MECCANO

ACCESSORY OUTFITS

Make Your Outfit Bigger and Better

Once a boy has commenced to build with Meccano, he desires to build larger and more ambitious models. He may do so by adding an Accessory Outfit to his existing set, thereby greatly increasing its scope. The particulars below show how a boy who commences with one of the earlier Outfits may build up his equipment by easy stages, until he is the proud owner of a No. 7 Outfit.

PRICE LIST
Complete Outfits

No. 00	3/6
No. 0	5/–
No. 1	8/6
No. 2	15/–
No. 3	22/6
No. 4	40/–
No. 5 (In well-made carton)	55/–
No. 5 (In superior oak cabinet with lock & key)	85/–
No. 6 (In well-made carton)	105/–
No. 6 (In superior oak cabinet with lock & key)	140/–
No. 7 (In superior oak cabinet with lock & key)	370/–

PRICE LIST
Accessory Outfits

No. 00a	1/6
No. 0a	4/–
No. 1a	7/6
No. 2a	8/6
No. 3a	18/6
No. 4a	15/–
No. 5a (carton) ...	50/–
No. 5a (wood) ...	80/–
No. 6a	210/–

This illustration shows a No. 3a Outfit which converts a No. 3 into a No. 4 Outfit.

No. 00a OUTFIT
Costs 1/6, and converts No. 00 into a No. 0 Outfit. With it an additional 27 models may be built, making a total of 70 models in all.

No. 0a OUTFIT
Costs 4/-, and converts No. 0 into a No. 1 Outfit. With it an additional 36 models may be built, making a total of 106 models in all.

No. 1a OUTFIT
Costs 7/6, and converts No. 1 into a No. 2 Outfit. With it an additional 57 models may be built, making a total of 163 models in all.

No. 2a OUTFIT
Costs 8/6, and converts No. 2 into a No. 3 Outfit. With it an additional 43 models may be built, making a total of 206 models in all.

No. 3a OUTFIT
Costs 18/6, and converts No. 3 into a No. 4 Outfit. With it an additional 53 models may be built, making a total of 259 models in all.

No. 4a OUTFIT
Costs 15/-, and converts No. 4 into a No. 5 Outfit (carton). With it an additional 43 models may be built, making a total of 302 models in all.

No. 5a OUTFIT (Carton)
Costs 50/-, and converts No. 5 into a No. 6 Outfit (carton). With it an additional 51 models may be built, making a total of 353 models in all.

No. 5a OUTFIT (Wood)
Costs 80/-, and converts No. 5 into a No. 6 Outfit (wood). The parts are exactly the same as in the carton Outfit mentioned in the preceding panel, but the cabinet is in wood.

No. 6a OUTFIT
Costs 210/-, and converts No. 6 Outfit into a No. 7 Outfit (oak cabinet). This Outfit builds every one of the 393 models illustrated in the Complete Manual.

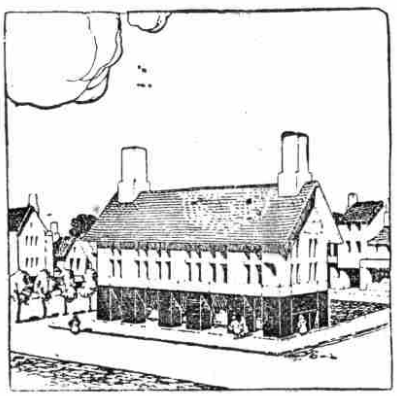
MECCANO LIMITED BINNS ROAD LIVERPOOL

LOTT'S TOY BRICKS

OF ARTIFICIAL STONE

DESIGNED THROUGHOUT BY AN EMINENT ARCHITECT

More popular every year. Real miniature stone bricks for building real miniature Houses, Castles, Towers, Bridges, etc. Other models readily devised. Provides endless entertainment for young and old. Each box complete with plans, bricks, roofs, etc., etc.



Market Hall, Boxes 1 and 2 or 3 Series "B." Example after the Market Hall at Ross, Herefordshire.

PRICES AND CONTENTS OF BOXES

SERIES "B," COMPOSITE SETS. COMPLETE WITH PLANS, BRICKS, ROOFS, FENCES, TREES, Etc.

Box A.	Bungalow, Lych Gate, Barn, Bridge, Shelter, Pavilion ...	5/-
,, B.	Chalet, Market Cross, Hall, Gatehouse, Belfry, Factory	5/6
,, 1.	All above Models and Pair of Cottages, Garage, House, Tower, Chapel, Bridge ...	10/-
,, 2.	"Daily Mail" £500 Prize House, Cottages, Tower, Parish Hall, Garage, Library, and 12 other Designs ...	10/6
	NOT COMPOSITE.	
,, 3.	The whole of above Designs and six additional Buildings twice the size, as Market Hall, Country House, Abbey Church, Parish Church, Bridge. 49 Models in all	17/6
,, 6.	All Models stated above. Many larger and more important Buildings. 71 Models in all	35/-

TUDOR BLOCKS

Box 1. 6 Models 3/3 Box 2. 12 Models 7/6

GARDEN SETS

Small Size ... 4/- Larger Size ... 6/-

HAVE YOU ENTERED FOR OUR PRIZE COMPETITION?

See December Issue "Meccano Magazine"

Write for List

Lott's Bricks Ltd.

WATFORD ENGLAND

New Meccano Parts

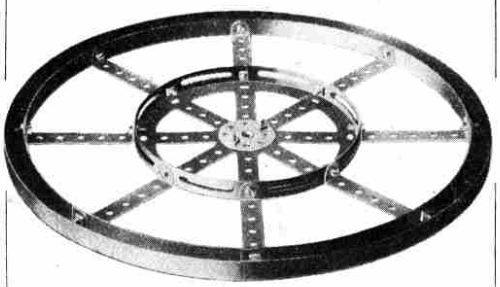
We have pleasure in announcing that the following new Meccano parts are now available :—

		Price.
No. 118	Large wheel hub, 5½"	each 1/-
No. 119	,, ,, segment	,, 4d.

No. 118

No. 119

The above parts are useful for building up large wheels, such as are used in models of beam engines, horizontal engines, etc. One method of using these parts is shown in the accompanying illustration. Eight of No. 119 are required to make a circle of 11½" diameter.



Example of how the new Meccano parts, Nos. 118 and 119, may be used.

Do Your Friends a Good Turn

THOSE of our readers who are able to do so, may help us very considerably in obtaining new subscribers, by telling their friends about the "*M.M.*" There must be over a million Meccano boys in this country, and yet only about one in twenty of this number takes the "*M.M.*" regularly. I want everyone of these boys to share in the pleasures of the *Meccano Magazine.*

Our circulation is growing steadily, but we wish to see it grow even more rapidly, so that we shall be able to still further increase the size of the "*M.M.*" Then we shall be able to print more and more of those hundreds of interesting subjects, for which competitors in our recent competition have made definite requests.

If every reader of the "*M.M.*" obtains only *one* new subscriber we shall double our circulation. Now, boys, will you try and find at least one new subscriber and so help me to make the "*M.M.*" even better, bigger, and brighter than it is at present?

If you know of a Meccano boy who is not a regular reader of the "*M.M.*" and will send me his name and address, together with 3d. in stamps, I will see that he has a copy of the next issue mailed to him.

The Editor

J. Knight (Croydon).—The Meccano Receiving Set No. 1 will receive messages on wave-lengths up to 1,000 metres. All the British broadcasting stations at present operating transmit on wave-lengths varying between 300 and 500 metres.

W. Jones (Carnarvon).—Telegraphy may be received with a Crystal Set up to distances of 100 miles. If you acquire a knowledge of the Morse code you will be able to spend many happy hours listening-in.

R. Williamson (Bradford).—Under ideal conditions telephony may be received with a Crystal Receiver up to a greater distance than that generally recognised (i.e., 20–25 miles). Broadcast from London has been received at Bridlington and Liverpool on Crystal Sets, while a Meccano Set regularly receives broadcast at 33 miles from Manchester.

J. McDonald (Manchester).—You could not ordinarily receive telephony from Paris with a Crystal Receiver. In order to do this it would be necessary for you to employ a valve set.

John Whitaker (Stratford-on-Avon).—(1) Ebonite is a compound of sulphur and rubber. (2) Some telephone receivers are known as the "watch" type simply because of a similarity in shape.

W. Robinson (Norwich).—The nearest broadcasting station to Norwich is Marconi House, London, which is outside the range of a Crystal Receiver.

W. Maddock (Chester).—Audio frequency is the term used for oscillations which are within the range of the human ear. Many thanks for your good wishes.

J. Robinson (London).—A crystal allows the passage of currents in one direction only. Several substances such as galena, silicon, and carborundum have this property. I am glad to know that you are deriving so much pleasure from your Meccano Receiver.

F. Wilkins (Peterborough).—An earth switch connects the aerial to earth when not in use. This is a precautionary measure which obviates any possible trouble from lightning.

R. Leech (York).—(1) There is no danger from burn or electrical shock to any person operating a Crystal Receiver. (2) I am afraid you are too far from the nearest broadcasting station to receive telephony with a Crystal Receiver.

E. Williamson (Ainsdale).—I am glad to know that your Meccano Receiver has been such a boon to you in helping to pass away the long hours of your convalescence. The constructing of the No. 2 Set will lend an added interest to the hobby and you will obtain even greater enjoyment from this set, the result of your own handiwork, than from your existing set.

R. Arnold (New Zealand).—Our agents for New Zealand (Messrs. Browning & Ifwersen, Ltd., P.O. Box 129, Auckland) will always be happy to help you, should you experience any difficulty in assembling your Radio Set.

H. C. Key (Calcutta).—I was very interested to hear of the Radio experiments recently carried out at your camp. Any further news in this connection will be much appreciated.

D. Parker (Newport).—(1) The terminal you require is the Meccano terminal (No. 306) and it is featured in the Radio parts list in your instruction leaflet. (2) The usual price of a 20 ft. aerial pole is from 7/6 to 10/-. This may be purchased from any timber yard in your town.

Joan Biggs (Bridgend).—(1) The "Ducon Plug" is no doubt a very efficient instrument when used with a valve set, but it cannot be used with a Crystal Receiver. (2) Providing you obtain the necessary permission from your landlord I cannot see what an Insurance Co. has to do with the erection of your proposed aerial.

M. Smith (Sharrow).—I am sorry to say that the instructions you require for building a two valve set would take up too much space at present. Numerous text books are published giving the information you require. I am glad to know that the series of articles entitled "The Men Who Gave Us Radio" has given you such enjoyment.

H. Atkins (Leatherhead).—I have examined your proposed circuit but I do not think that it will function, owing to the fact that it is always open, the interrupter being off the contact.

J. P. Cronin (Tralee).—I am glad to know you are such a radio enthusiast. From what I hear you will be able to enjoy the pleasure of listening-in before long just as do we in England.

John Gillam (London S.E.).—I am afraid your No. 2 circuit is not an improvement on your No. 1. For instance there is no need for a secondary coil with a variometer because the inner coil of the variometer serves as a secondary. Also you can dispense with the variable condenser as you will find that the tuning with the variometer is sufficiently sensitive and in fact preferable to the slider tuning.

New Rolling Stock and Accessories

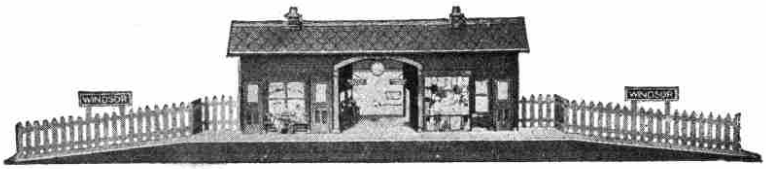
for

HORNBY CLOCK WORK TRAINS

THESE Wagons, Signals, Lamps, Stations and Turntables are all built in correct proportion to the size, gauge, method of coupling, etc., of the Hornby Trains. Most important of all they have the uniformly beautiful finish which is the great feature of the Hornby system. To use cheap-looking rolling stock or a foreign-looking station with a Hornby Train completely spoils the effect.

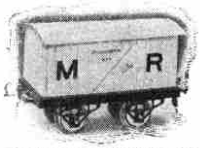
THE WINDSOR STATION is a thing of beauty, and its bright colouring and realistic appearance will bring joy to the heart of every boy who sees it.

BRAKE VANS
Finished in colour.
Each **4/6**



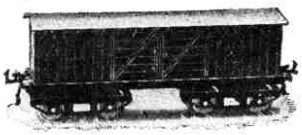
WINDSOR STATIONS
Excellent models, beautifully designed and finished.
Dimensions: Length 2 ft. 9 in., breadth 6 in., height 7 in. Each **12/6**

No. 1 LUGGAGE VANS
Lettered M.R. Representative colours. Each **4/6**



REFRIGERATOR VANS
Enamelled in white, lettered black. Each **4/6**

MILK TRAFFIC VANS
Fitted with sliding door, complete with milk cans. Each **5/-**

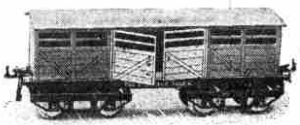


No. 2 LUGGAGE VANS
Finished in colour. Fitted with double doors. Suitable for 2 ft. radius rails only. Each **7/-**

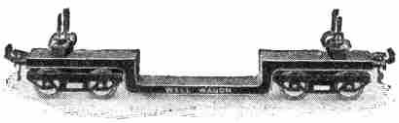
GUNPOWDER VANS
Finished in red.
Each **4/6**

No. 1 CATTLE TRUCKS
Fitted with sliding door, Very realistic design.
Each **4/6**

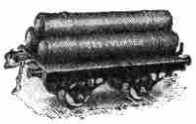
COLMAN'S MUSTARD VANS
Finished in colour.
Each **4/6**



No. 2 CATTLE TRUCKS
Splendid models, fitted with double doors. Suitable for 2 ft. radius rails only. Each **7/-**

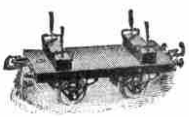


TROLLEY WAGONS. Finished in colour. Suitable for 2 ft. radius rails only. Each **6/6**



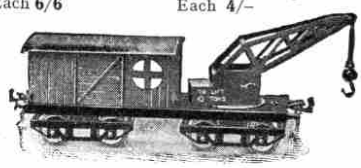
GAS CYLINDER WAGONS
Finished in red, lettered gold.
Each **4/-**

No. 2 LUMBER WAGONS
Fitted with bolsters and stanchions for log transport. Suitable for 2 ft. radius rails only. Each **5/6**



No. 1 LUMBER WAGONS
Fitted with bolsters and stanchions for log transport. Each **2/6**

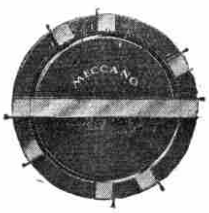
SPRING BUFFER STOPS. Each **2/-**



BREAKDOWN VANS AND CRANES
Excellent finish. Beautifully coloured. Suitable for 2 ft. radius rails only. Each **7/-**

No. 1 TIMBER WAGONS
Beautifully enamelled in colour and stoved. Each **2/-**

No. 2 TIMBER WAGONS
Beautifully enamelled in colour and stoved. Suitable for 2 ft. radius rails only. Each **5/6**



TURNTABLES. Each **4/6**

ROTARY TIPPING WAGONS
Finished in colour.
Each **3/6**

SINGLE LAMP STANDARDS
A four-volt bulb may be fitted into the globe.
Each **3/-**

DOUBLE LAMP STANDARDS
Four-volt bulbs may be fitted into the globes.
Each **4/-**

TELEGRAPH POLES
Each **3/-**

LOADING GAUGES
Each **1/9**

SIGNALS
Each **2/6**

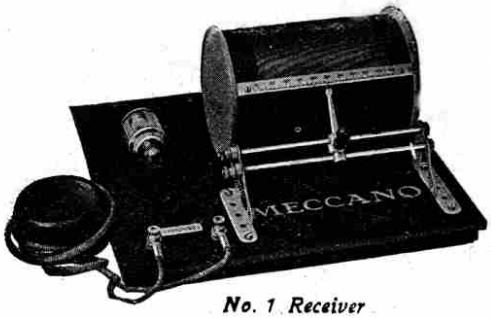
MECCANO LIMITED BINNS ROAD LIVERPOOL

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

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/-

MECCANO LIMITED 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 Leather Palms.	Tan Leather Elastic Wrist.	Tan Leather Laced 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″ × 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.

ANYTHING TO SELL?

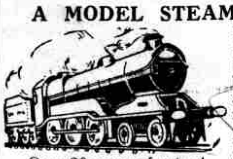
This Space is set to ½ inch s.c. and costs 5/- per month. This sum is the 64th of £16, the price of a whole page advertisement. 55,000 copies of the Dec. number were issued and distributed all over the world. You therefore reach this exclusive public at the rate of one penny a thousand.

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"×2"×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 4½d. 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/-. Microscope Outfit, 3/9, post 4½d. Really good Telescope, 3/9, post 3½d. Pocket Cinema and Real Films, 9d., post 2½d.

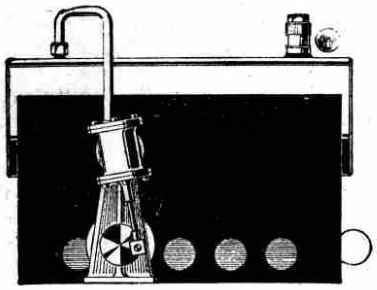
A MODEL STEAM ENGINE



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 ½d. stamps) for large, new, illustrated catalogues and lists.

Over 20 years of actual experience in model making.

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, 7/16×7/16 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.

OMPLETE PLANT (*post free*), **13/-**

f 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! Hullo! 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 10×8×2. 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.**

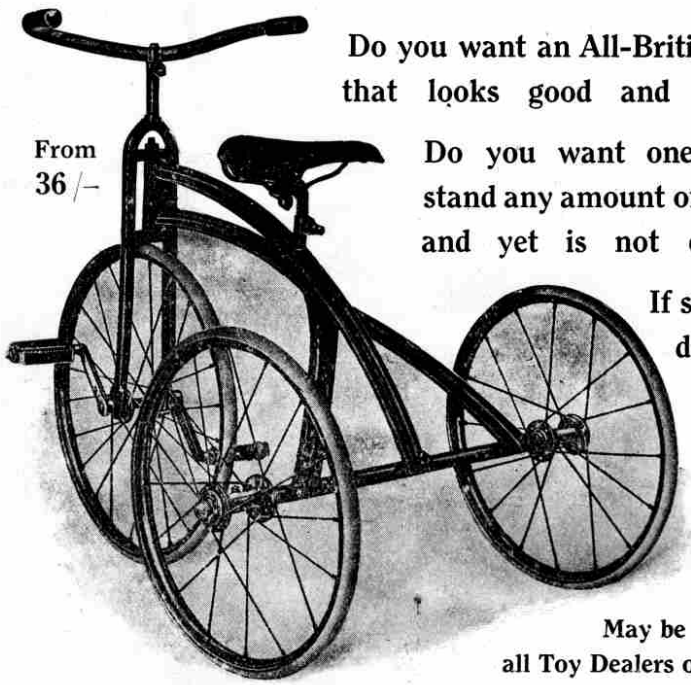
MAKE YOUR OWN ELECTRIC LIGHT

5/-

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