

Preparing Stamps for Mounting

BEFORE we mount the stamps in our album it is necessary to take off any paper that may remain on their backs. Sometimes I am shown collections in which stamps have been mounted with large portions of envelopes or wrapping paper adhering to them. Such unsightly objects quite spoil the appearance of the whole collection. As only untidy people omit to remove the paper to which a stamp was affixed, I have little fear that Meccano boys will indulge in such lazy methods of mounting their stamps.

Don't "Soak" Your Stamps

Now, in taking stamps off their original covers some amount of care is necessary. It is not satisfactory to drop a handful of stamps into the wash-basin, and there let them soak indefinitely, however convenient that method may seem! One of the reasons against this is that many stamps are printed in what are called "fugitive" inks. These inks are employed to baffle those misguided gentlemen who endeavour to gain a dishonest livelihood by cleaning the cancellation marks off stamps, so as to be able to use them again! Fugitive inks smudge and run at the first hint of water or sometimes even of dampness. So unless you wish to spoil some of your stamps the removal of the paper must be done scientifically. Take a flat dish filled with cold water and gently lay the stamps on the water, one at a time and face upwards, so that only the backs of the stamps are in contact with the water. It is better to keep the stamps quite separate, for if one is placed on top of another the face of the stamp underneath is wetted and the object is frustrated.

Drying the Stamps

In about ten minutes the stamps may be removed one by one, care being taken not to splash the faces of the others in the dish. You will then find that the paper will come off the back of the stamps with ease. The stamps may then be placed in rows on a sheet of clean white blotting paper, face downwards, and left for a few hours to dry, when they are ready for mounting in the album. Do not put the stamps in the album until they are really dry, otherwise they are sure to stick to the page.

Sometimes it may be decided to remove the stamps from their covers before sorting them, if there are not too many. With others, however, the postmark on the wrapper may be of assistance in identifying the stamp, and if the soaking is done before the classification this assistance is lost when it is removed.

Choosing an Album

Although albums may be purchased at almost any price from 1/- to £50, it is not advisable to begin with an expensive album, since stamp collectors are noted for changing their albums. As we grow

more experienced we learn more about albums and their varied advantages, and then we are better able to decide exactly which kind of album suits our particular taste and requirements.

Then, too, after collecting for a few years we may decide to specialise or to concentrate our attention on some particular country. Then we shall require a different type of album to that required for a general collection. I myself first used a cheap album embracing all countries in the world. Finding I had not sufficient room I transferred my collection to a large foolscap loose-leaf album in which I provided a space for every stamp issued. This album soon extended to four large and bulky volumes in which there were more blank spaces than stamps! Deciding soon after to specialise in British Colonials I transferred that part of my collection to cards, which I have now in a six-drawer filing cabinet. Such an "album," with one card to each stamp and used and unused on the same card, may be said to be very efficient, but like all albums, it has its drawbacks! I only mention it to show how easily a system may be changed. When I adopted the loose-leaf album I felt quite certain I should never alter this system, but later I changed to cards because, in the light of further experience, they seemed to suit my purpose better.

For the beginner, a good 10/6 album will serve the purpose admirably. As we remarked last month, a catalogue is essential. If you cannot afford both album and catalogue at once, it is best to buy the catalogue first and to use an exercise book until funds permit the purchase of an album, or until a birthday comes along.

Mount Your Stamps with Hinges

Stamps should be mounted with stamp mounts, which may be bought for a few coppers a thousand at any stamp dealer's. On no account should stamps be stuck down to the page with gum. A boy once did this, and soon afterwards, wishing to alter the arrangement of some of his stamps, found that he could not do so. They were all stuck firmly on the page, from which nothing short of cutting or tearing would remove them. I know another boy who had run short of stamp mounts one wet afternoon and was so anxious to mount his stamps that particular day that he actually used Seccotine! Never be tempted to use the clean gum of an unused stamp to attach it to the page, for the value of the stamp depends on keeping this gum intact and undamaged.

To mount a stamp in the correct manner the stamp hinge is folded over with the gum side outwards. It is then slightly moistened and affixed to the top edge of the stamp. Then moisten the other part of the hinge and mount the stamp in position on the page of the album. Thus the stamp is attached to the page by a paper hinge, and may be lifted so as to show the underside without being removed from the page. The beauty of using hinges is that they will peel off cleanly when required, leaving no mark on either stamp or page to show where they have been.

Think First

In arranging your stamps you cannot do better than follow the catalogue order. Blanks may be left for the stamps required to complete sets, and spaces for sets that have yet to be collected. The more forethought you give to arranging the

stamps in their correct places, the less time you will have to spend in altering the arrangement later. If you do have to alter, you will appreciate the assistance of the stamp mounts, which many beginners despise, but which the experience of practical collectors has proved to be invaluable.

We have not as yet dealt with such details as plate numbers, watermarks and perforations, but as these are of great importance and affect the value of a stamp, we shall give them space. Often, too, a knowledge of paper is necessary to identify some particular issue, and we shall therefore deal with this subject as briefly as possible in one of our succeeding issues.

NEXT MONTH.

PLATE NUMBERS & WATERMARKS

New Issues

Irish Free State



The stamps of the Irish Free State have aroused great interest among stamp-collectors. On 6th December, 1922, after ten months of endless varieties of surcharging on English stamps, the State issued the first stamp that was its own



from beginning to end. This was the 2d. Map design. Since then the 1d. and 1½d. values have been issued in the same type; the ½d., 5d. and 1/- have been issued in the "Sword of Light" design; the 3d. and 10d. in the Celtic Cross design; and the 2½d., 4d. and 9d. in a type which shows the arms of the Four Irish Provinces. All are printed at Dublin Castle on paper watermarked "S.E." (the initials of Saorstát Éireann, "Irish Free State") and perforated 15 x 14 in sheets of 240 stamps.

France

PASTEUR COMMEMORATIVES.

Three French stamps of the values 10, 30 and 50c. were issued on 25th May last to commemorate the anniversary of the birth of Louis Pasteur, the famous French scientist, who was born in 1822. Each of the three is of the same type and shows a portrait of the great man. The stamps appear to be coming into regular circulation, and superseding the old type for these values. They were engraved by M. G. Prudhomme and are being printed at the Government Printing Establishment, Paris. R.K.G.



BOYS! Get the most out of life—buy an AUTO SCOOTER

THE popularity of the AUTO-SCOOTER amongst boys and girls is becoming greater than ever. Think of the exhilarating joy of gliding along on a fine spring day with the wind cutting your face and your whole being thrilling with keen excitement! Isn't it a happy thought? Our AUTO-SCOOTERS are built on scientific lines and will give long and excellent service, even with the roughest handling.

Be sure you ask for an AUTO-SCOOTER for your next present!

THE AUTO-SCOOTER IS THE SPORTY TOY FOR THE SPORTY BOY.

Prices to suit all pockets. Send for list of 6 different models.

Splendid Essay Competition

for boys under 14

WHAT YOU HAVE TO DO.

Write an Essay of not more than 500 words on "Why I should like an AUTO-SCOOTER for my next present." Then send it to the Editor of the "Meccano Magazine." Closing date for entries from the United Kingdom 31st March, Overseas 30th April next. The Editor of the "M.M." has kindly consented to act as judge, and for the two best essays we will give the following—

First Prize: Our Model-de-Luxe Scooter, as illustrated.

Second Prize: Our Popular Model with Solid Tyres.



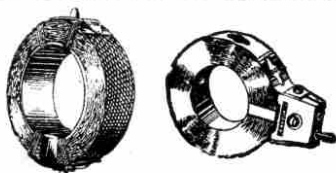
Model-de-Luxe Scooter

This is the
FIRST PRIZE
in our
SPLENDID ESSAY
COMPETITION

The New Auto-Scooter Company,
CHESTERGATE, STOCKPORT.
STOCKED BY ALL LEADING TOYSHOPS.

FOR DEPENDABILITY OF OPERATION USE

"IGRANIC" RADIO DEVICES



HONEYCOMB INDUCTANCES

(De Forest Patent No. 141344).

These world-famous coils are renowned for their high efficiency, low self-capacity, small absorption factor and minimum high frequency resistance. No dead-end losses. Each turn surrounded by air pocket. Made in two types, gimbal and plug mounted. Wave lengths approximately 100 to 25,000 metres. The only coils that uphold their claim for negligible losses. Prices vary with sizes.

GIMBOLDER TUNING STAND (Patent Applied for)



This coil holder has been designed and produced for accommodating gimbal mounted honeycomb coils, which enables extremely fine settings to be obtained. In addition to the angular relation of these coils being varied, they can also be rotated about their own axis, thus giving extremely fine and critical adjustment when used on selective and regenerative circuits.



INTERVALVE TRANSFORMERS

(Patent No. 205013)

Designed for the distortionless reproduction of speech and music. The steel shroud effectively shields from external interference. Recent improvements in design render it the finest amplifying transformer obtainable. Prices: Shrouded, 21/- Open, 20/-.

Other manufactures include:—

VARIOMETERS. VARIOCOUPERS

COIL HOLDERS.

TELEPHONE TRANSFORMERS.

VERNIER FRICTION PENCILS.

HIGH FREQUENCY

TRANSFORMERS.

etc., etc.

Write for Lists Z.146.



FILAMENT RHEOSTATS

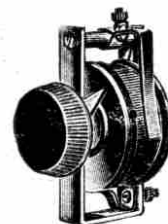
(Patent No. 195903).

A splendid instrument for filament control under all conditions. Novel method of construction ensures smooth and silent operation. Designed for individual valve control. Adjustable contact fingers permits of resistance values from zero to four ohms by fine variation. Supplied in two types, plain and vernier. Prices: Plain, 4/6. Vernier, 7/-.

BATTERY

POTENTIOMETER

An Igranic Potentiometer is a necessity where one or more stages of high frequency amplification is used. Stabilises grid and eliminates noises and self-oscillation. Resistance 300 ohms. Current consumption negligible. Nickelled finish, complete with fixing screws, knob and pointer. Price 7/-.



Glasgow.

Manchester. Queen Victoria St.,

Bradford.

149,

LONDON.



Works:
Elstow Road,
BEDFORD.

Cardiff.
Newcastle.
Birmingham



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).

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.

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.

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

Meccano Boy takes Photo from the Air

Results of the Fifth Photographic Competition

Winter weather and short days do not seem to damp the enthusiasm of Meccano photographers! In fact there have been even more entries than usual for the Fifth Photographic Competition, including some very interesting prints. The standard of the work submitted is higher than usual, and it is noticed that the majority of competitors seem to prefer the Miscellaneous Section, no doubt because of the wider scope offered.

The First Prize in Section A (under 14 years of age) has been awarded to Master James Ford, of Cow Lodge, Invergowrie, for an excellent animal study of young pigs. The First Prize in Section B goes to Master M. R. Crofts, of Moseley Birmingham, who sent in a very interesting snap of the Victoria Pier at Blackpool, taken from an aeroplane. "When we were flying at 90 miles an hour," writes this enthusiastic photographer, "I leaned over the side of the plane to try to take a photograph of the new Swimming Bath (the largest in the world), but the rush of air was so great that I was forced to retreat back to my seat. After taking a deep breath I again leaned over the side and then managed to secure a photo of the Pier and part of the Swimming Baths." It is difficult to secure a clear photograph

from the air, and Master Crofts is to be congratulated on his success.

Hawk-Eye Cameras, made by the Kodak Company, have been forwarded to these two boys, and also Meccano goods to the value of 5/- to the following competitors, who gained second and third places in each section. Section A: Master R. P. Ingram, of Beckenham, Kent, for his photograph of a lake, and Master Harold Scott, of Arnley, Leeds, for a study of a dog. Section B: Master S. Shearing wins the second prize with a fine photograph of the painting on a church wall. The third prize in this section has been awarded to Master Leslie G. Davy, of Ealing, for his photograph of a mountain stream.

The Sixth Photographic Competition has already been announced in the December "M.M.," and full particulars will

be found on page 12. Competitors should remember that the most suitable prints for reproduction are those in which details are sharp and well defined. Gas-light prints usually give the best results, though all prints are judged entirely on their merits as photographs, and receive equal consideration irrespective of the paper on which they are printed, or whether or not they are mounted.

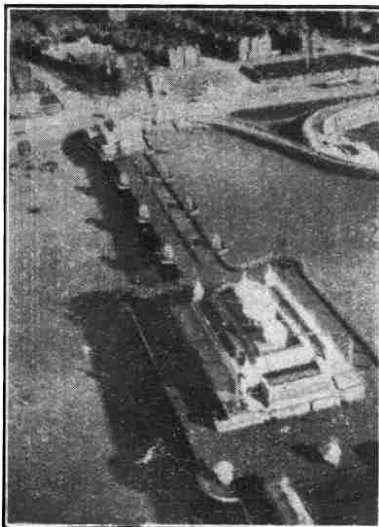


Photo by]

[M. R. Crofts

Blackpool Pier from the Air



Photo by]

[James Ford

A Study in Black and White!

Books of Joy!

From the few books detailed below you will be able to get a tremendous amount of pleasure. For 13 years the Wireless Press has devoted its energies to publishing books on wireless, and in our catalogue we have no less than 75 wireless publications. We shall be glad to send you a catalogue upon receipt of a postcard.

THE HOME CONSTRUCTOR'S WIRELESS GUIDE. Price 3/6, by Post 3/9

This is the most complete book yet issued for the home constructor. If you want to make wireless apparatus, get this book. You cannot beat it.

THE WIRELESS ANNUAL, 1924. Price 2/6, by post 2/11

Full to overflowing with valuable information, the Annual includes amongst its contributors Senatore G. Marconi, Dr. W. H. Eccles, Sir William Noble, Phillip R. Coursey, Major H. C. Parker, Captain P. P. Eckersley, W. G. W. Mitchell, etc. In addition the Annual provides you with a full, up-to-date list of Amateur Call Signs, including French Stations, Regular Transmissions of European Wireless Stations, Call Signs of all Land and Aircraft Stations, Directories of Wireless Societies, Manufacturers and Retailers of Sets and Accessories, Definitions of Technical Terms in five languages, a host of useful tables and other general information. GET YOUR COPY TO-DAY.

MAST AND AERIAL CONSTRUCTION FOR AMATEURS. 1/6 net, by Post 1/7

Complete information is given here on the erection of masts and of indoor, outdoor, and frame aërials. With a copy of this book at hand you will have no difficulty in these matters.

THE AMATEUR'S BOOK OF WIRELESS CIRCUITS.

Price 2/6 net, by Post 2/10

The most up-to-date book of circuits yet published. This contains 111 practical circuits showing full values of condensers, etc.

CONSTRUCTION OF AMATEUR VALVE STATIONS.

Price 1/6, by Post 1/7

Those interested in valve apparatus will find full particulars for making the various parts of receiving sets.

CRYSTAL RECEIVERS FOR BROADCAST RECEPTION.

Price 1/6, by Post 1/7

Descriptions of the various types on the market and full directions for building a first-class crystal receiver, with many useful hints, are presented to the reader.

HOW TO BUILD AMATEUR VALVE STATIONS. Price 1/6, by Post 1/7

Amongst other matter, several different arrangements of receiving "units" are described in detail, together with description of component parts of valve apparatus.

PRACTICAL WIRELESS SETS FOR ALL—HOME CONSTRUCTION MADE EASY. Price 1/6, by Post 1/8

For inexpensive and wonderfully effective sets, you should get this book.

THE WIRELESS WORLD AND RADIO REVIEW. Every Wednesday, 4d.

First published in 1913, this is universally recognised as the premier wireless journal. There is something for everybody interested in wireless in every issue. Send for free specimen copy.

The Wireless Press Ltd. Dept. M.M.
12/13, Henrietta Street, Strand, W.C.2.

The Meccano Guild

A Fellowship of Meccano Boys

The Meccano Guild is an organisation for boys, started at the request of boys, and conducted as far as possible by boys. All who have studied its objects must agree that the Guild cannot fail to have a profound effect for good on the lives of its members. The Guild is one great fraternal organisation of which all Meccano boys should become members, for its primary object is to bring them together. By joining the Guild a Meccano boy becomes a member of a great brotherhood of world-wide extent. Each member of the Guild tries to help the others to get the very best out of life.

OBJECTS OF THE GUILD

The Objects of the Meccano Guild are three-fold:—(a) To make every boy's life brighter and happier; (b) To foster clean-mindedness, truthfulness, ambition and initiative in boys; (c) To encourage boys in the pursuit of their studies and hobbies, and especially in the development of their knowledge of mechanical and engineering principles.

HOW THE GUILD COMMENCED

More than a million boys in Great Britain derive their greatest indoor pleasure from Meccano. Before the Guild was formed, hundreds of these Meccano boys wrote to us every week. They told us how they wished they could be put into communication with other Meccano boys and how they longed to be able to meet them. They asked if arrangements could be made so that their wishes might become an accomplished fact.

We responded to their repeated and increasingly numerous appeals, and as a result the Meccano Guild came into being. The Headquarters of the Guild are at the Head Office of the Meccano Works in Liverpool. At the head—guiding, controlling, and taking a personal interest in this great movement—is the President, Mr. Frank Hornby, Inventor of Meccano and Chairman and Managing Director of Meccano Limited.

HOW TO BECOME A MEMBER

Membership of the Guild is possible to every boy possessing a Meccano Outfit who satisfactorily fills in the prescribed application form. Members are requested to promise to observe the objects of the Guild and to wear their badges on all possible occasions.

The cost of the Guild membership badge is 7d., and stamps for this amount should be sent along with the form of application. The Guild badge is beautifully enamelled in blue and is made for wearing in the lapel of the coat. Any boy wearing the Guild badge is at once recognised by other Meccano boys as a member of the great brotherhood of boys who have undertaken to live a clean, truthful and upright life. No introduction or ceremony is necessary between Guild members, who may be recognised at once by the badge they wear.

In addition to the badge, each member on joining receives a beautiful Certificate, measuring 7 inches by 9½ inches. This Certificate is printed in orange and sepia and is a replica of the large Club Certificate. The Certificate is intended to be framed by the Guild member and hung in his bedroom.

Write to the Secretary of the Meccano Guild, Binns Road, Liverpool, asking for an application form and full particulars. You will then be enrolled and your Badge and Certificate sent to you. Don't hesitate—write to-day. Put M. J. after your name for reference.



RECRUITING
MEDALLION



BADGE OF
MEMBERSHIP



THE MECCANO CLUB
CERTIFICATE

MECCANO CLUBS

Meccano Clubs are founded and established under the guidance of the Guild Secretary at Headquarters and at the present time there are active Clubs in over one hundred and fifty towns and villages in this country, as well as many Clubs Overseas and in Foreign countries. Some of the larger towns and cities have several Clubs, one in each district. Each Club has its Leader, Secretary, Treasurer and other Officials, all of whom, with the exception of the Leader, are boys. Write for information as to the nearest Club to you. If it is too far away for you to join, or if you are unable to join for any other reason, consider the possibility of forming a new Club in your own district.

SPECIAL AWARDS TO CLUB MEMBERS

Every encouragement is given to members of Clubs to do good work and to read instructive papers during the session. Special Merit Medallions (illustrated on this page) are granted to those members who display ability in connection with such work, and full particulars may be obtained from Headquarters.

THE GUILD RECRUITING CAMPAIGN

Every Meccano boy should become a member of the Guild and do his utmost to help to make the objects of the Guild widely known. With this end in view, a special Medallion is presented to each member of the Guild who obtains three new recruits. An additional mark of merit is given when six more members are recruited. Full particulars of the Recruiting Campaign will be sent on request.

THE CORRESPONDENCE CLUB

Members of the Guild have the privilege of joining the Correspondence Club and of being placed in communication with other members of the Guild in some other part of the country or abroad. To those boys who are interested in foreign languages the Correspondence Club provides a medium for their advancement in this respect, for correspondents can often be found for them in many foreign countries, particularly in France. They are thus able to write to a Meccano boy in his native language, and as he would probably reply in English, the correspondence will be of mutual benefit. Full particulars and enrolment form on application.



SPECIAL MERIT MEDALLION
(About half actual size)



It is with great pleasure that I am able to announce that 1923 has proved to be one of the most successful years in the records of the Guild. Many thousands of new members have been enrolled, and numerous clubs all over the world have been affiliated. Every year seems to bring us nearer to the fulfilment of the most important of our objects, "To make every boy's life brighter and happier." Our membership is steadily mounting up, thanks to the efforts of Club Leaders, Secretaries, and of every individual member.

In this connection the Recruiting Campaign is achieving its purpose, and many hundreds of medals have been awarded. When it is remembered that every one of these medals means three new recruits to the Guild it can well be understood the very fine work that is being done. Each member of the Meccano Guild, whether he is a member of a club or a "lone" member, should make every endeavour to win one of these Recruiting medallions. It is an award well worth striving for and though it may prove difficult for some, it is by no means impossible. The winners always have the satisfaction of knowing that they have at least done something for this great brotherhood of boys.

Guild members and club Secretaries have now practically completed their preparations for the Second Winter Session, and several new schemes have been introduced into the club programme. To the many new clubs formed in the last few months, the past session will have shown how a really successful club may be run. They will now be able to profit by this experience and to make such improvements or alterations as may be found necessary to make the coming session a success. To the older and well-established clubs the commencement of a new session is always a busy time. Keeping in touch with old members, enrolling new entrants and drawing up the next Syllabus are all important and necessary duties.

During the past few weeks many thousands of new Meccano boys have added to our ranks. These boys hear of the Guild for the first time with this issue of the "M.M.," and I have thought it desirable to give, on page 22,

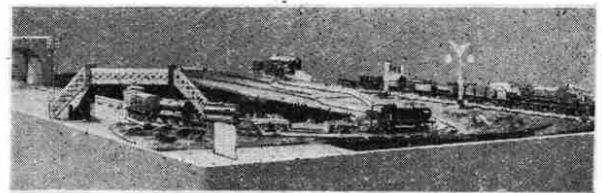
A Successful Exhibition

A successful two-day Exhibition of Mechanical and Engineering Models was recently organised by the Holy Trinity Meccano Club. The following affiliated Clubs were represented:—Thornton Heath M.C., Roan School (Greenwich) M.C., St. Paul's (Hammersmith) M.C., and St. Mary's (Newington Butts) M.C. The Mayor of Islington opened the Exhibition, and great interest was shown in the decorated stalls on which Meccano models were displayed. Down one side of the Hall was an excellently-arranged Hornby railway system, some 60 ft. in length. This display included points, sidings, turntable, bridges and electrically-operated signals, as well as examples of the latest Hornby rolling stock. A Meccano Clock and a huge model (some 17 ft. in length) of the famous Quebec Bridge were also on view.

Two very successful concerts were given by the "Ripplevale Nigger Troupe" and the Thornton Heath Dramatic Club. A novel feature of the Exhibition was a stall built in the shape of a triangle to represent the Meccano Guild Badge. This occupied a prominent position in the centre of the hall.



The Holy Trinity Meccano Club's Stall which was awarded second prize for the best decorated stall, the first prize being won by St. Mary's (Newington Butts) M.C.



Section of the Hornby Rail System Exhibit

some particulars of this great world-wide brotherhood of boys. They will find there briefly set out the objects and benefits of the Guild. May I say that I shall be only too pleased to send application forms and further particulars to any reader interested. All new members should make a point of joining a club, and full details of the nearest club to them will be sent on request.

Meccano Club Leaders No. 9. Mr. S. MITCHAM.



The "Norwich Enterprize Meccano Club" was opened early in 1920, and Mr. S. Mitcham undertook the Leadership of the Club at a most difficult time. Under his guidance, however, the Club has continued to make excellent progress. Flag signalling and Morse key transmission have been included in the programme, and the members are making good progress in these subjects. Mr. Mitcham is to be congratulated on his splendid Club and on the sustained enthusiasm of its members.

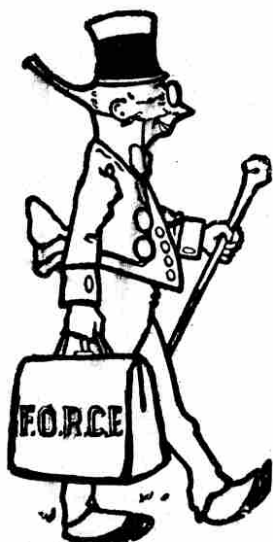
The Correspondence Club is becoming increasingly popular, and already many lasting friendships have been formed between members all over the world. Any boy who wishes to correspond with another member, whether he is a "lone" member or belongs to a club, should write to me and ask for the Correspondence Club application form. No charge is made for joining the Correspondence Club, and the rules are very simple indeed. Stamp collectors and photographers in particular should make a point of joining, for the Club affords many opportunities for the exchange of duplicates and photos.

I should like to remind all Club Secretaries that reports for the last session should now be sent in for inclusion in "Club Notes." A brief summary of the activities of the club during the session should be given, together with the number of members now on the rolls. Recommendations for Merit Medallions should also be sent in by Club Leaders, together with the paper or notes of the lectures delivered.

In conclusion I should like to take this opportunity of wishing Guild Members every success in the New Year. Now is

Good Wishes

the time for good resolutions, and if every boy will read over the words on his membership certificate and do his best to live up to them, then there is no doubt that 1924 will be even more successful than the past year of splendid progress.



FREE SAMPLES

To get one just send a postcard to "Sunny Jim," Dept. A.Y. 6, 197, Gt. Portland St., London, W. 1. He will send with it, for mother, an interesting RECIPE BOOK written by himself.

Did you ?

Last year hundreds of Meccano boys wrote to "Sunny Jim" for free samples of his famous whole-wheat-flake ready-cooked food "FORCE." They're glad they wrote because most of them have since been able to persuade their mothers to give them "FORCE" and hot milk regularly *every* day. These crisp crackly flakes of toasted malted wheat make the most tasty and nourishing meal you ever heard of. Tell mother it needs no cooking at all—she'll be interested in that!

FORCE

**WHOLE WHEAT FLAKES
MALTED AND TOASTED**



NO BOY OR GIRL can afford to be without the world-renowned and largely-advertised

SECCOTINE

(Regd. Trade Mark)

Tubes 4½d., 6d., 9d. Everywhere.

The best general adhesive the world knows. For wood, leather, bone, paper, etc., objects large or small. Used in bulk for manufacturing purposes. Of great utility to boys and girls who long to make things.

FIRMAS (Heat Seccotine)

(Regd. Trade Mark)

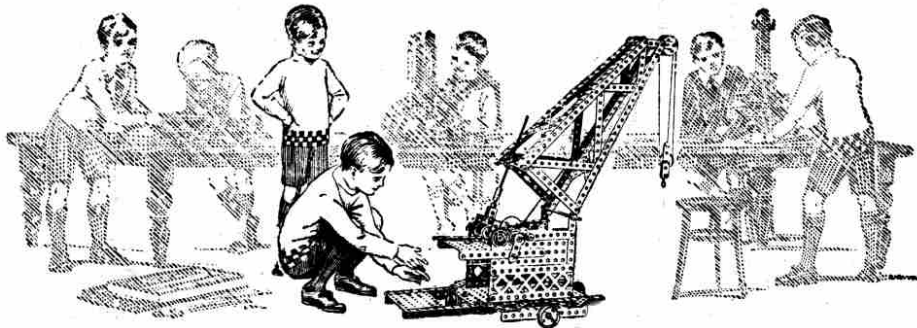
Tubes 6d.

For glass, china, delph, etc. Articles joined with it can be boiled without coming asunder.

McCAW, STEVENSON & ORR, LIMITED,
The LINENHALL WORKS, BELFAST.

Telegrams : "GLACIER, BELFAST."

Telephones : 4261 (3 lines).



CLUB NOTES



St. Mary's (Newington) M.C.—A decided increase in membership has been the result of the successful Exhibition, held in November last. Visitors came from all parts of London to see the many interesting models, the Meccano Clock in particular causing a great deal of comment. Hornby Trains, too, were in evidence, and a well-arranged railway system contributed much to the general success and enjoyment. *Secretary:* Mr. C. Curle, 37, Pullens Buildings, Peacock Street, S.E.

King Edward's School M.C.—The programme for the last Winter Session contained several novel and interesting items, of which a Lecture on Scotland, a Mock Trial and an impromptu Concert were perhaps the most popular. A Magazine has been published and articles on Railways, Radio and Photography have appeared. The recently-appointed Club Secretary is proving a very enthusiastic organiser. *Secretary:* Master N. J. Robertson, 30, Hinstock Road, Handsworth Wood, Birmingham.

Wynberg M.C.—At a recent meeting of this successful and ever-growing South African club, a model-building race was organised. Its object was to test the members' powers of observation whilst constructing working models. The winner completed a model of a travelling crane in the short space of 33 minutes. A lecture entitled "The Story of the British Navy" proved a great success and was followed by a demonstration with the Meccano Loom. *Secretary:* Mr. A. J. Lewis, The Park, Wynberg, S. Africa.

The Hague M.C.—An exhibition recently held by this progressive club proved a decided success. Many large models were on view, including about a dozen worked by electricity. Over a thousand leaflets were printed and distributed broadcast before the exhibition, with the result that a large attendance was secured. Five new members were recently enrolled. *Secretary:* Mr. H. G. Van der Sluis, 108, Stadhoudersplein 108, Den Haag, Holland.

Malvern (Johannesburg) M.C.—A change of Club Leaders has recently taken place, Mr. C. Sykes having to leave the district after two years' very excellent work among Meccano boys in that part of S. Africa. His place has been taken temporarily by Mr. C. Gunnell. The club membership, at present 28, continues to grow steadily. A Sale of Work was held in aid of the Epworth Children's Home and proved an unqualified success. *Secretary:* C. Gunnell, 177, St. Frusquin Street, Malvern, S. Africa.

Central (Sheffield) M.C.—Some very interesting meetings have been held during the past Session, including a Wireless Demonstration, a lecture on "Valves," and a visit to the local wireless station. In addition the Meccano lectures have been in great demand and have been voted a great success. *Secretary:* Master A. S. Taylor, 19, Roach Road, Sheffield.

Calcutta M.C.—Local gentlemen are taking an interest in the progress of this enthusiastic club. A novel innovation is an "Adult Section." A Meccano Outfit and Carpentry Set have been purchased for the use of members on club nights. *Secretary:* Master A. N. Roy Chowdhury, 35/2, Beadon Street, Calcutta, India.

White Notley M.C.—Recently held an Exhibition which was so successful that it was decided to institute an annual Exhibition and Concert. Some of the models exhibited were a Helter-Skelter, a Motor Breakdown Crane, Pit-Head Gear, Motor Buses, etc. Guessing Competitions, which will be open to the public, have been proposed as a means of adding to the club funds. *Secretary:* Master F. Fox, 2, Station Road, White Notley, nr. Witham, Essex.

Buckfastleigh M.C.—Has now been able to secure a suitable club room and the past Session has proved a great success under the leadership of Mr. A. Chivall. A dozen application forms have recently been issued, so that a decided increase in the present membership may be expected shortly. *Secretary:* Master Harold J. Parsons, Bell Cottage, Buckfastleigh.

Clubs Recently Affiliated

Peterborough M.C.—Affiliated with the Guild a few months ago this Club continues to make excellent progress. The Meccano Lecture "The Men Who Gave Us Radio" was read at a recent club evening. Posters advertising the Meccano Club have also been displayed in the town, and several new members have been enrolled as a result. *Secretary:* Master Austin March, 88, Granville Street, Peterborough.

Ashton-on-Mersey M.C.—Although affiliation was granted some time ago activities have been restricted owing to the difficulty in obtaining a suitable club room. The old room is not now available but the enthusiastic members are managing to "carry on," and hope to be more successful in the coming Session. *Secretary:* Master F. J. Price, Alexander Villa, Mersey Road, Ashton-on-Mersey.

Guild Secretary Visits Leamington Meccano Club

A very enjoyable evening was held by the Leamington Meccano Club on the 7th December, when the Guild Secretary visited the Club for the purpose of giving a lantern lecture describing the manufacture of Meccano and the activities of the Guild. Over 100 slides were shown, the lantern being operated by the energetic Club Secretary, Mr. Guy Hare. The lecturer showed slides of various Meccano Clubs and mentioned that there are now over 120 Clubs in this country, in our Dominions, and in foreign countries.

The Secretary also gave some interesting details of the progress of Meccano itself. He told how Meccano commenced in a very small way as "Mechanics Made Easy." At that time Mr. Hornby was assisted only by one girl and the business was run from a single small room in James Street, Liverpool. This was followed by a description of the present factory which covers five acres and employs 1,500 hands. Slides were shown of the splendid up-to-date machinery including Stamping and Gear-Cutting machines, the Press Shop and the Barrelling and Plating Departments. Finally, the Stores and the large and well-lighted Packing Rooms were described and illustrated.

Slides of the first Meccano models aroused great interest, enabling the members to see the wonderful

progress made in model-building since the early days. The fact that the Guild is a world-wide movement was forcibly brought home to the audience when the lecturer showed slides of specimens of the Manuals in various languages, and mentioned that Meccano literature is printed in sixteen different languages, including Dutch, Spanish, Portuguese and even Chinese—a tribute indeed to the universal demand for Meccano. Slides of the departments where Hornby trains are manufactured were also shown, and the lecturer mentioned that there were over 160 operations in the making of a Hornby train.

At the close of the lecture the Club President, Sir John Keir, K.C.B., proposed a vote of thanks to the lecturer, which was seconded by the Club Leader, Mr. F. W. Bull. Sir John Keir and the Guild Secretary then judged the models entered for the Club's Annual Competition. The first prize was awarded to Masters F. C. Miles and G. S. Collett for their model of the Motor Chassis, and special consolation prizes were awarded by the Guild Secretary to Masters J. H. Stevens and B. Bailey for their models of Funicular Railway and Motor Tipping Wagon, and after three rousing cheers for the Guild the meeting broke up.

Clubs not yet Affiliated

Grahamsey M.C.—This club has recently been organised and the members are very keen. Any Meccano boy in this district who is interested should write or call for full particulars. *Secretary:* Master W. Marr, 16, Wood Houses, Grahamsey, nr. Crook, Co. Durham.

Rosyth M.C.—A room and temporary Leader have been obtained by the organiser of the club, and it is hoped that affiliation will soon be possible. New members will be heartily welcomed and should apply early. *Secretary:* Master Edward Hunter, 79, Admiralty Road, Rosyth, Fife.

For Your Next Party

Many fancy dress parties are given about this time of the year, and no doubt



Meccano boys will wish to go representing Meccano. We are printing two photographs which will give two suggestions.

Both the costumes shown won first prize at fancy dress dances last winter. With a little ingenuity, splendid costumes may be evolved. The costume below was made entirely from cardboard and covered with tin-foil. It proved very effective.

We shall be glad to hear from any of our readers who have other suggestions to make and whenever it is possible to do so we are pleased to loan advertising matter and showcards to assist them to make their costumes attractive.



Listen with a Meccano Receiver

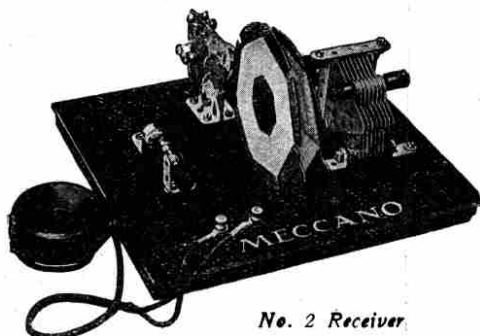
No. 1 Meccano Crystal Receiver

With a good aerial this set will receive telephony up to about 25 miles from a broadcasting station, and Morse signals up to a distance exceeding 100 miles. The set, which may be used with a broadcasting licence obtainable from any Post Office at a cost of 10/-, will receive on wave-lengths from zero to approximately 1,000 metres.

R.S. 1—Receiving Set complete, tested and guaranteed, price ... 29/-
Compulsory Broadcasting Fee ... 1/-
Price 30/-



No. 1 Receiver



No. 2 Receiver

MECCANO LIMITED

No. 2 Meccano Crystal Receiver

This set is of the constructional type and is specially adapted to the requirements of those who wish to carry out simple experiments. Its range is the same as that of No. 1 set described above, and it receives on wave-lengths of approximately 300-500 metres. It may only be used with a constructor's licence, which costs 15/-, and is obtainable from any Post Office.

R.S. 2—Complete Set of Parts, in strong carton, including single telephone
2,000 ohms resistance, price ... 25/-
R.S. 2a—Complete Set of Parts, in strong carton, without telephone, price 15/-

BINNS ROAD

LIVERPOOL

Meccano Boys Keep Fit!!



Just a short time with the gloves each day will keep you in the best of condition for working out new Meccano models.

BOXING GLOVES SET OF FOUR

YOUTHS' SIZES

6/9	9/6	10/9 Pair
Twill Backs	Tan Leather	Tan Leather
Leather	Elastic	Laced
Palms.	Wrist.	Palms.

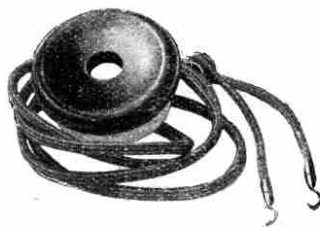
Postage and packing 6d. extra.

Odd & Sons,

55, North End, CROYDON,
111, High Street, SUTTON, Surrey.

Telephone Receivers

We have a limited number of single telephone ear-pieces similar to the illustration, of which we are disposing at 10/- each, postage 1½d. These telephone ear-pieces are of 2,000 ohms resistance. They are of the highest grade of British manufacture and give loud and clear reproduction, free from distortion. They



are suitable for use with any receiving set, and are useful as additional 'phones to enable a second person to listen in. They may be converted into a double head 'phone by attaching two together with a metal band, or with a 12½ inch Meccano strip.

Those desirous of acquiring a high-grade telephone are advised to take advantage of this opportunity, as our present stock is limited and will soon be exhausted.



Skids Football

JUST LIKE THE REAL THING.
A Chum and a Table
are all you require.

Order your Team to-day and start a League among your Chums. Team Set (11 a side) 2/6, League Set (11 a side) 10/6. Also SKIDS CRICKET (11 a side) 3/6. Post Paid. Postage abroad 1/- extra.
Ask your Dealer for them, or write direct to SKIDS GAMES (M Dept.), 61, Cathedral St., GLASGOW.

Storage Boxes



We have in stock a limited number of boxes, suitable for holding Meccano parts. These boxes are in polished oak, fitted with partitions, and hinged lids. They fasten with lock and key, and are provided with two drawers, also with locks and keys.

The dimensions of the boxes are 17" x 15" depth 9¼", and the price is each 70/-, carriage forward.

As our stock is only small we advise those of our readers who are interested to take immediate advantage of this opportunity for securing a strong and serviceable box for storage of their Accessory Parts.

MECCANO LTD., LIVERPOOL.



THAT readers of the "M.M." are interested in Puzzles is evident from the large number of letters we have received regarding this page in our last issue. We are therefore arranging to have a special Puzzle Competition during the next three months.

Puzzles for Guild Members

This Competition is open to Guild members only, and any of our readers who are not Guild members will find full particulars in regard to joining the Guild on page 22. Each puzzle published on this page will be numbered and entrants should write their solutions on a post card alongside the number of the puzzle concerned. Solutions must be received in this office before the 25th of each month, because the answers to the preceding month's puzzles will be published in the following month's "M.M." On 25th March we shall classify all the entries received and the winner will be the competitor who has given correct solutions to each of the three sets of 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 10/6 respectively, all to be selected from our current catalogue by the winners.

This Month's Puzzles

Remember that solutions to the puzzles on this page are to be sent in before 25th January, because the answers will be published in the February "M.M." Remember also that this Competition runs over three months, and in addition to the puzzles on this page, entrants are required to solve the puzzles in the February and March issues in order to qualify for a prize.

No. 1.

Three niggers fell asleep in a barn. One awoke and saw there a bag of apples. He found that if he threw one away the rest would divide into three equal shares, so he threw one away, took his share of the remainder, ate them, and fell asleep again. Another nigger awoke, and went through the same performance, and after him the third nigger likewise. Lastly all three awoke, and found that the remaining apples would divide among them in equal shares if one were thrown away. How many apples were there at first?

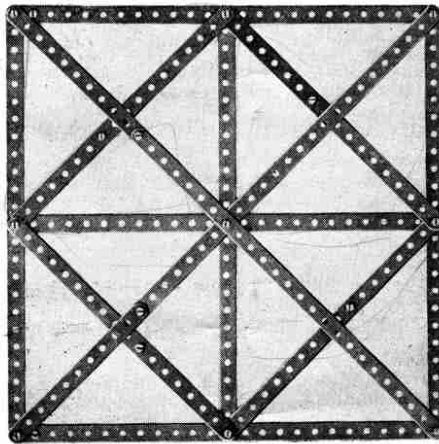
No. 2.

If a brick weighs 7 lbs. and half a brick, what will a brick and a half weigh?

No. 3

Here is a puzzle that will be of particular interest to those who have grappled with the problems of a certain unpopular gentleman called Mr. Euclid!

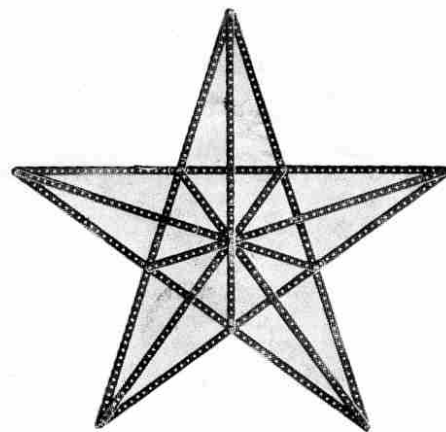
How many different triangles can you count in the square illustrated?



In the construction of this figure the following Meccano parts have been used:—15 of No. 1, 5 of 1a, 5 of 1b, 36 of 37a, 6 of 111a, 30 of 111b. The answer will be given next month. Get your friends to help you!

No. 4.

If you find the square too easy, try this five-pointed star puzzle. Either build it in Meccano, as shown in the illustration, or draw it on a large sheet of paper.



To make this figure the following parts are required:—8 of No. 1, 6 of 2, 4 of 2a, 15 of 37a, 15 of 111b, 1 of 37b. If you decide to draw it, remember that the bisecting lines must all meet at a common point in the centre of the star. When you have completed the figure, see how many different triangles are contained in it. Then pass it on to a chum, and see what answer he gets.

No. 5.

A * * * * old woman on * * * * bent,
Put on her * * * * and away she went,
And to her * * * * she did say,
What shall we do to * * * * to-day.

The puzzle is to fill in the blanks with a word of four letters. The letters are the same in each word, but are arranged in a different order and therefore give different words.

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.

Sometimes Meccano is mentioned in a humorous way in various papers. A paragraph in "Punch" relating to a race meeting that was held in Ireland said that one of the races was won by a horse called "Meccano." Mr. Punch's comment was "How could a horse with such a name be anything but a winner?"

Subsequently "Punch" had another allusion to Meccano. This time it was in connection with the play called "Cairo," put on last year at His Majesty's Theatre, London. Objection was taken to the proposal to produce this play under the name "Mecca" on the grounds that the name might be offensive to Mohammedans, and there was some talk of the proposed title being banned. Mr. Punch facetiously remarked that if the title "Mecca" was banned, he did not see why the word "Meccano" should not be banned also! We could scarcely agree to this, could we, boys?

"I say, dad," said a Meccano boy at his home-lessons, "can you do this sum for me?" "I can," replied his father, "but it wouldn't be right." "I don't suppose it would be," said the boy, "but you might have a try!"

Teacher: "Brown, this is the third time you've looked on Smith's paper."
Brown: "Yes, sir, he doesn't write very plainly!"

Q. What is the difference between a dead bee and a sick elephant?

A. One is a bee deceased and the other a seedy beast!

Answers to Puzzles will be printed next month

ANYTHING TO SELL?

This Space is set to $\frac{1}{4}$ inch s.c. and costs 5/- per month. This sum is the 64th of £16, the price of a whole page advertisement. 55,000 copies of the Dec. number were issued and distributed all over the world. You therefore reach this exclusive public at the rate of one penny a thousand.

For Sale. Meccano Vertical Steam Engine, almost new, good condition. Price 15/-. H. Robinson, Church Avenue, Holywood, Co. Down.

BEAUTIFULLY FINISHED STEAM POWER UNIT 2" x 2" x 3", with powerful oscillating cylinder, solid flywheel, 3 speed pulley, bed plate, fixing standard. Machined solid brass and screwed together, 3/6 each. With 8 inches steam pipe and starting cock, 4/3, plus 3d. postage. 21, St. James' Road, Edmonton, London.



Set of parts for Shock Coil, 1/6, post 2d. Battery Parts, 1/3, post 3d. Electric Light Outfit (complete), 3/9, post 4d. Wireless Set, really good sound value, 5/9, post 6d. Model Theatre with Charlie Chaplin and many other actors, etc., 3/6, post 7d. Cinema and Films, 9/6, post etc., 1/-.

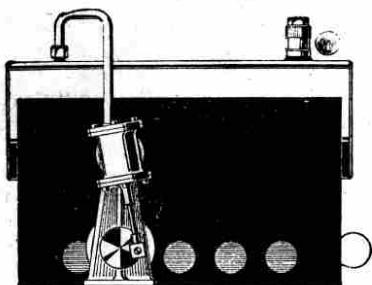
Really good Telescope, 3/9, post 3d. Pocket Cinema and Real Films, 9d., post 2d.

A MODEL STEAM ENGINE



Powerful Steam Locomotive (complete), 12/6, 15/6 (in box with large track, 20/-, 25/- and 30/-, with carriages and trucks), postage 9d., 1/- and 1/6 extra. Send 4d. (in $\frac{1}{4}$ d. stamps) for large, new, illustrated catalogues and lists.

THE MIDLAND SCIENTIFIC (38 P.3)
Queen's Road, Aston, BIRMINGHAM (England)
Please remit by P.O. only if over 6d. in value.



THE S.T. Steam Plant

with double-acting cylinder, 7/16 x 7/16 in.

Specially designed for driving Meccano Toys. The engine you can build yourself with the aid of a screwdriver. It is perfectly safe and guaranteed to work.

ENGINE PARTS, 5/-
Post 3d.

FINISHED BOILER, 7/6
Post 6d.

COMPLETE PLANT (post free), 13/-
If you want a bigger engine send 6d. for our complete 72 pp. catalogue.

Stuart Turner Ltd.
ENGINEERS,
HENLEY-ON-THAMES.

CINEMA FILMS

Drama, Cowboy, Comedy, Round the World Series, etc., etc. All the latest Topicals kept in stock.

SHADOWS & CO.,
NEWTOWN, WESTBURY, WILTS.

Lists Free.

HOME CINEMAS from 15/6. Films 5/- 1,000 ft. Ideal for dull winter evenings. Lists free. Standard Film Co. (81A), Charterhouse Chambers, E.C.1.

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

Cinematograph Films Cheap, 100 ft. Sample, 1/3 post free. Cinemas from 6/6. Stamp for lists. "Radio Films," 34, Church Street, West Ham, E.15.

BUY A BUMBLE AND DON'T GRUMBLE

Bumble Crystal Sets are complete with Wound Inductance Coils, Terminals, Ball and Socket Detector, 9 carat Gold Cat Whisker, 3 Screw Crystal Cup with Super-sensitive Crystal, Base Board, etc. Completely assembled. Guaranteed for 30 miles. Send P.O. 7/- to-day.

The H. S. Radio Co., 36, Willes Road, Leamington Spa.

Wireless! Hulloo! Meccano Boys!

Construct your own Wireless Sets or improve your present Receiver. Reliable parts at lowest charges. Lists Free. Prompt delivery.

Webb & Goward, Caxton Street, Market Harborough.

15/= complete 15/= complete 15/= WIRELESS OUTFIT

Cabinet 10 x 8 x 2. Enclosed Detector.

2000 ohm Phone, Aerial and Earth Wire, etc.

Also all Wireless Accessories and Sets at lowest prices.

TAYLOR'S Wireless Depot, PARKSTONE, Dorset.

CUT THIS OUT.

"Meccano" Pen Coupon. Value 3d.

Send 5 of these coupons with only 2/9 direct to the Fleet Pen Co., 119, Fleet Street, E.C. 4.

You will receive by return a splendid British 14-ct. Gold Nibbed Fleet Fountain Pen value 10/6 (Fine, Medium, or Broad Nib). If only 1 coupon is sent, the price is 3/9. 3d. less for each extra coupon up to 4 (Pocket Clip 4d.). Satisfaction guaranteed. Your own name gilt letters, either pen 1/- extra.

Lever Self-Filling Model with Safety Cap, 2/- extra.

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).

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

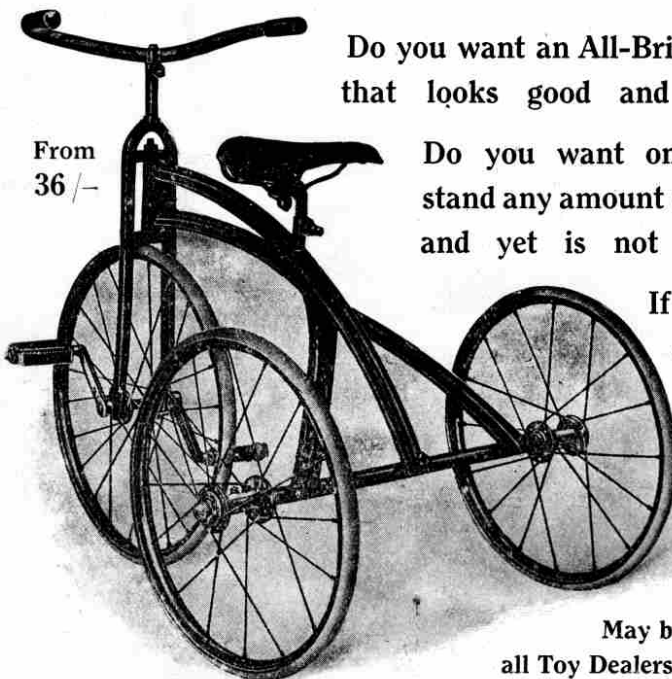
MAKE YOUR OWN ELECTRIC LIGHT

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.), 88, New Oxford St., London.

Do You Sell "Dux"?



From 36/-

Do you want an All-British Tricycle that looks good and IS good?

Do you want one that will stand any amount of hard wear and yet is not expensive?

If so, ask your dealer "Do you sell Dux?" and make sure you get one.

May be obtained from all Toy Dealers or Cycle Agents

WHOLESALE ONLY FROM THE MANUFACTURERS:
THE LOMBARD RIM & TUBE CO. LTD., Lombard St., Birmingham

Made in Britain



Price 59/6 in all Good Toy Shops,
Brake, Free-Wheel and Mudguards included.

THE Fairycycle

(Registered Trade Mark)

Patent No.

Most boys and girls know the Fairycycle. Many were lucky enough to get one at Christmas.

There is no need to wait for them now, your good toy dealer will have them in stock or can get them at once for you.

But be sure it is a
Fairycycle
don't be put off with inferior imitations. See the word Fairycycle on the frame. None genuine without.

The Fairyscoot

Registered Design. Registered Trade Mark.

No Scooter is its equal. The 12" Stout Wheels and Solid Drawn Steel Tubular Cycle Build place it in a class by itself. It is on the same lines as the Fairycycle. The Cycle Handlebar is adjustable.

Aluminium Foot-board with this Trade Mark →

This Registered Trade Mark is the sign of British Quality.



Dealers write :

LINES BROS. LTD., 9, FORE ST., LONDON, E.C.2.

MANUFACTURERS
OF THE

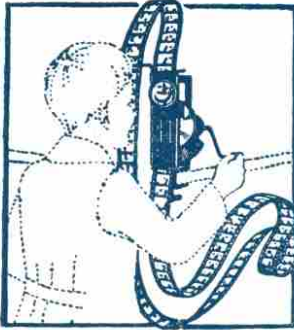
TRIANGOIS
The World's Best Toys REGD



FAIRYSCOOT mF/8
Regd. Design. Prov. Patent.

Price 19/6 in all Good Toy Shops,
Plated Lever Brake 3/6 extra.

Start off 1924 with a visit to GAMAGES



THE NEW "CINE-TOY"

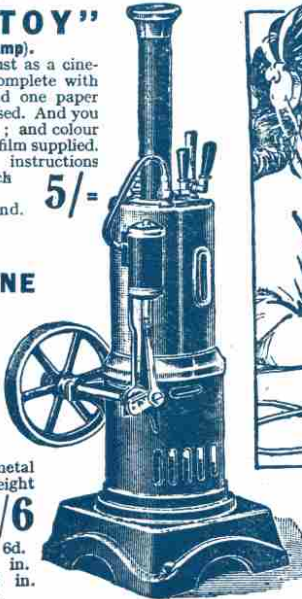
(Requires No Lamp).

Gives moving pictures just as a cinematograph. Supplied complete with one transparent film and one paper film. Any films may be used. And you can make your own films; and colour them on the blank paper film supplied. Price complete with instructions Extra paper films, 3d. each 5 different subjects. Ordinary films, 6d. per band.

5/-

VERTICAL STEAM ENGINE

With burnished brass and boiler, steam whistle, with slide valve cylinder, slip eccentric, reversing gear, water gauge. Will work in whatever direction the wheel is started, with safety valve and all fittings polished brass, mounted on stamped metal base, finely japanned. Height overall, 12½ in., diam. of boiler, 2½ in. Price 14/6 Post 6d. Height overall, 13½ in., diam. of boiler, 2½ in. Price 17/3 Post 6d.



BOYS! MAKE LISTENING-IN YOUR HOBBY THIS YEAR!

—and start off with this splendid Crystal Set from Gamages.

Supplied in parts ready for you to assemble and make your own Set and receive the Concerts from within 20 miles of any of the British Broadcasting Stations. The Set is simple and instructive and something more than a toy when finished. Included with this set is a piece of our famous Permanite, the most sensitive Crystal in the world. Price 12/6 Post 6d. Phones, Aerial, &c., also supplied at Lowest Prices.



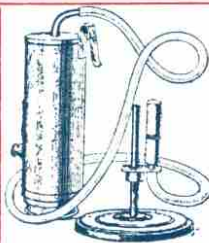
FOOTBALL!

Whatever your need, we can supply it. Write for Illustrated Football List—post free on request. Illustrated is Gamages "Club" Ball, a moderately priced ball of real good quality. Selected hide case, hand sewn. Fitted with best quality red bladder. Price 16/6 Post 6d.

Other balls (Association or Rugby) at prices from 9/-.
Jerseys, Boots, Shorts, Club Badges at prices equally as low.

COMPLETE ANGLER'S OUTFIT

Now then, you would-be anglers, here's a splendid set with which to take up fishing. Start this year with the set illustrated on left. Each box contains 8 ft. 3in. joint rod, rings and reel fittings. Reel, Lines, Floats, Gut Casts, Ledger, 7 Hooks to Gut, Plummet, Split Shot, Disgorger, Haversack, Worm Bag, Bait, and Book on "How to Begin." Price complete .. 21/-



Acetylene Generators

For the smaller size Magic Lanterns and Cinematographs. Something that will give a more intense light than an oil lamp. Including Generator, Container, Rubber Tubing, Gas Arm and Adjustments complete. Price 4/6 Carriage 6d.



Complete Full-Size MAGIC LANTERN OUTFIT

No. 1. Full-sized japanned body Lantern, similar to sketch, fitted with best 4 in. Plano-convex condensers and double combination front lens, with rack-work focus, incandescent gas or electric fittings, slide carrier, and 1 doz. slides. Price 55/-

Full-size Lantern, Russian iron body, fitted with best Plano-convex condensers and double combination front lens and rack-work focussing. Complete with electric or gas fittings (bulb extra), including 1 doz. full-size slides. Similar in design to above. Price 77/6 Either of above if fitted with three-wick oil lamp, 7/6 extra.



Don't miss the Joys of Cycling This Year! Ride a Gamage Popular

Complete with Pump, Tool-Bag, Pump Clips and Tools.

Thousands of boys are now happy in the possession of a Gamage bicycle—why not you? There is no better way of going about than cycling.—But the cycle must be a good one. That is where choice of a Gamage Popular proves wise. It is strongly built of British materials by skilled mechanics. It is in every respect a high-grade cycle that will give you satisfaction for years and years—ask any of your friends who own one! Note the price! It is the lowest to-day for worthwhile cycles.

Gent's and Boys' Models £5 : 9 : 9 Carriage extra outside London Radius.

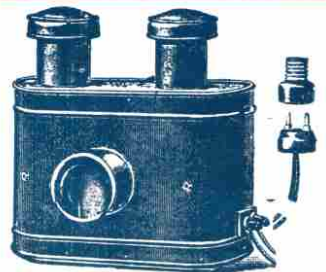
Pocket Microscope

This Pocket Microscope magnifies 50 diameters (2,500 superficial), very useful for chemistry, botany, etc. Pond water can be examined by means of the saucer slide and one plain slide on top.



Write for Illustrated Optical Catalogue—quite free.

Complete in case with 3 plain slides. Price 2/- Post free.



Post Card Lanterns for Electric Light

For the projection of opaque picture and solid bodies (post-cards, photographs, flowers, the mechanism of a watch, etc.) With connection contacts mounted on insulating plate, with connecting cable of about 6½ ft. and plug.

8½ in. long, 5½ in. deep, 8 in. high (measured without chimney), 2 flat nickel reflectors, electric fittings for 2 lamps. Without lamps. Price 37/6

A. W. GAMAGE LTD., HOLBORN, LONDON, E.C. 1.

City Branch: BENETFINKS'

PUBLISHED BY MECCANO LTD., BINNS ROAD, LIVERPOOL.
Printed by Stenbridge & Co. Ltd., Albion Street, Leeds.