competitors in Great Britain will be 15th April next; from the Colonies 31st May next.

The result of the competition will be announced about June 30th following, or as soon after as possible.

The names of the prize winners will be published in the Meccano Magazine, a copy of which will be sent to all competitors.

No correspondence can be entered into concerning the result of the competition.

Send for your Entry Form to-day. Post Free from Meccano Ltd., Binns Road, Liverpool.



The Secretary's Notes

I am always glad when the dark nights of Winter come, for I know that these are the best months of the year for Meccano boys. Though there are heaps of things to do in the Summer when Cricket and Tennis are in full swing, to me the Winter always seems to possess greater possibilities. It is during these months that Guild members score, for they are far happier and luckier than the thousands of other boys to whom the cold dark Winter evenings mean staying indoors, often with nothing at all to do. These boys waste the long evenings week after week, living in hopes of better times when Summer comes

But to all Meccano boys, and to Guild members in particular, the dark Winter evenings are the jolliest in the whole year. With a warm cheerful Club Room, with friends around and with the sure knowledge of a really delightful evening, the Meccano Guild members are the homiest boys in the

Joy are the happiest boys in the world. That is the reason why I lin.3 the Winter Sessions best, because I know that every Club member is renewing old friendships as well as making new ones. That he is thoroughly enjoying himself with his chums, and that all are interested in the same things. I know, too, that during these months many thousands of new members all over the world will be enrolled and will be able to realise the fine objects of the Guild. The Winter months bring to thousands of boys knowledge of the Meccano Guild, and with it the dawn of a great deal of pleasure and good times in store.

Every boy is not so fortunate as our Guild members, however. Although I do everything in my power to make the Guild known to every Meccano boy, yet every year there are thousands of Meccano boys who never hear of the Guild. It is up to all you Guild members to bring the Guild before the notice of every Meccano boy and to enrol them one and all as members. Once they see what they are missing they will not need much persuasion to join. By passing on information about the Guild you will really be doing a good turn to your friends. Now, although the dark nights of Winter are past and we are looking forward to the Summer, I want every member to bear in mind the fact that during the Summer months a great deal of useful work may be done for the Guild. It is during those months, indeed, that plans and arrangements are made for the first Winter Session, and it is during those months also that new recruits should be enrolled. On the cricket field, or out in the open, there are many opportunities for members to bring the Guild to the notice of non-members, and I want you to do this whenever possible during the every Meccano Guild member will enrol just one

If every Meccano Guild member will enrol just one new member in the Guild we shall have achieved a wonderful record year. To double the membership of the Guild is by no means an impossible task.

Already one of the largest brotherhoods of boys, we should become of immense strength.

There are few members in the

A Great

A Great become of immense strength. There are few members in the Guild who could not secure one recruit if they tried, during the next two or three months. It may take perseverance, perhaps, but it could be done, and Meccano boys are well-known for their perseverance and enthusiasm. It is a great scheme and I am going to give it a trial—it is up to you members to help. I am not offering prizes as a reward in this scheme, although I would remind members of the special Recruiting Medallion, full particulars of which will be sent on request. I want each member to obtain his recruit for the sake of the Guild alone.

Edinburgh Club's Exhibition

NE of the latest additions to the ranks of Scottish Clubs is the Boroughmuir Meccano Club, Edinburgh, whose affiliation with the Guild was announced in the last issue of the "M.M." This club possesses membership fifty-one, and the Leader is Mr. Donald Maclean, M.A., the Headmaster of the Boroughmuir Secondary School, A few days pre-School.

vious to affiliation an Exhibition Meccano models and Hornby Trains was held in the school, and proved very successful. The room was well decorated with paper festoons and coloured electric globes, and Meccano and Hornby Train posters gave it a very cheerful and inviting appearance. Wireless sets made by the club members were on view, and one of the greatest attractions was a sixty-foot railway track on which a

EVERY TEN PNBY=TRAINS 200221

A section of the recent Exhibition of the Boroughmuir M.C.

Hornby Pullman Train ran at regular ten-minute intervals. Our illustration shows this train alongside a home-made station, and in the background are some very excellent Meccano models, including a Tramcar, Big Wheel, Weighing Machine, and Searchlight Tower. A collection was made and amounted to £2 12s. 6d., half of which sum was given to the Edinburgh Sick Children's Hospital, the remainder being credited to Club Funds.

Meccano Club Leaders No. 11. Cub-Master R. T. J. JOHNSON



Mr. Johnson's Club, "The Ormskirk Wolf-Cub M.C.," is essen-tially a Scout Club, and well how illustrates successfully Meccano Club may be combined with Scout activities. The Club was established in October, 1921, at the suggestion of Scoutmaster H. Torr, who still takes an active interest in the Club. Cub-Master Johnson has proved himself to be an enthusiastic and capable Club Leader, as is evidenced by the popularity of both Summer and Winter Sessions.

I will gladly send enrolment forms on to any who ask for them, and will help in any way possible either by sending Guild literature or by giving advice. When you have obtained your recruit's signature to the application form for enrolment, write your name on the back of the form and address it to me persenally

as I wish to know the names of those members who have helped in this scheme. I hope that this scheme will be so successful that we shall not only make the next Winter Sessions the most famous in the annals of the Guild, but we shall also bring the first object of the Guild nearer to fulfilment "To make every boy's life brighter and happier."

It should like to remind Club Leaders that recommendations for Special Merit Medallions for the Second Winter Session should be sent before the close of the Session. Last Session many recommendations were made after the Session was ended, with the result that the Medallions were only prepared in February. Complete reports should also be sent in as soon as the last meeting is held, so that I may know the position of each Club at the end of the Session may be sent in at a later date. From the letters that I have received I feel confident that the present Session may be sent in at a later date. From the letters that I have received I feel confident that the present Session was repeated in February. Complete reports should also be sent in at a later date. From the letters that I have received I feel confident that the present Session was be sent in at a later date. From the letters that I have received I feel confident that the present Session may be sent in at a later date. From the letters that I have received I feel confident that the present Session may be sent in at a later date. From the letters that I have received I feel confident that the present Session may be sent in at a later date. From the letters that I have received I feel confident that the present Session may be sent in at a later date. From the letters that I have received I feel confident that the present Session may be sent in a soon as the last meeting is held, and concern the sent in a soon as the last that I may be sent in a soon as the last that the medallions were only repared in February. Complete reports should also be sent in as soon as the last that I have received I may be sent in as soon as the last that the medallions were only prepared in February. Complete reports should also be sent in as soon as the last that the Medallions were only prepared in February. Complete sent in a soon as the last that the Medallions were ended that the Medallions were ended that the may be sent in as soon as the last that the Medallions were ended tha

When members fill up the enrolment form for the Correspondence Club and return it to Headquarters I endeavour to find them a suitable correspondent at an early date. Generally I am able to accommodate them within the next month, but it sometimes happens that this is not possible. For instance, if the request is for a correspondent living in Zululand, who must be a native and able to understand English, it takes some time to fix this up. If a correspondent living in Zululand, who must be a native and able to find one by return of post. Again, boys who require French correspondents to correspondent in English are likely to have to wait for some time because the majority of French boys wish to either write or receive letters in their own language. It sometimes happens that when boys require correspondents abroad I have to get into touch with our agents in that particular country, hence there is further delay. I am always pleased to enrol boys in the Correspondence Club, however, and in every case I am able to place them in touch with suitable correspondents of the Correspondence Club will be sent on application.

How to Run a Successful Meccano Club

Guild Secretary

(Conts nued)

N the case of clubs that have, or are likely to have, a large membership, it is desirable to form a Committee of, say, three or five members in addition to the Leader and Secretary. The boys chosen The Club to serve on the Committee should be capable Committee and enthusiastic, for they have more to do than merely attend Committee meetings and talk.

Although it is not always difficult to start a scheme, it is, as everyone knows, often very difficult to "keep it going." For instance, at the commencement of every year many boys resolve to keep a diary. They purchase a new diary and start the year well by making an entry every day. After a week or so interest dies away, and soon the diary is forgotten. It is the same with many other things in life, including the running of a successful club. It is not the formation of the club that is difficult, but keeping it going week after week, and the necessity for the club officials to give the members a good time at every meeting by arranging an interesting programme. This is one of the reasons why we always insist on affiliated clubs having adult Leaders, for with the greater experience that age brings, it is more often possible to spread the intense enthusiasm of every club member over the whole session, whereas this enthusiasm is often otherwise dissipated in the first two or three meetings.

Next to the Leader the most important work in connection with a Meccano Club remains to be done by the Club Secretary.

Not every boy is fitted to be a Club Secretary. The Club The position calls for Secretary courage, enthusiasm and The boy undertaking this perseverance. position must be possessed of considerable tact, with a capacity for hard work, which often must be carried out under difficult circumstances.

To any boys contemplating the formation of a club I would offer this advice :-Do not rush into this work without thought, but if, after due consideration, you honestly believe that you have the necessary qualifications, go ahead. The work is full of interest, and you cannot fail to gain useful experience. At the end of a year or two, you will have the pleasure and honour that comes only to real workers.

The finding of a Leader is seldom a difficult matter, for in every community there are men deeply interested in the welfare of boys: Schoolmasters, Choosing a Sunday-School Teachers, Scoutmasters, or Club Leader sometimes young business men, are always ready to give a helping hand where boys are eager to do some useful work. Usually the secretary of the local Y.M.C.A. will be only too glad to

times the secretary of an already-estab-

lished boys' club (such as a Scout Club or Boys' Social Club) will introduce a Meccano night. With his guidance and

help, the Meccano night may be made

help by finding a suitable Leader.

the most interesting night of the week. It should be pointed out to him that although his club has its organisation-a club room, a number of members, and the security that only experience can give-the bargain is not all one-sided, for the Meccano enthusiasts will swell the membership of the established club and will introduce to it many highly-enjoyable, interesting and useful features.

It is, of course, often more satisfactory to have a Meccano Club that is entirely separate from any existing club, as it is then under the complete control of the Leader and Committee. These matters may be arranged, however, when a Club Leader has been chosen, for with him lies the final decision.

(To be continued)

Special Merit Medallions

RECENT AWARDS.

Special Merit Medallions are awarded each session to the member of each Club who (1) gives the best lecture, and (2) does efficient work for the Club. The Medallions, which are here illustrated, are beautiful both in design and finish.





They have been specially produced by a well-known firm, and on each is engraved the winner's name.

I give below a list of the boys, followed by the names of their Clubs, who have recently been awarded Special Merit Medallions :

Cross, L., Dewhurst, H., Dowler, H., Eaton, F., Fearn, C., Harrison, S., Meads M.C. "Meads M.C."

"Ethersall M.C."

"Holy Trinity and Radio M.C."

"Boston Model Making M.C."

"Rolleston M.C."

"Ormskirk Wolf Cubs."

"Davenport M.C."

"Parkstone Congregational M.C."

"Meads M.C."

"Peterbrough M.C." Harrison, S., Helm, E., Jacobs, C., Laycock, J., Marsh, A., Osborne, A., Plank, F., Shepherd, L., Sibley, J., Stoker, A. D., Toon, E. P., Turney, A., Whitworth, C., Whorton, C. Peterborough M.C. "Peterborough M.C."

Sparkbrook M.C."

West View M.C."

Knutsford Lecture Hall M.C."

Luton M.C."

Davenport M.C."

Rolleston M.C." "Peterborough M.C."
"Dudley M.C."
"Dudley M.C."

I hope we shall find that more members have been persuaded to read papers this session.

There is no better training for boys than that they should stand up before their friends and address them in this way. Any subject may be selected (Radio, Engineering, Nature Study and Stamp-Collecting are all good topics), and I am sure that members may count on assistance in the preparation of their papers from their Leaders or parents. After the papers have been read they should be sent to me with the Leader's recommendation, so that I may judge which is the best, and award Special Merit Medallions accordingly.



Meads M.C.—A Model Building Competition was held recently in a local hall and many excellent models were built. Meetings are held every Saturday evening from 8.30 p.m. until 9 p.m., and new members will be welcomed any Club evening. Secretary: Master F. Coombe, Fire Station, 44, Meads Street, Eastbourne. Wisbech M.C.—The last Session was very successful and terminated with a grand Social, to which parents and friends were invited. The present Session is proving quite as successful, and an Exhibition of models was held in January. The Savings Bank is a popular asset to the Club. Secretary: Master S. Ketteringham, 99, Norwich Road, [New Walsoken, Wisbech.]

is a popular asset to the Club. Secretary: Master S. Ketteringham, 99, Norwich Road, [New Walsoken, Wisbech.

Glenelg (Australia) M.C.—A novel display of models was recently organised by this Club. The display took the form of a river spanned by a swing bridge, over which a Hornby train ran continuously. A steamer sailed on the river, on the banks of which stood a realistic workshop. When the whole was in motion the display won the whole-hearted approval of all the visitors. The new Session commenced on February 6th, with a membership of 26. Secretary: Master F. Squire, 41, Osmond Street, St. Leonards, Glenelg, South Australia.

White Notley M.C.—Club activities during the Session have consisted of model building, lectures, competitions, and exhibitions, and the Club continues to make excellent progress. A Cinematograph Display is to be a special feature of the present Session, and a Lantern Lecture, which is to be given by the Rev. Goodhart, is eagerly anticipated. Secretary: Master F. W. Fox, 2, Station Road, White Notley, nr. Witham, Essex.

Mew Malden M.C.—The Club held a display of models at the beginning of the Session. This was followed by four short lectures given by members of the Club, and later in the evening the Club Leader gave an address on "Hydroplanes." The visitors were very interested in the lectures given by the members, for three of the lecturers were each only nine years of age. Master H. Baker spoke on "The Hornby Clockwork Train," Master V. Smith on "Cranes," and Master Morgan on "The Steam Engine." A fourth lecturer gave a lecture on "Giant Steam Shovels." Secretary: Master E. Alcorn, "Springfield," 7, Poplar Grove, New Malden.

St. Luke's (London, W.18) M.C.—Owing to a number of the boys leaving school, the last Session has not

New Malden.

St. Luke's (London, W.18) M.C.—Owing to a number of the boys leaving school, the last Session has not been as successful as those held hitherto. The Club has now been reorganised, however, and good progress is again being made. New members are required, and any boy living in the vicinity should get into touch with the Secretary. Secretary: Master L. Burgess, 166, Wornington Road, North Kensington, London, W.10.

Cohbam M.C.—At the close of the first Winter.

Cobbam M.C.—At the close of the first Winter Session a Christmas Party was arranged. This was a great success, and was attended by thirty members, together with their friends. Club activities are proceeding as usual during the present Session. Secretary: Master W. Phillips, Fox & Hounds, Cobham, Surrev.

Surrey.

9t. Mary's (Newington Butts) M.C.—This Club is the hous in the 3t. Mary's (Newington Butts) M.C.—This Club is accomplishing useful work among the boys in the vicinity of Newington Butts, S.E.11. In addition to the ordinary work some very interesting lectures have been given by local gentlemen. The Rev. C. R. J. Day gave a lecture on "Ants," while Capt. Kennedy, R.A., delivered a lecture on "Birds." Both were greatly enjoyed by the Club members, as also was the Rev. L. W. Slade's lecture on "Australia." This lecturer brought home the beauty, extensiveness and possibilities of this Colony very vividly to his listeners. A successful Concert was held recently in aid of Club funds, and a Club Magazine is now being issued. Altogether the Club is making considerable headway. Secretary: Mr. C. Curle, 37, Pullens Buildings, Peacock Street, London, S.E.

Melton Mowbray M.C.—All the members are keen and enthusiastic and are doing their utmost to bring new recruits into the Club. In this they receive full encouragement from their capable Leader, Mr. York. A Minstrel Troupe is being organised, as several of the members are interested in work of this kind. Secretary: Master H. White, 25, Bayswater Read Melton Mowbray

several of the members are interested in work of this kind. Secretary: Master H. White, 25, Bayswater Road, Melton Mowbray.

Peterborough M.C.—This Club held its first Exhibition at the close of the last Session and it was attended with complete success. A very high standard of models was exhibited, including such models as a Workshop with drill, lathe, polishing spindle, illuminated with electric light; a Beam Engine and a Well Borer, both electrically driven; Windmill, Big Wheel, Swing Bridge, Delivery Chute and Tower Lantern. In addition, a realistic railway track was laid out, over which a Zulu Tank Loco and a Hornby No. 1 Goods Train ran during the Exhibition. It is hoped to hold another Exhibition in the near future. Secretary: Master A. Turner, 51, Granville Street Peterborough.

STAMPS FOR SALE

(See also page 76).

Free to Applicants for Approvals.

Free to Applicants for Approvais.

Set Large Pict. French Morocco

One of the most beautiful sets ever issued, depicting
The Temple at Rabat and Castle Gate at Fez.

Or any one of the following:—
7 Pictorial Turkey.
5 Sonora (cat. 2/3).
15 Pict. Edenburg.
10 White Russia (cat. 3/4).
16 Whenel on France.
10 White Russia (cat. 3/4).

5 Memel on France.

10 White Russia (cat. 3/4).
Ask for particulars of how to increase your collection
for nothing.

ALBAN SIMMONS, HILLSIDE, NEW BARNET.

FREE! KING'S HEAD PACKET

(containing twelve varieties) to all applicants for my cheap Approval Books. A FURTHER FREE GIFT of a set of mint stamps is sent to purchasers of any of the following 2/6 Packets which I am offering at 1/each to clear:—German Provisionals, Hungary, Belgium, Bavaria, Austria, War Collection, Holland, France and Sweden.

PERCY DUNBAR, 19a, Barnard Rd., S.W. 11

All different.

Postage extra.

PHILIP J. DYKE, 122, Gladstone Rd., Wimbledon

-200 different, 1/3; 1,000 different, 6/6; 200 British Colonials, 4/-. Place, Woodhurst, Huntingdon.

SET OF 10 HYDERABAD FREE to appro. applicants. Try my &d. Booklets. S. Huckle, 53, Birkenhead Avenue, Kingston-on-Thames.

PAPUA PICTORIAL, HOLLAND PROVISIONAL, Fiume (brig), Zanzibar, Turkestan, Jamaica pictorial, German official, Ceylon, set of 50 unused, etc.; 110 different in all, 3d. if you request approvals (9d.

O. HOLLOWAY, 28, HEYBURN ROAD, LIVERPOOL.

5/- Mounted Collection for 1½d. post. Incl., Jamaica (judicial), Paraguay, 4 Prussian offici'ls, Tasmania (pict.). Request approvals. Stammers (M), 51, St. George's Rd., Leyton, E.10.

1000 MIXED STAMPS 1/-, 5000 4/6. Cranwell, 55, Cowslip Road, London, E.18.

Thousands of stamps at \(\frac{1}{4}\)d. each. Don't pay more. Send p.c. for cheapest approvals in Britain. Exchange with Colonies. Splendid cheap packets. Pollett, \(6\), Edith Road, London, W.14.

CATAPULTS

Of new and original design. Very accurate. A handy little pocket weapon for Garden, Field, Farm, or Target work, only 1/9 each, postage 3d. (usual price 2/6). Supply ammunition included.

IDEAL NOVELTIES (M. Dept.), Oldchurch Road, Clevedon, SOMERSET. (Money returned if dissatisfied).

Ventriloquist's Instrument, Invisible.
Astonishes. Mystifies. Imitates Birds,
Beasts. Lot 1/- (P.O.) Larger Parcels,
2/-,5/-—WONDER CO. Dept. M., 4S.
George Street, WESTON-SUPERMARE. (Business by Post only).

AUTOMATIC PEA PISTOL

Loads 15 shots, repeating action, nicely finished, each in box with instructions and supply of ammunition post free

No.

1 Black model with nickelled trigger ... 2 Brightly nickelled throughout ... 1/9
Send p.c. for 1924 Catalogue. J. BISHOP & CO., (M),
12, Argyll Place, Regent Street, LONDON, W.1.

A Model Steam Engine

A Model Steam Engine

Our readers will be specially interested in the "S.T." steam power plant advertised on page 84, for the engine included in this plant is suitable for driving simple Meccano models. The engine is of the oscillating single-cylinder type. The castings used are of the best gun metal and the boilers are brazed throughout. Incidentally it may be mentioned that one of these boilers tested to destruction did not burst until a pressure of 520 lbs. was reached!

Messrs. Stuart Turner Ltd., the makers, have submitted a specimen Outfit to us and we can testify to the high finish of the parts. The cylinder, piston, cross-head, etc., are beautifully made. It should be noted that the plant is sent out in parts, but the full instructions enable any intelligent boy to assemble these in less than an hour. The engine works very realistically and revolves at a high speed.



EDITORIAL AND ADVERTISING OFFICES :-BINNS ROAD, LIVERPOOL.

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).

Small advertisements are inserted in these columns at 1/- per line (average seven words to the line), or 10/- per inch (average 12 lines to the inch). Cash with

BINDING CASES to take a large number of copies of the "M.M." are supplied at 3/- each post free. These cases, which have a strong stiff back covered with imitation leather, are lettered in gold and fitted with special spring clip.

Obtaining the "M.M" Overseas

Readers Overseas and in foreign countries may order the Meccano Magazine from regular Meccano dealers, or direct from this office. The "M.M." is sold Overseas at 2d. per copy, or mailed (post free) direct from Liverpool, 1/6 for six issues, or 3/- for twelve issues.

twelve issues.

IMPORTANT.

Overseas readers are reminded that the prices shown throughout the "M.M." are those relating to the home market. Current Overseas Price Lists of Meccano Products will be mailed free on request to any of the undermentioned agencies. Prices of other goods advertised may be obtained direct from the firms concerned. firms concerned. CANADA:

Meccano Ltd.,
45, Colborne Street, Toronto.
Messrs. E. G. Page & Co.,
379, Kent Street, Sydney.
NEW ZEALAND: Messrs. Browning Ifwersen Ltd.
P.O. Box 129, Auckland.
SOUTH AFRICA: Mr. A. E. Harris,
P.O. Box 1199, Johannesburg.

Teacher: "What is 'forced rhubarb'?"

(who has had "FORCE" for breakfast every Bobbie morning): "Please teacher, Rhubarb and 'FORCE'

Yet Bobbie was right - although it was not the answer teacher expected. Bob was thinking of * FORCE-D" rhubarb, which is a dish he is very fond of.

You would like "FORCE-D" rhubarb because the crispy brown flakes of toasted malted wheat give you something quite different, far nicer than the ordinary stewed rhubarb you have been used to. "FORCE" is such a fine food for health and strength that mother will

not mind at all if you ask her to let you have it regularly. Have "FORCE" for breakfast with hot milk (it needs no cooking), and when you have rhubarb, have "FORCE" too, and find out for yourself how delicious "FORCE-D" rhubarb

FREE SAMPLE.—Send your name and address to "Sunny Jim," Dept. A.Y.8, 197, Gt. Portland St., London, W.1., and he will send you a nice trial packet of "FORCE" containing enough for two good meals.







/ E give on this page the final puzzles in the competition announced in our January issue. This competition has extended over three issues and is for Guild members only. We would remind our readers that each puzzle is numbered, and that entrants are to write their solutions on a post card alongside the number of the puzzle concerned. Solutions for the final series must be received in this office before the 25th March, on which date the competition will close. On 25th March we shall classify all the entries received, and the winner will be the competitor who has given the greatest number of correct solutions to the three sets of puzzles.

Those who have sent in answers to the previous puzzles should send in their replies to the puzzles on this page, even though their answers to the previous puzzles may not all be correct. It does not follow that the winner will be able to give correct answers to all the puzzles. We have given some real "posers," as we know our readers are far too sharp and clever to be interested in "ordinary" puzzles!

The first prize will be Meccano Products to the value of £2 2s. 0d. Second and third prizes to the value of £1 1s. 0d. and 10s. 6d. respectively, all to be selected from our current catalogue by the winners.

March Puzzles

Remember that this Competition runs over three months, and in addition to the puzzles on this page, entrants were required to solve the puzzles in the January and February issues in order to qualify for a prize. This Competition is open to Guild members only, and full particulars in regard to joining the Guild will be sent (post free) on application, to any of our readers who are not already members.

No. 11

What is it that men love more than life, Fear more than death or mortal strife, The poor man has, the rich man wants, The miser spends, the spendthrift saves And all men carry to their graves.

No. 12

The tail of a fish weighs 3 lbs., the head weighs as much as the tail and half the body, and the body weighs as much as the head and tail together. What is the weight of the fish?

Mary is 24 years old. Mary is twice as old as Ann was when Mary was as old as Ann is now. What is the age of Ann?

The sum of the ages of Mary and Ann is 64 years. Mary is twice as old as Ann was when Mary was half as old as Ann will be when Ann is three times as old as Mary was when Mary was three times as old as Ann. What is the age of each?

A ship with a crew of 175 set sail with sufficient water to last the voyage, but after 30 days an epidemic carried off 3 men daily, and a storm protracted the voyage 3 weeks. The water supply just lasted, however, until she reached her destination. Of how many days was the voyage?

No. 16

A and B travelled on the same road and at the same rate from H to K. At the 50th milestone from K, A overtook a flock of geese proceeding at the rate of 3 miles in 2 hours, and 2 hours afterwards he met a wagon moving at the rate of 9 miles in 4 hours. B overtook the geese at the 45th milestone and met the wagon 40 minutes before he came to the 31st milestone. How far was B from K when A arrived there?

Answers to Last Month's Puzzles

No. 6

SOLUTION TO THE SHUNTING PUZZLE:

SOLUTION TO THE SHUNTING PUZZLE:

(1) Loco A with 13 wagons, moves forward and then shunts back into siding S, clear of the single line.
(2) The train B then proceeds past the siding, taking A's remaining wagons and itself clear of the siding.
(3) Loco A and its 13 wagons then come out of siding S and advance far enough to allow train B to deposit the remaining wagons of train A in siding S. Train B then proceeds to its destination, while loco A and its 13 wagons return to the siding, pick up their remaining trucks, and then proceed on their journey.

No. 7

Come landlord fill the flowing POTS, Until the TOPS run over, To-night we'll STOP upon this SPOT.

To-morrow POST to Dover.

No. 8: Smith.

No 9

Were "but" but "and," and "and" but "but," "but and and" were "and and but," and "and and but" but "but and and," and "but and but" but "and and but" but "and and and." and," and "but and but" but "and and and but." but "but and but."

No. 10: 22 miles.

We offer a prize of 5/- for the best puzzle submitted each month, and prizes of 2/6 each for any other puzzles printed.

Puzzles should be expressed as clearly as possible and the answers should be given in each case. Diagrams should be clearly drawn and letters should be addressed "Puzzles," Meccano Magazine, Binns Road, Liverpool.

Dick: "I say, dad, is oxygen what oxen breathe l day?"

all day?"

Father: "Of course—and it is also what every other creature breathes."

Dick: "And is nitrogen what everyone breathes at night?"

Mr. Brown: "What's the idea of these china dishes on my wireless set?"

Mrs. Brown: "You ought to be glad I put them there because now you can tell Mr. Jones that you got China on your radio."

"When Jack and I are married, I'm going to have three servants."
"You will probably have twenty-three, my dear—

but not all at

ireside fun.

Aunt Dorothy: "How many Comthere, Johnny?"

Johnny: "Ten."
Aunt Dorothy:
"Suppose you were to break one of them?"

Johnny (hopefully): "Then there'd be nine.'

Bribery in the Pantry

Grace: "Oh! Fred, stealing jam! I'm going to ill mother." Fred: "Wouldn't you rather have some jam?"

It Served Them Right

Minister's Wife: "Wake up! There are burglars in the house."
Minister: "Don't get excited, dear, let them find out their mistake themselves!"

The late Lord Halsbury once visited a certain lunatic asylum in

his official capacity.
"I'm the Lord
Chancellor," he announced to the attendant at the door.

The man looked at him curiously for a moment.

"This way, sir," he said very firmly. "We have three more of 'em in here.

"There's a man outside; sir, that wants to see you about a bill you owe him. He wouldn't give his

"What does he look like?"
"Well, he looks as though you'd better pay it."

Q: What is the difference between a hairdresser and a sculptor?
A: One curls up and dyes and the other makes faces and busts!

Q: Why is a moth flying near a candle like a farmyard gate?
A: Because if it keeps on it singes its wings!

*

Inventors are never taken seriously—even Edison made light of his theories!



" Father," said Dick, looking up from his Meccano, " I saw a deaf and dumb beggar in the street this afternoon,

pediment in his speech!" "Don't talk nonsense!" exclaimed father.

"But he had," insisted Dick; "one of his middle fingers was missing!

Shopkeeper: "What can I do for you, my boy?"
Boy: "Please, I've called about your advertisement for a man to retail canaries!"
Shopkeeper: "Yes, and do you think you could sell the birds?"
Boy: "Oh, no, sir! I only want to know how your canaries lost their tails!"

* * * *

George: "It's funny that the pupil of the eye

never learns anything!"
Harry: "Yes, and it's also curious that the bridge of the nose is never crossed, and that the roof of the mouth is never repaired!"

Small **Advertisements**

(For Rates see page 82)

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

ADVICE, HANDBOOK & CONSULTATION FREE. King, Registered Patent Agent, 146a, Queen Victoria Street. London, E.C.4. 37 years' references.

MAKE YOUR OWN ELECTRIC LIGHT

These wonderful Dynamos light brilliantly a 4-6 volt lamp, and take very little power to drive. Dynamos 5/-. Post 6d.

Special "De Luxe " Model, giving over twice the output, 7/6. Post 6d.



GREENS

(Dept. N.), 85, New Oxford St., London.

HOW TO BE TALLER

TALL, CRACEFUL. She or he gets attention, respect, and admiration. You can be 2, 3, or more inches taller. Surprise your friends. Send only 14d. stamp. M. M. Edison, 51, Church Street, South Shore, Blackpool.

The Practical Electrician's Pocket Book contains 570 pages of useful text, tables and data simply and clearly worded. Recommended by the Editor of Meccano Magazine. Price 3/4 post free from Rentell, 36, Maiden Lane, Strand, London.

reden Cyclometer

FITTED TO YOUR BICYCLE TELLS YOU:—

How far you have been : Distance from one place to another; Service your Tyres give you; Number of Miles to Destination; Distance Travelled, etc.

Makes your Riding doubly interesting. Its accuracy has been endorsed by all the best authorities, and the experience of your fathers for 26 years.

1/4/3/7/5 Insist on a Genuine Veeder. See the Name thereon. Beware of German Imitations.

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Is your father alive?

Yes? That's good. That's why you can afford a Meccano Outfit. 165 years ago we began to take care of boys and girls whose fathers were dead—very often mother was dead, too. 7,000 orphans have been saved from poverty, fed, clothed, educated and started in life. 300 are now at our School at Haverstock Hill, dependent upon us for everything. Talk to your father about this. Tell him that our bread bill alone comes to £3 each day. Ask him if he can, and will, help us. Ask yourself too. Perhaps you would like to send something for our large family. Would you? Please reply to Mr. Fred J. Robinson, Sec., 73, Cheapside, London, E.C.2.

Alexandra Orphanage

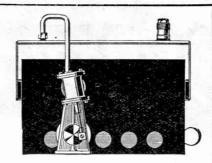
(Incorporated as the Orphan Working School and Alexandra Orphanage).

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"Meccano" Pen Coupon. Value 3d.
Send 5 of these coupons with only 2/9 direct to
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You will receive by return a splendid British
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with double-acting cylinder, 7/16 x 7/16 in

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HENLEY-ON-THAMES.

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FOUNTAIN PEN Nickel-Plated.

Post free for 1/- P.O. (Fine, Medium or Broad Nib) E. M. Creasy, The Bazaar, Tregenna Hill, St. Ives, Cornwall.

CATALOGUES RECEIVED

We have received the following catalogues this month. Should any of our readers write to the firms concerned, they will assist us by mentioning the "Meccano Magazine."

A new price list has been sent to us by Mr. A. Kristich (82, Marchmont Street, Russell Square, London, W.C.1), which shows many reasonably-priced stamps and cheap packets. This advertiser carries practically a complete stock of post-Armistice issues of Mint British Colonials, stamps that are a splendid investment for the present control of th investment, for they never recede in price. Any reader interested in the collection of unused British. Colonials will find this price list of great assistance. The list will be sent free on application.

Messrs. Hobbies' Ltd. (Dereham, Norfolk) new catalogue of 200 pages (price 9d. post free), is a comprehensive guide to all branches of fretwork, with a very interesting section devoted to models of locomotives, motor cars, aeroplanes, etc. A large section is devoted to an array of tools of the finest quality that make for neat and accurate working. The catalogue also deals with the art of picture framing, materials, machines, fretsaws, etc., and includes over one hundred pages of designs, ranging from dolls' furniture and simple brackets to handsome china cabinets over 2 ft. in height. Carpenters' and Joiners' Outfits range in price from a simple outfit at 9/6 to an elaborate tool chest price 55/—. Fretwork Outfits range from small sets price 4/— to elegant cabinets price 57/6. The catalogue is beautifully printed on art paper, and is a vade mecum to workers in wood.

Into the Land of Fun-(cont. from p. 63)

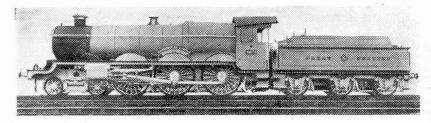
direction or the other. Steering is effected by a $\frac{1}{2}$ " pulley wheel fixed on a rod, at the lower end of which is a 11 pulley wheel. A cord wound twice around this pulley is connected to a double angle strip in which the steering axle is journalled.

This Tipping Wagon may be employed with great advantage as an accessory to a Hornby train system, by using it to transport loads from the sidings to some distant point or vice versa.

NEXT MONTH:

SOME USES OF NEW PARTS

Interesting Railway Publications



E have a very large selection of photographs of Locomotives-ranging from the early examples of Hackworth and Stephenson to the modern mammoths working famous express trains on the British Railways, such as the Cornish Riviera Express, Great Western Railway—Scotch Expresses on the L.M.S. and L. & N.E.R.—Continental Boat Trains, Southern Railway. Sample 8×6 photo of G.W.R. "Caerphilly Castle," L.M. & S. "Croxteth" or L. & N.E.R. "Pacific" sent post free for 1/8.

PHOTOGRAPH CARDS of locomotives forming the four groups—viz., G.W.R., L.M. & S., L. & N.E. and Southern (Four sets)—12 cards in each set, price 3/9 per set post free.

COLOURED CARDS—Nine sets of twelve in each, comprising locomotives—trains—stations, etc. Price 1/6 per set post free—or 13/- the complete collection.

PICTURE STAMPS—72 illustrations in colour of locomotives—trains and railway scenes. Price 1/3

SOUVENIR OF GREAT WESTERN LOCOMOTIVES—containing twelve collotype reproductions SOUVENIR OF GREAT WESTERN LOCUMENTS.

of modern locomotives—price 2/9 post free.

CHART OF LONDON & NORTH EASTERN—Pacific Type Express Locomotive—size 20×30—showing all details of construction—price 1/8 post free.

List of photographs, slides, etc., sent free.

F. Moore's Railway Photographs, 3, Amen Corner, LONDON, E.C.4

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to Children under 12 years of age

AN EASY COMPETITION

Just write a little story (not exceeding 150 words) telling us what fun you would get out of a Fairycycle if you had one given you.

The 3 Boys or Girls who send in the best description of uses will be given a Fairycycle FREE.

Write on foolscap and insert at the end the name and address of the Toyshop or Store nearest to where you live, which stocks the real Fairycycle, also your own name, address and age.

Be sure the shop stocks the Real FAIRY-CYCLE, you can tell by looking for the Triangular Trademark and the word Fairycycle on the Frame.

The winners will receive their Fairycycles through the Shop they name in their letter as stocking them.

If no Toyshop or Store near you stocks the Fairycycle, then say so and give the name of one or two who should.

Entries must reach us not later than March 10th, 1924.

The decision of Lines Bros. will be final.

Names and addresses of winners will be published in the April issue of Meccano Magazine.

Mark your envelopes 'Fairycycle Competition' and send them to Lines Bros. Ltd., 9, Fore St., London, E.C.

No employee of Lines Bros. may compete.



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