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Printing Machine

Girder Crane

Letter Balance

Crane

MECCANO

Pit Head Gear

Fire Escape

Punching

Machine

Eiffel Tower

HEN a boy takes up Meccano he begins his life afresh in a land of pleasure and brightness. A Meccano boy's life is different from the life of any other boy. He is the happiest boy in the world, for he has joined the ranks of boys who do things. He has glorious times building models models that actually work -and playing with them. And when he tires of one model, he takes it to pieces and builds an entirely different one with the same parts. So he goes on day after day, building a countless variety of models, each one a perfect toy, each one giving him many hours of fun. Time never hangs heavily on his hands, for he is as busy and happy as he can be. He is a member of a great fraternity of a million other boys, all friends, all with interests, pleasures and work in common.

The toy that brings all this happiness is Meccano, the building system invented by Frank Hornby twenty years ago, and now brought to an extraordinary state of perfection. This book will tell you all about the Meccano hobby, what it is, and what it will do. If you do not actively pursue this hobby you are missing endless fun and pleasure, and sacrificing the friendship and help of a million other clever and contended boys. You are also depriving the other boys of your friendship and help. They want you and they ask you to join them in their happy pursuits.

Motor Chassis

MECCANO

Engineering for Boys

The parts of which the Meccano system is composed are illustrated on pages 14, 15 and 16. There are over one hundred different parts, mostly made of steel or brass, and each one has a specified mechanical purpose. The whole of the parts

combine to form a complete engineering system and with them practically any movement known to mechanism may be constructed.

The finest machines are used in the manufacture of the 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 models shown in the Meccano literature, and make them work—and this without previous knowledge or study. He may build Cranes, Wagons, Bridges, Towers, etc., using the same parts over and over again. A well illustrated Book of Instructions, written in clear and simple language, is furnished to him with his Outfit, and he is in no difficulty at any time.

The training to the eye, brain and hand in erecting Meccano models is very great, but there is also developed a faculty of priceless value to every boy. No Meccano boy is content to build the models just as he finds them; they always have heen, always will be, capable of alteration and improvement, and the boy sets to work to do this almost at once. 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 commences to invent, and new models and designs, the creation of his own brain, make their appearance. Knowing the value of this we give him encouragement by offering prizes for new models, and in the last few years some hundred thousand models have been submitted to us for adjudication, and many thousands of dollars distributed in prizes to capable boys.

How to Begin

For convenience Meccano parts are sold in several different sized Outfits, numbered 00 to 6. There is no difference in the quality or finish of the parts in any of the Outfits, but as the latter increase in size, they contain larger quantities and greater varieties of Meccano parts. Each Outfit may be converted into the one higher, by the purchase of an Accessory Outfit

(see page 12). 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. 6. In this way, no matter what Outfit the boy commences with, he may build it up by degrees to a No. 6, and so be able to make all the many hundreds of models shown in the Books of Instruction.

The separate Meccano parts may be bought at any time in any quantities (see pages 14, 15 and 16).



No. 00 OUTFIT

THIS is a splendid new Outfit containing sufficient parts for building 40 different models. A well-illustrated 8-page booklet of instructions is included in each Outfit, making everything quite clear. The models are of a simple type, so that even the very young boy can build them—wagons, derricks, windmills, etc., providing hours and hours of joyous play. No study is needed, and there is nothing further to buy.

No. 00 Outfit

Price ... \$1.00

No. 0 OUTFIT

THE No. 0 Outfit contains a good assortment of Meccano strips, rods, wheels, plates, nuts and bolts, etc., and a special Book of Instructions for building 70 fine working models, including Trucks, Carts of all kinds, Wheelbarrows, Gocarts, Airplanes, Cranes, Swings, Bridges, etc., each a perfect toy, capable of giving hours of fun. All tools, and everything necessary for commencing to build immediately, are included.

No. 0 Outfit

Price

\$2.00





No. 1 OUTFIT

THIS outfit is a very popular one. It contains a greater number and a bigger selection of Meccano parts, with which larger models may be built, including fine Cranes, Trucks, Joy-wheels, Merry-go-rounds, Aeroplanes, Windmills, etc. A big fully illustrated Book of Instructions is included, which makes everything clear and shows how 106 models can be made with the outfit.

No. 1 Outfit

Price \$3.00

No. 1X OUTFIT

THE No. 1X Outfit contains all the parts of the No. 1 Outfit and in addition a dandy E-1 Electric Motor to make the models work like real machinery. This fine motor, described fully on page 13, will operate the working models that can be made with the outfit and greatly increases the fun of playing with Meccano. The motor will build right into and form a rigid part of the model, and is equipped with a pulley and driving pinion—power can be transmitted by belt or gear. The outfit and motor bought separately would cost \$5.50, yet this special outfit costs only \$5.00.

No. 1X Outfit

Price \$5.00





No. 2 OUTFIT

THE fortunate owner of a No. 2 Outfit is able to build models of a more complicated and interesting type. Large Cranes, excellent Windmills, well-constructed Bridges, Derricks, Mechanical Hammers, etc., all designed on sound engineering principles, with hours of pleasure stored up in each one; a splendid commencing outfit. As in all Meccano Outfits, full instructions for building are provided, everything necessary is included in the outfit, and there is nothing further to buy. No study is necessary, and the youngest boy can commence to build as soon as he gets his outfit.

No. 2 Outfit

Price \$6.00

No. 2X OUTFIT

THIS is the second in the series of popular X outfits. It contains everything found in the No. 2 Outfit, described above, and a reversing electric motor, yet the complete No. 2X Outfit costs only \$8.50. With the aid of the motor, many realistic working models can be made—the Manual of Instructions included in this outfit illustrates 163, and you can invent many more.

No. 2X Outfit

Price \$8.50





No. 3 OUTFIT

HIS excellent outfit contains many parts of a more advanced engineering type. They include correctly cut gear wheels, worm wheels, pinion wheels, collars with set screws, cranks and strips in greater design and variety. The Cranes, Bridges, Motor-cars, etc., which it builds are of the better type, and in addition such excellent models as Railroad Crossing Gates, Pile Drivers, Inclined Delivery Chutes, Demonstration Scales, Mine Shaft Elevators, etc., may be constructed. It contains a big Manual of Instructions showing how to build 207 models.

No. 3 Outfit

Price	 	 	\$9.00

No. 3X OUTFIT

THIS is the No. 3 Outfit with the reversing motor. It enables you to build all the models possible with the No. 3 set and make them work. Any boy can think of many original models that he can make with this fine outfit—the Manual included shows how to build Band Saws, Lawn Swings, a Pile Driver and many others—a total of 207, and most of these can easily be made to work by having the Electric Motor built into them.

No. 3X Outfit

Price \$11.50





No. 4 OUTFIT

HIS is a fine substantial outfit containing a big selection of Meccano parts, including contrate wheels, enabling the user to construct reversing gears, etc. Engineering parts of this type greatly improve the working of the models, and make possible a big variety of new movements and mechanisms. Among the No. 4 models illustrated in the Manual are Flying Machines, Drilling Machines, Travelling Cranes, Lathes, Girder Cranes, Swivelling and Luffing Jib Cranes, Steam Shovels, Hay Stackers, Automatic Weighing Machines, etc. A reversing Electric Motor is included in this outfit, also a much larger Book of Instructions, showing how to construct 257 working models.

No. 4 Outfit Price \$15.00



No. 5 OUTFIT

building possibilities with HE this outfit are greatly increased, and fine engineering models, including a Printing Press, Screw-Cutting Lathe, Giant Auto Swing, an improved Mine-Shaft Elevator, Telpher Line, Drop Hammer, Beam Scales, etc., may be constructed with it. There are 756 parts in this outfit, including an assortment of fine brass contrate wheels, solid pinions, accurately finished gears and couplings, etc. A reversing Electric Motor is also included, providing a reliable powerplant for operating the models. A big Book of Instructions is provided, showing how to build 287 models.

No. 5 Outfit

Price \$20.0

No. 5X OUTFIT

THIS is a special presentation outfit containing 817 parts—all the contents of the No. 5 Outfit plus a large number of new parts recently added to the system and not included in any of the other regular outfits. Among these are Braced Girders, Sprocket Wheels, Large Pulley Wheels and other parts. A Meccano Transformer is also included in addition to the reversing Electric Motor.



No. 5X Outfit Price \$25.00

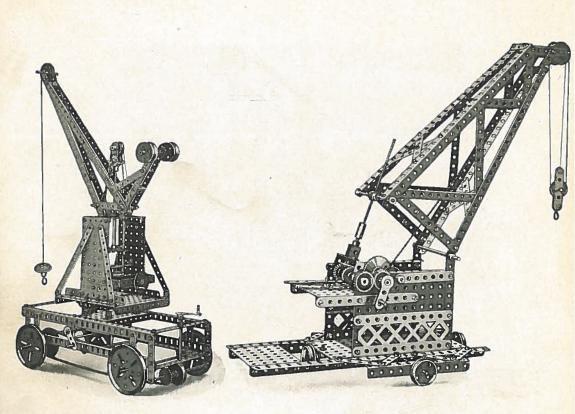


No. 6 OUTFIT

THE No. 6 Meccano Outfit contains a very fine range of Meccano parts. It will make all the models possible with the earlier outfits, and many more, including a Ferris Wheel, Beam Engine, Stone Sawing-Machine, Jack-Knife Bridge, Escalator, Planing Machine, Radial Travelling Crane, Tower Bridge, Meccanograph, etc.,-327 models in all. The Electric Motor included in this outfit will make the models work like real machinery. Some of the models stand several feet high, and they represent the genius of generations of engineering and mechanical experts. No greater benefit could he conferred upon any boy than to make him a present of this outfit. It will give him a sound knowledge of all the great engineering feats of the world, and will cause him to take a deeper interest in one of the most attractive sides of life. If he intends to pursue an engineering career it is an indispensable part of his education and will make his initiation into an intricate subject easy and pleasant.

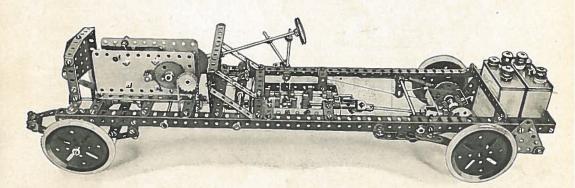
No. 6 Outfit

Price

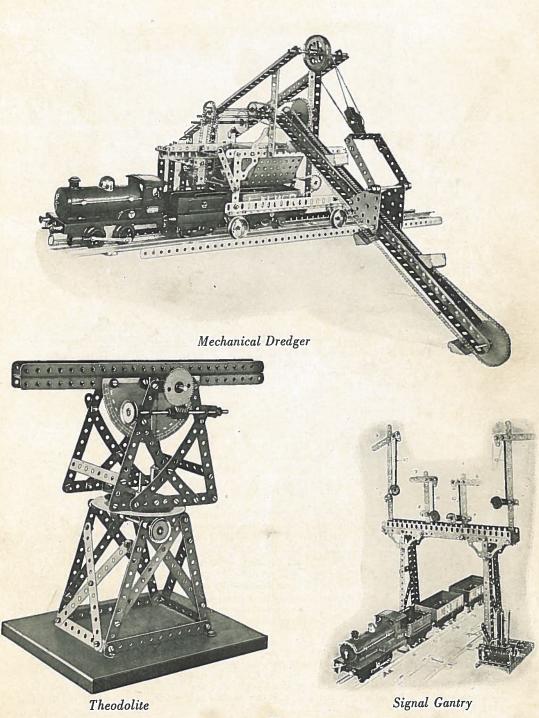


Hydraulic Crane

Revolving Crane



Motor Chassis





MECCANO ACCESSORY OUTFITS

UR illustration shows a specimen of one of the Meccano Accessory Outfits. As we have already explained, these outfits connect the main outfits from No. 0 to No. 6, 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 which cover the entire system.

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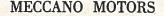
Accessory Outfits do not contain motors

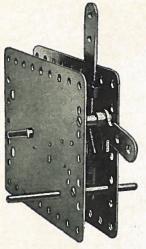
MECCANO MANUALS OF INSTRUCTIONS



THERE are two Meccano Manuals of Instructions, and no Meccano boy is properly equipped unless he has them both. Book No. 1 is the regular Manual which goes with the main Meccano outfits. It contains illustrations and full instructions for making 325 fine models; some of the models have been designed by our own staff of experts, and others are prize-winning models contributed by Meccano boys from every country in the world. Price, 35 cents postpaid.

Book No. 2 contains illustrations and instructions for building 100 entirely new models, very many of them prize-winners. The Eiffel Tower and Transporter Bridge are imposing models of great beauty, and the High Speed Ship Coaler, Vertical Drill, and Punching Machine are interesting models for those fond of mechanism. There are many models shown which can be made with the smaller outfits, and a series of simple scientific experiments, including Triangle of Forces and Inclined Plane, which any boy can make, and which impart a lot of useful knowledge. Price, 35 cents postpaid





ALL the Meccano models can be made to work by hand, but it adds greatly to the fun of the hobby if the models are operated in a realistic way by means of a motor. Both the Meccano Clockwork and Electric Motors are specially designed to build into Meccano models, and, in fact, they may be said to be part of the system itself. They are pierced with the regular Meccano equidistant holes, and they fit smoothly into position, giving no trouble and a great deal of extra pleasure.

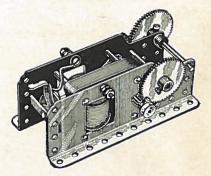
MECCANO CLOCKWORK MOTOR

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, due to its design, extra gearing made from Meccano parts can be applied to produce greater lifting power. It is very easy to understand, and all its movements are fully explained in the instructions which accompany it.

Meccano Clockwork Motor \$3.00

MECCANO ELECTRIC MOTORS

THE use of electricity exercises a great fascination for any intelligent boy, and this motor provides him with the means of running all his models by electricity. It is well designed, simple, strong and free from danger. Suitably geared, it has a lifting power of more than 30 pounds. It takes four volts, and may be operated either by storage or dry batteries, or direct from the house current if a suitable transfomer is used. No more powerful or satisfactory toy Electric Motor has ever been designed.



Meccano Electric Motors

E-1 Non-Reversing			 	 \$2.50
E-2 Reversing, with	extra	gears	 	 3.50



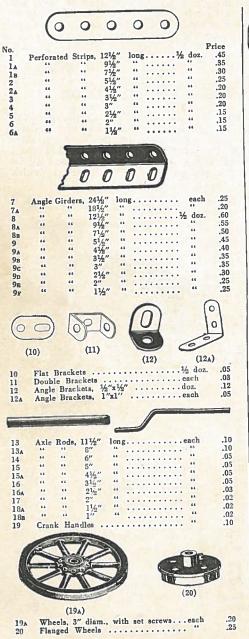
MECCANO TRANSFORMER

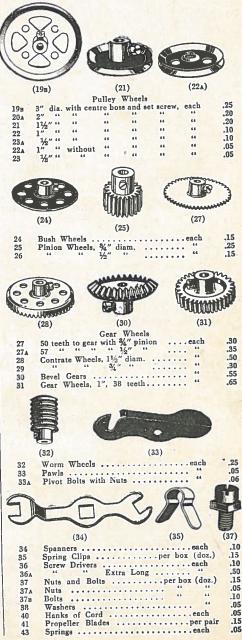
(For 110 v. a. c. 60 cycles only)

THE Meccano Electric Motor can be operated direct from house current by the use of the Meccano Transformer. This method is very convenient and eliminates battery cost. The transformer is entirely enclosed, and has no moving parts to get out of adjustment. It is absolutely safe for any boy to use. Screw the plug furnished with the transformer into the lamp socket, connect the wires from the motor to the two binding posts and turn on the current. Away goes the motor with a merry hum.

Meccano Transformer \$2.50

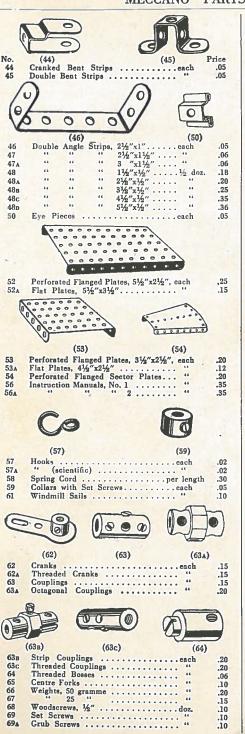
Particulars and Prices of Meccano Parts





14

MECCANO PARTS (Continued)





15

MECCANO PARTS (Continued)

