

The Masic Carpet

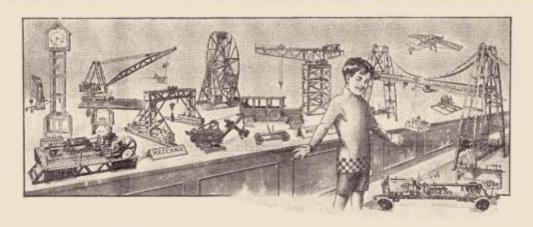


# The Masic Carpet

EVERY boy who has read the "Arabian Nights" knows the story of Prince Houssain's carpet, and how everyone who stood on it had only to express the wish, and he was instantly whisked off to any part of the world he wanted to see. Most boys have thought what a wonderful time they would have if only they owned such a carpet. Well! even fairy tales come true sometimes and this one has surely been realized.

Any carpet with Meccano and a boy on it becomes a Magic Carpet. The boy can wish himself into a workshop filled with fascinating and ingenious machinery; into a factory where he can weave his own gorgeously coloured silks and into hundreds of other places equally entrancing. He can wish for Automobiles, great Bridges, Looms, Cranes that raise and lower real loads and which he can operate himself. And all his wishes come true!

Prince Houssain's Carpet was not half so wonderful as the Meccano Magic Carpet. His was only imaginary, but the Meccano Carpet is read. It is ready now to take you into lands of brightness, joy, and fun. Step on to it, boys, and commence wishing!



## **MECCANO**

Engineering for Boys

The Meccano system is composed of some two hundred different parts, mostly made of steel or brass, and each one has a specified mechanical purpose. The parts combine to form a complete miniature engineering system with which practically any movement known in mechanics may be duplicated

The finest machines are used in the manufacture of Meccano parts, which are all standardized and interchangeable. The steel parts are heavily coated with nickel and the brass parts are finely finished and lacquered.

By employing these parts any boy may build all the hundreds of working models shown in the Meccano literature—and this without previous knowledge or study. He may build Cranes, Wagons, Bridges, Towers, etc., using the same parts over and over again. A fully-illustrated Book of Instructions is included in each Outfit, and he is in no difficulty at any time.

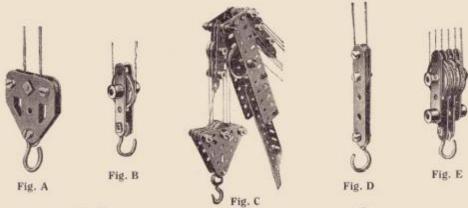
The training of the eye, brain, and hand in erecting Meccano models is considerable. It is a boy's nature to venture into unknown fields, and the Meccano hobby opens up a new and wide world for him to explore. He very soon proceeds to invent and new models and designs, the creation of his own brain, make their appearance.

For convenience Meccano parts are sold in nine Outfits of varying size, How numbered 00 to 7. The quality and finish of the parts are of the same high standard throughout the series, but as the Outfits increase in size they to contain larger quantities and greater varieties of parts. Each Outfit may Begin be converted into the one next higher by the purchase of an Accessory Outfit (see page 16) Thus, if a No. 2 is the first Outfit bought, it may be converted into a No 3 by adding to it a No. 2a A No. 3a would then convert it into a No. 4 and so on up to No. 7. In this way, no matter with what Outfit the boy commences, he may build it up by degrees to a No 7.

The separate Meccano parts may be bought at any time in any quantity (see pages 18 and 19).

### REAL ENGINEERING

Here are a few simple and interesting movements showing how real machines work. If you can understand them you can build any of the big Meccano models, and become a regular Meccano Engineer at once. Meccano engineering is the most fascinating indoor hobby ever invented. Hundreds of thousands of boys all over the world are building Meccano models every day.



### Pulleys

One of the most important mechanisms ever invented is the Pulley, a form of lever that is of great service to engineers. A large variety of pulleys may be made with Meccano Parts, and a few are illustrated above.

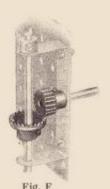
Figs. A, B, and D are simple types useful for quick hoisting. Fig. E is a multiple pulleyblock used on large cranes to obtain great leverage at the expense of hoisting speed.

Fig. C illustrates the jib of the splendid Stiff-Leg Derrick (Model No. 709) suspending a fine block-pulley. This pulley is one of the many interesting features of this model.

### Gears

The Meccano system includes a wide range of Gear-wheels, Bevel-Gears, Pinion-Wheels, Contrate-Wheels and Worm-Wheels in various sizes. All manner of interesting movements may be obtained by the use of these gear-wheels, and below are illustrated three of the most simple arrangements.

Fig. F shows how a vertical movement may be converted into a horizontal movement, or vice versa. Fig. G shows a Worm-Wheel engaged with a Gear-Wheel giving a very great reduction in shaft speed. Fig. H. Still a further movement is shown in this figure, using Meccano Bevel Gears





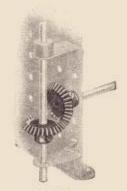
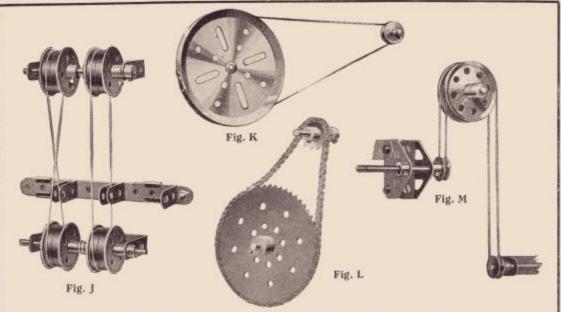


Fig. G

Fig. H



### Belt and Chain Drives

In Meccano models, cords usually take the place of belts for this method of power transmission. Miniature belting may be made, however, from strips of canvas, indiarubber, etc., in which case Flanged Wheels may be used, either singly or in pairs (see Fig. J) instead of grooved Pulleys. The Meccano Spring Cord also forms an excellent means of connection between pulleys.

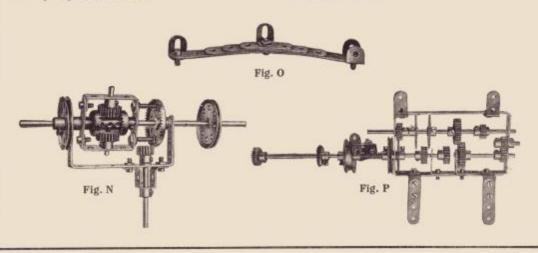
The movements illustrated above require no explanation excepting, perhaps, Fig. J. In addition to the actual drive a simple method is shown for slipping the belt from the fast to the loose pulleys or vice versa.

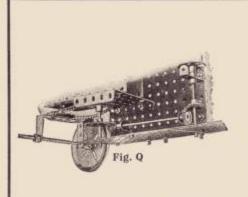
### Motor Chassis Mechanisms

Below are illustrated three important mechanisms, useful for constructing models of Motor Chassis.

Fig. N is a perfect example of a differential, and the model clearly shows the successful method of overcoming the difficulty of one of the drive wheels revolving faster than the other when a car turns a corner.

Fig. O is a laminated spring, made entirely with Meccano parts and Fig. P a gear box which shows how changes in the speed of cars are effected by the meshing of different-sized gear wheels.









### Steering Gears

The various types of steering mechanism commonly in use on vehicles of all descriptions may readily be reproduced with Meccano.

may readily be reproduced with Meccano. Fig. Q. This type of gear, which is particularly suitable for road tractors, etc., operates through a worm gear with chain connection, and is coupled to the hand-wheel by means of Bevel Gears.

Fig. R. In this case the road wheels are moved about their central pivot by means of a crank, which is secured to the steering shaft, and a connecting strip.

Fig. S. The road wheels in this example are secured to a central rod, which forms a pivot, and is rotated from the hand-wheel by means of a worm pear.

### Three Interesting Mechanisms

Fig. T. Here is shown a method by which the table of a drill, or similar machine, may be secured quickly and rigidly in any position on the upright rod upon which it slides.

Fig. U. This illustrates the standard Meccano ball-bearing, which may be employed wherever it is required to rotate one part of a model freely upon another, with a minimum of friction.

Fig. V. A typical crankshaft built up from cranks and triangular plates (forming balance weights) etc. is shown in Fig. V. The eccentric appearing in the illustration operates the valve mechanism of the engine.

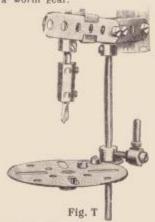






Fig. V

### Meccano Standard Mechanisms

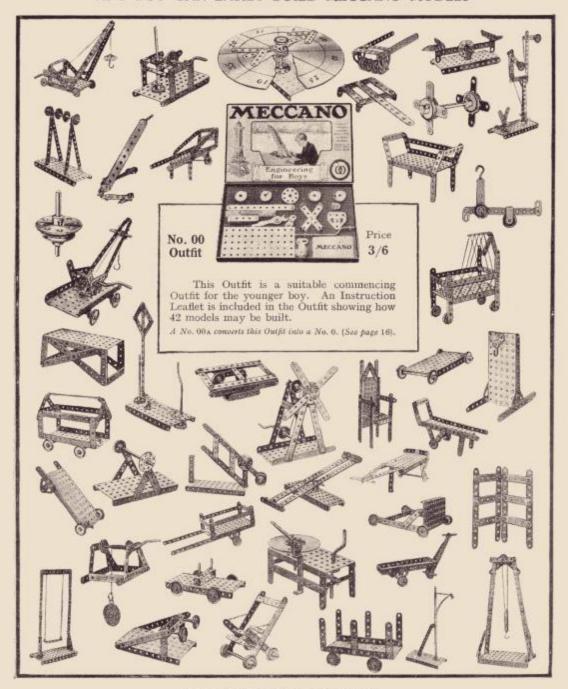
In December 1925 we are publishing an entirely new book, dealing with a variety of mechanisms on similar lines to those shown in this and the preceding pages. Gear Ratios, Belt and Rope Mechanisms, Levers, Clutches, Brakes, Steering Gears, Traversing Mechanisms, Grabs and many similar movements will be illustrated and described. The book, known as "Meccano Standard Mechanisms," is essential to every model builder, for the standard mechanisms are applicable to many models and may be used for a variety of purposes.

The price will be 1/- postage 1/26, extra) and orders, accompanied by a remittance for 1/1/2, may now be sent in. They

The price will be 1/- (postage 1 d. extra) and orders, accompanied by a remittance for 1/11, may now be sent in. They will not be acknowledged but will be filed and dealt with in strict rotation, delivery being effected as soon as the book becomes

available.

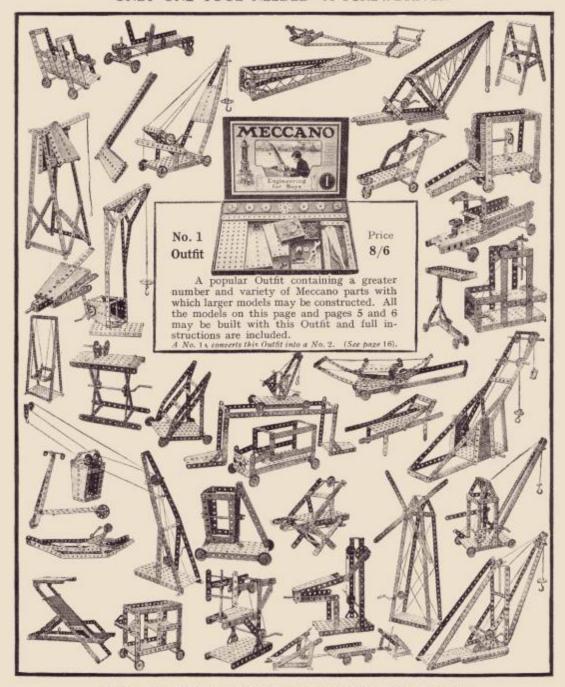
### ANY BOY CAN EASILY BUILD MECCANO MODELS



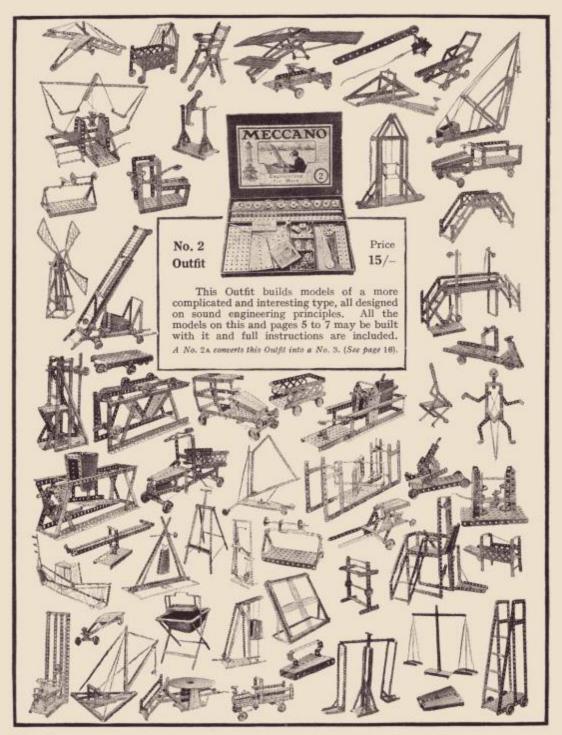
### A NEW MODEL FOR EVERY DAY IN THE YEAR



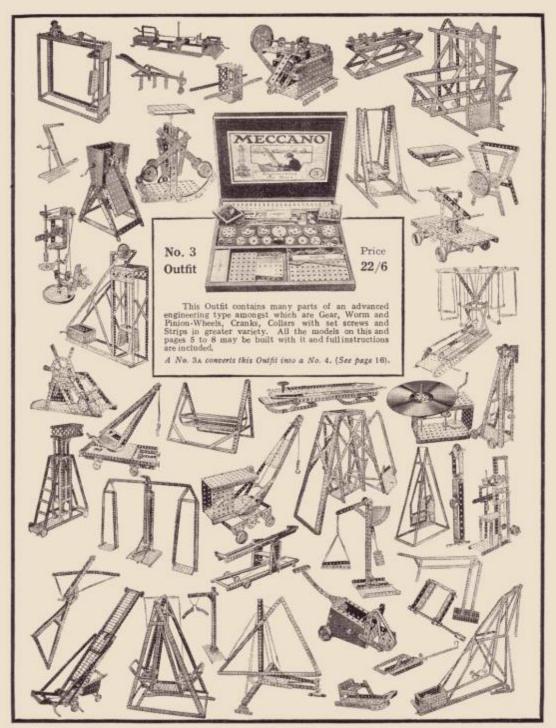
### ONLY ONE TOOL NEEDED-A SCREWDRIVER

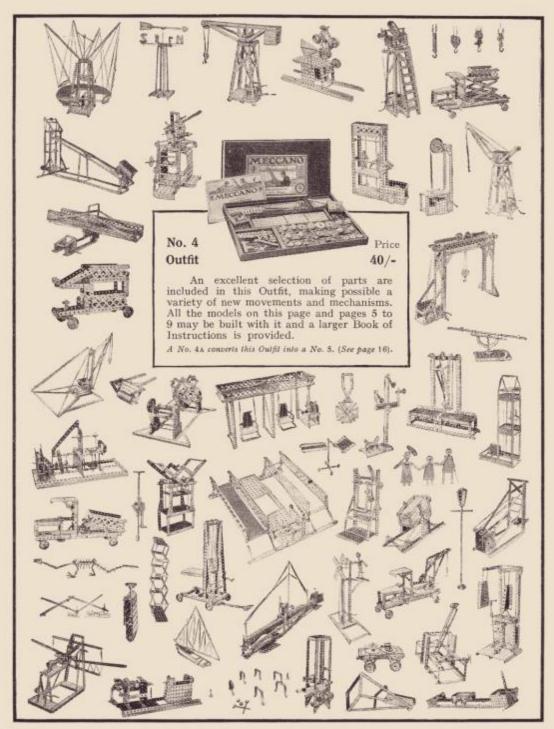


THERE IS NO LIMIT TO THE NUMBER OF MODELS

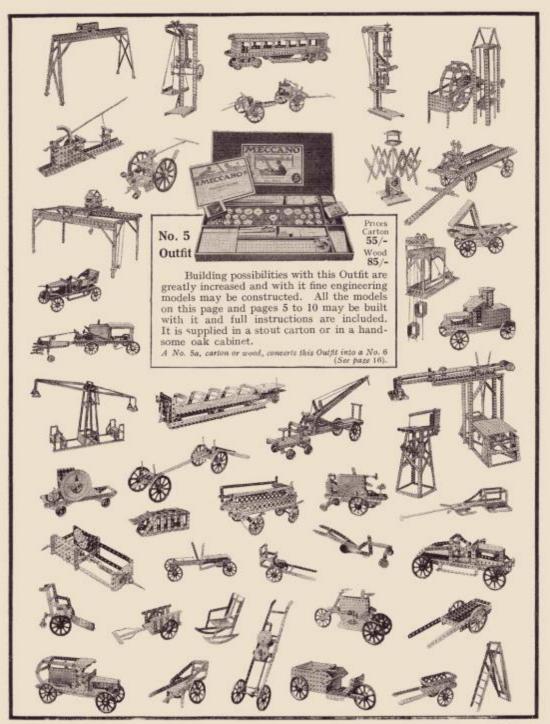


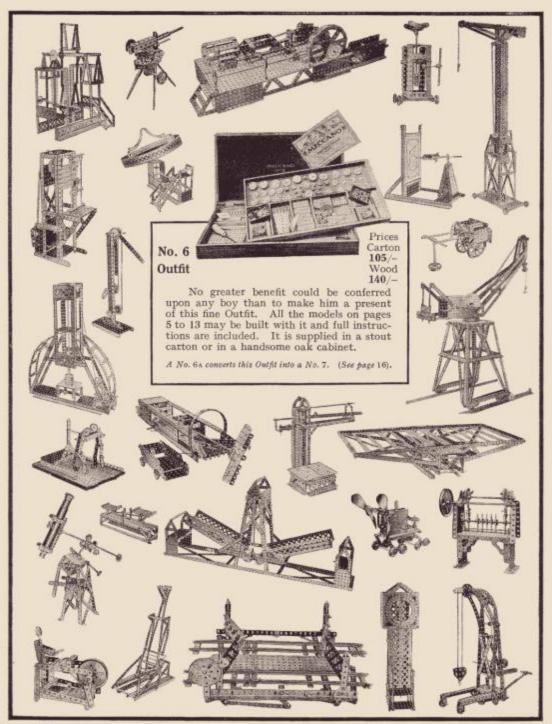
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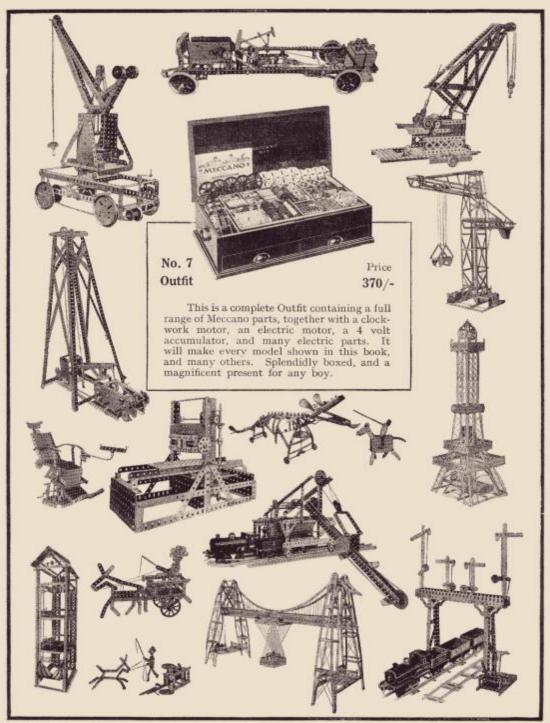




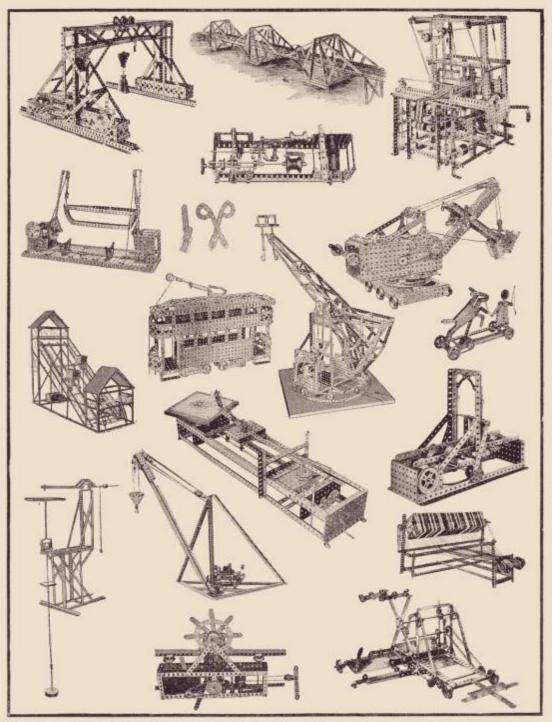
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### ACCESSORY OUTFITS

OUR illustration shows one of the Meccano Accessory Outfits. These Outfits connect the main Outfits from No. 00 to No. 7, making it possible for a boy who commences with one of the earlier Outfits to build up his equipment by easy stages, until he is the possessor of parts that cover the entire system.

#### Meccano Accessory Outfits.

No.	00a converting No.				into	No.	0	***	1/6
**	0a.	1.0	**	0	11	**	1	***	4/-
**	1a	**	**	1	44	**	2	***	7/6
33	2a	11		2		100	3	***	8/6
**	3a	13		3		**	4	***	18/6
11	4a		11	4	**		5	***	15/-
	5a*	**		5	**		6		50/-
	5a†			5	-		6	***	80/-
	6at			6	**		7		210/-
	*Carton.				10000	†Wood.			



# MECCANO ELECTRICAL OUTFIT

### ELECTRICAL OUTFIT

THE application of Electricity to the Meccano system adds a further and wonderful charm. The joys of model-building are now increased by the fascinating pastime of carrying out delightful electrical experiments.

THE MECCANO ELECTRICAL OUTFIT contains a number of specially designed electrical accessory parts, and, used in conjunction with any of the regular Outfits, enables the user to construct models for making interesting and instructive experiments. These include the Electric Railway, Morse Key, Tapper Key, Buzzer, Electric Lamps, Electric Crane, Induction Coil, Electric Iron, Motor-Starter, etc.

Price ... ... 42/-

### SHAFTING STANDARDS



THESE Shafting Standards are designed on the Meccano system, with loles. Our illustration s ho ws how strong and services ble sbafting may be constructed from Meccano parts with the aid of the Large Standard.

Standard only, Large ... Price 1/-

### SAW BENCHES



THIS model Saw Bench is suitable for use with an Electric or Clockwork Motor. By means of the equidistant holes in the base it may be built into a Meccano Model Workshop. Beautifully finished in black enamel and pickel.

Price ... ... 4/-

### MECCANO ELECTRIC MOTORS

### No. 1 ELECTRIC MOTOR

(4-VOLT)

THE 4-volt motor is specially designed to build into Meccano models. It is a most reliable and powerful model and when properly geared will lift over 30lbs dead weight. It may be run by a 4-volt accumulator or, by employing a suitable transformer, direct from the main. Fitted with reversing motion, provided with stopping and starting controls, and the gearing is interchangeable.

No. 1 Electric Motor ... Price 15/6

No. 2 ELECTRIC MOTOR

No. 1 Motor

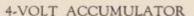
4. Volt

(100-250-VOLT AC or DC)

THIS Electric Motor may be employed for any purpose for which a small motor is suitable, but it is specially adapted for driving Meccano models. The side plates are perforated with standard equidistant holes, thus allowing the motor to be built into any Meccano model. The motor is specially designed for connection with the electric-light main. It is supplied for 100-120 volts or 200-250 volts (alternating or direct) and is fitted with 6 ft. length of flex, an insulated plug for connection with the motor terminals, and an adapter for connection with an ordinary lamp socket. A suitable resistance is required when the motor is run with a 200-250 volt current, and this is supplied by connecting a 60-watt lamp in series with the motor.

No. 2 Motor A board, on which are mounted a suitable lamp-holder (lamp not 100-250 Volt included) and a switch, is provided separately.

No. 2 Electric Motor ... ... ... ... Price 32/6 Lamp Board (with Lamp-holder and switch) ... ... 4/6

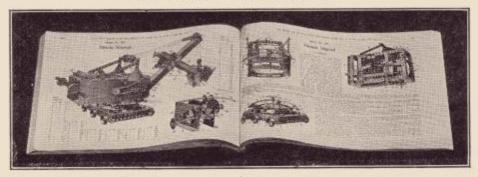


THIS new and excellent type of accumulator has been adapted to drive the Meccano No. 1 Electric Motor (4-voit). It has remarkable recuperative powers, and will continue to supply current when nominally exhausted. Price ... ... 17/6

### CLOCKWORK MOTOR

This is a splendid piece of mechanism, simple, powerful, reliable and free from all danger. It is fitted with starting, stopping and reversing levers, and all its movements are fully explained in the instructions that accompany it. Price ... ... ... 7/8

### THE MECCANO MANUALS



THERE are three Manuals, the 0 Manual for simple models built with the 00 and 0 Outfits, the 0-3 Manual comprising models built with any of the Outfits up to and including No. 3, and the Complete Manual, which comprises a selection of models that may be built with every Outfit up to a No. 7.

This latter Manual is a very fine publication and should be in the hands of every Meccano boy. It includes instructions for building 391 models. The new edition (No. 25) of the Complete Manual is beautifully illustrated in balftone. Most of the models have recently been revised, and very greatly improved by the introduction of new parts that have been added to the Meccano system during the past year.

Clockwork

Motor

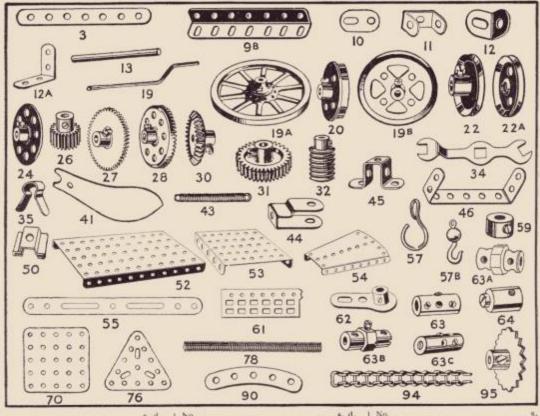
PRICES OF MANUA. 5.

9 Manual (post free) ... ... 6d.

0-3 ... ... 1/2

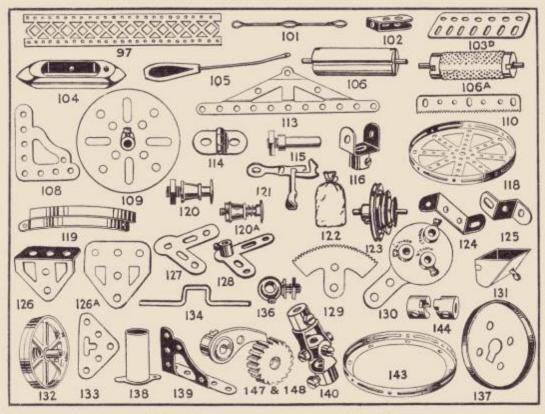
Complete Manual ... ... 2/10

### MECCANO ACCESSORY PARTS



No.  1. Perforated Strips, 12½° long ½ doz. 1 0  1a. " " 9½" " " 0 9  1b. " " 7½" " 0 8  2. " " 5½" " 0 6  2a. " " 4½" " 0 5  3. " " 3½" " 0 4  4. " " 3" " 0 3  5. " 0 3	No.	No. 37. Nuts and Bolts per box (doz.) 0 6 37a. Nuts 9 0 3 37b. Bolts 9 0 3 38. Washers doz. 0 1 40. Hanks of Cord 2 for 0 3 41. Propeller Blades per pair 0 4 43. Springs each 0 2 44. Cranked Bert Strips 9 1
6. " " " " " 0 3 6a. " " 0 3 7. Angle Girders, 24½ long each 0 8 7a. " 18½" 0 6 8. " 12½" ½ doz. 1 9 8a. " 9½" 1 3 8b. " 7½" 1 2	19b. 3" diam, with centre boss and set screw , 0 8 19c. 6" , , , , , , , , , , , , , , , , , ,	45. Double Bent Strips 0 1 46. Double Angle Strips, 2½"×1"½ doz.0 e 47 3"×1½" 0 9 47a 3"×1½" 1 0 48 1½"×½" 0 4 48a 2½"×½" 0 5 48b 3½"×½" 0 6
9. " 5½" " " 1 0 10 9a. " 4½" " " 0 10 9b. " 3½" " " 0 8 9c. " 32" " " 0 8 9d. " 2½" " " 0 6 9f. " 14" " " 0 6	23a. ‡" , with , , , , , , 0 2 23a. ‡" , with , , , , , , 0 4 24. Bush Wheels , 0 6 25. Pinion Wheels, ‡" diam , 0 6 26. , , , , , , , , , , , , , , , , , , ,	480
10. Flat Brackets 0 2 11. Double Brackets each 0 1 12. Angle Brackets, \$\frac{1}{2} \times \frac{1}{2} \times \	27a. 57 " " ½" " 0 9 27b. 133 " " ½" " 1 6 28. Contrate Wheels, ½" diam. " 0 9 29. " 0 6 30. Bevel Gears " 0 10 31. Gear Wheels, ½", 38 teeth " 1 0	34" × 24"
14. " " 6½" " " 0 2 15. " " 5" " " 0 2 15a. " " 4½" " " 0 1 16a. " 3½" " " 0 1 16b. " 2½" " " 0 1	32. Worm Wheels 0 6 34. Spanners 0 2 34b. Box Spanners 0 3 35. Spring Clips per box (doz.) 0 3 36. Screw Drivers each 0 3 36a (extralong) 0 6	56. Instruction Manuals complete 2 6 56a. " No.0-3 1 0 56b. " No.0 0 0 4 57. Hooks 0 1 57a. (scientific) each 0 1 57b. (loaded) 0 5

### MECCANO ACCESSORY PARTS—(continued)



63b. 63c. 64. 65.	Couplings Octagonal Couplings Strip Couplings Threaded Couplings Threaded Bosses Centre Forks Weights, 50 gramme 25 Woodscrews, ½" Grub Screws. Grub Screws. Flat Plates, 5½" Flat Plates, 5½" Triangular Plates, 2½" Screwed Rods, 11½" " 5" 6" " 6" " 5"	4. 9 0 2 2 3 4 6 8 8 6 2 2 1 0 0 3 4 4 6 5 2 2 1 1 6 5 4 6 3 3 2 1 1 2 1 6 5 4 6 3 3 3 2 1 2 1 6 5 4 6 3 3 3 2 1 2 1 6 5 4 6 3 3 3 2 1 2 1 6 5 4 6 3 3 3 2 1 2 1 6 5 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6	too Vi Trota nifeti-	if 0 0 h 0 0 n n 0 0 n n 0 0 n n 0 0 n n 0 0 n n 0 0 n n 0 0 n n 0 0 n n 0 0 n n 0 n n 0 n n 0 n n n 0 n n n n 0 n	1.282250000022440228866444422000400008 82200 0
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### THE

### "MECCANO MAGAZINE"



THE Meccano Magazine, published in the interests of boys, contains splendid articles on such subjects as Railways, Famous Engineers and Inventors, Electricity, Bridges, Cranes, Wonderful Machinery, Latest Patents, Radio, Stamps, Photography and Books. New Meccano models and new parts are announced from time to time, and full details are given of the special competitions arranged for Meccano boys. There are special articles also for owners of Hornby Trains.

The Meccano Magazine is published on the 1st of each month and may be ordered from your Meccano dealer or from any newsagent or bookstall, price 3d. If desired it will be mailed direct by Meccano Ltd., Binns Road, Liverpool (post free) for six months 2/-, or twelve months 4/-.

### The Meccano Guild

THIS is the little enamelled badge showing that the wearer has joined up with thousands of other Meccano boys for more fun, more friends, good fellowship and mutual help. Each member obtains one of these badges when he joins the Meccano Guild, and he at once becomes the acknowledged friend of every other Meccano boy throughout the world.



The Maccanu Guild Badge

Any boy possessing a Meccano Outfit may join the Meccano Guild. Send for full particulars and a form of application to the Secretary, Meccano Guild, Binns Road, Liverpool.

MECCANO CLUBS.—There are now Meccano Clubs in most towns, run by enthusiastic Meccano boys and guided by adult Club Leaders. They hold regular meetings, arrange exhibitions and concerts and generally enjoy themselves in the ways in which boys find delight. They are all affiliated to the Meccano Guild, whose officials tell the boys how to form and run the Clubs so as to make them successful.

The Meccano Guild Secretary will let you know if there is a Meccano Club in your town, and if you write to him he will give you interesting information about this great world-wide boys' movement.

Published by
Meccano Limited, Liverpool.