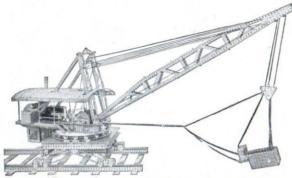
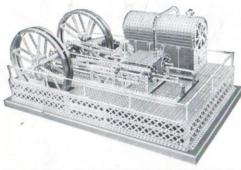


A Selection of Meccano Super Models

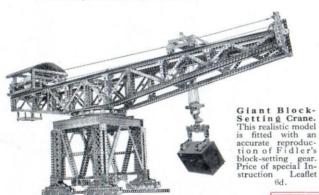


Dragline. This imposing model of a giant excavator is fitted with travelling, luffing, slewing and dragging movements. Price of special Instruction Leaflet 3d.



Two-Cylinder Steam Engine and Boiler. This is a realistic working model of a complete steam plant, equipped with valve gear, governor, balanced cranks, etc.

Price of special Instruction Leaflet 3d.





Three-Engine Biplane. This is a realistic model of an "Argosy" machine, fitted with alleron elevators and rudders. Price of special In ruction Leaflet 3d.

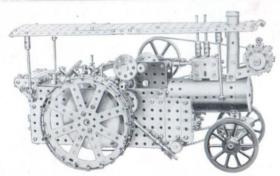
The models illustrated on this page show the wonderful possibilities of Meccano. They are a selection from a range of super models that have been specially produced by our expert designers. Each one in the series is a masterpiece and there is not a boy in the country who will not be eager to build them all.

These models are so important that we have engaged expert engineers to describe them. and a special leaflet with beautiful half-tone illustrations and detailed instructions has been written for each of them.

A descriptive leaflet, giving full particulars of all the models in the series and the prices of the special Instruction Leaflets that are published in connection with them, may be obtained free of charge from your dealer, or direct from

MECCANO LTD.

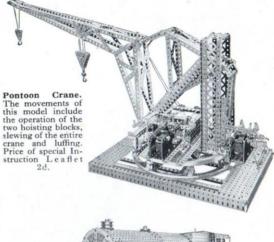
Binns Road - Old Swan - Liverpool.



Traction Engine. This is a powerful model capable of hauling heavy loads. It is driven by a 6-volt Motor and is fitted with two-speed and reverse gear box, crankshaft, piston, and valve motion, worm-and-chain steering, brake, "dynamo," etc. It is a fine example of the latest Meccano construction. Price of special Instruction Leaflet 2d.

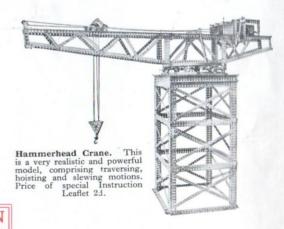
WIN £5 WITH A BRAINY SUGGESTION

Can you suggest a better title than "Our Future Engineers" for the picture on the cover? A prize of £5 will be awarded to the reader who sends one that we consider more suitable. Write your suggestion on a post card and send it to us before the 31st January, 1930.





Baltic Tank Locomotive. The driving wheels are operated by an Electric Motor. An accurate reproduction of Walschaerts' Valve Gear is fitted. Price of special Instruction Leaflet 3d.





MECCANO

The Toy that made Engineering famous





































































The Meccano system is composed of over two hundred different parts, mostly made of steel or brass, each one of which has a specified mechanical purpose. These parts combine to form a complete miniature engineering system with which practically any mechanical movement

may be reproduced in model form. More can be accomplished with Meccano than with any other constructional toy, for no other system has such possibilities. The genius is in the parts and the youngest boy can commence to build models as soon as he gets his Outfit

How to Begin

Meccano is sold in nine different Outfits, numbered 00 to 7. All Meccano parts are of the same high quality and finish, but the larger Outfits contain a greater quantity and variety of parts, making possible the construction of more elaborate models. Each Outfit may be converted into the one next higher by the purchase of an Accessory Outfit (see page 14). Thus, if a No. 00 is the first Outfit bought, it may be converted into a No. 0 by adding to it a No. 00A. A No. 0A will then convert it into a No. 1 and so on up to No. 7. In this way, no matter with what Outfit a boy commences, he may build it up by degrees until he possesses a No. 7. Meccano parts may be bought separately at any time in any quantity. The border of the page shows an interesting selection of the latest additions to the Meccano System. A complete illustrated Accessory Parts list may be obtained from any Meccano dealer.

Hundreds of Models

There is no limit to the number of models that can be built with Meccano-Cranes, Clocks, Motor Cars, Ship-Coalers, Machine Tools, Locomotives-in fact everything that interests boys. The most wonderful thing about Meccano is that it is real engineering; it is fascinating

and delightful and vet so simple that even an inexperienced boy may join in the fun of building models without having to study or learn anything. A beautifully illustrated Book of Instructions showing how to make hundreds of models is included with every Outfit and a screwdriver is the only tool required.

Boys, Build and Invent

The training of the eye, brain and hand in erecting Meccano is considerable, but there is also developed a faculty of immense value to every boy. No boy is content to build the models exactly as he finds them; it is always possible to improve, and he 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 proceeds to invent, and new models and designs, the creation of his own brain, make their appearance.

The Meccano Service

The Meccano boy of to-day will be the famous engineer of to-morrow. When a boy wants to know something more about engineering than is now shown in our books, or when he strikes a tough problem of any kind he writes to us. We receive over 200 letters from boys every day all the year round. Some write to us because they are in difficulty, others because they want advice on their work or pleasures, or about their choice of a career. Others, again, write to us just because they like to do so-and we are glad to know that they regard us as their friends. We

publish a special Magazine for them (see page16).

Although all kinds of queries are addressed to us on all manner of subjects, the main interest is, of course, Engineering. No one has such a wonderful knowledge of engineering matters as that possessed by our staff of experts, and this vast store of knowledge, gained only by many years of hard-earned experience, is at every Meccano boy's service.















MECCANO

Strong, Sturdy, Realistic Models

All Meccano models are strong and sturdy because of the quality and precision of the parts. Meccano models are real models. The Meccano Clock is a real Clockit keeps accurate time. The Meccano Loom is a real Loom-it weaves beautiful material. The Meccano Motor Chassis-with Ackermann Steering, Gear Box and Differential—so closely resembles a real motor car that it is used for teaching students at numerous schools of motoring. It is the same with all other Meccano modelsthey are accurate reproductions of the real thing and they all work correctly, because the Meccano parts with which they are constructed are based on true engineering principles. Some convincing details of the Meccano System are given in the following paragraphs:-

- 1. STRONG METAL-STURDY MODELS. Meccano Strips and Girders are made of finest quality steel and are roll-machine surfaced, a process that eliminates rough or burred edges. All models built with these Strips and Girders are strong and sturdy. They will easily withstand the constant strains and stresses to which they are subjected without buckling or bending.
- 2. NO TURNED OVER EDGES. All Meccano Strips and Girders are flat. Only flat Strips and Girders can be bolted rigidly together to make perfect joints as in full-sized steel structures. Rigid construction is essential in model-building, and only flat Strips and Girders can give the rigidity required.
- 3. CURVED FLAT STRIPS. There are Curved Flat Strips in the Meccano System. These parts are invaluable, for they greatly add to the strength and graceful lines of those models in which they are used.
 - 4. ALL PARTS WITH EQUIDISTANT HOLES. All

photograph. Dad and the

children are standing

on a Meccano bridge

which is easily

bearing their

combined weight.

Meccano parts have the The strength of Meccano parts is shown equidistant holes, set by this illustration reproduced from a 1-in. apart and spaced to 1/1000 inch, giving connections or bearings exactly where

required. This valuable feature, so essential to the correct construction of perfect models, is exclusive to Meccano.



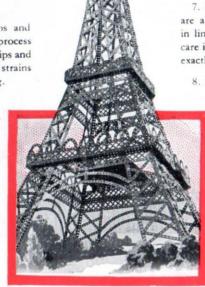


enamel is carefully sprayed on to the parts by compressed air, so that it is of even thickness.

- 6. CORRECTLY CUT GEAR WHEELS. Meccano Gear Wheels are cut and tested in exactly the same manner as gear wheels used for real engineering purposes. They are cut with 133, 57, 50, 38, 25 and 19 teeth that give useful ratios, no matter what combination is required. Bevel Gears, Contrate and Worm Wheels are other examples of essential engineering parts to be found only in the Meccano System.
 - 7. MANY NEW AND SPECIAL PARTS. New Meccano parts are always being invented in order to keep Meccano model building in line with the most modern engineering requirements. The greatest care is taken in the designing of these parts to ensure that they function exactly as their counterparts in actual practice.
 - 8. INTERCHANGEABLE PARTS. Meccano parts are interchangeable and will build an endless number of models without being spoiled in the process. When you are tired of playing with the crane or bridge you have built, you just take it to pieces again and build a motor car, or an aeroplane, or any model you want, with the same parts.
 - 9. MECCANO IS ELECTRIFIED. Dozens of interesting and useful electrical experiments may be made with Meccano. Galvanometers, Shocking-coils, Telegraph systems, Electro Magnets, Electric Motors, Bells, Lamps, Ammeters. Electric Flashing Signs, and many other interesting electrical models are all within the range of Meccano.
 - 10. INSTRUCTIONS FOR BUILDING. Full instructions are provided with every Outfit, the Manual included containing a number of illustrations and details that make model-building delightfully simple.

Over 250 tons of art paper are required to make a single edition of the Meccano Manuals, and if the entire edition were placed end to end, each one touching the other, it would extend a distance of over two miles up in the air, more than twelve times the height of the famous Woolworth Building in New York. The Meccano Manuals are printed in the English, French, German, Dutch, Spanish, Italian, Norwegian, Swedish, Danish and Chinese languages, and if you would like to see a copy of any of these languages it will be sent to you post free on receipt of 1s. 3d. Write to Meccano Ltd., Old Swan, Liverpool.





The Eiffel Tower in Meccano

THE FINEST HOBBY IN THE WORLD





RICHLY ENAMELLED IN COLOURS







Page Nine





THE WORLD'S MOST FAMOUS TOY

SEARCHLIGHT

DDDDDDD

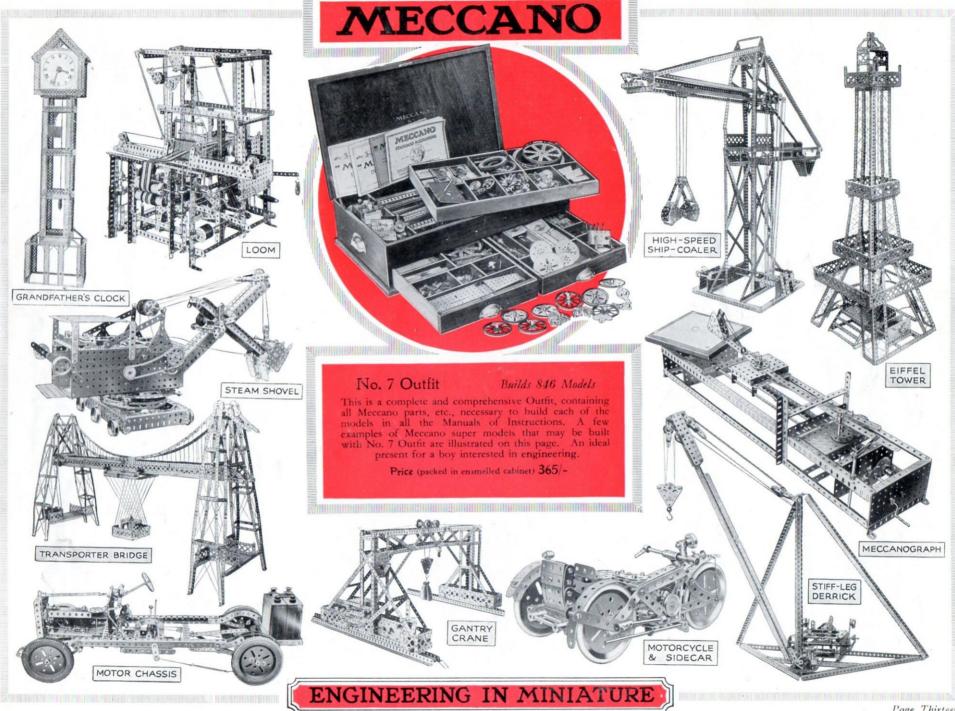
ELEVATED CRANE

WEIGHBRIDGE

STONE-

SAWING

MACHINE



Page Thirteen

Price List of Meccano Accessory Outfits

The Meccano Manuals of Instructions

Every Meccano boy should possess a copy of each of the 00-3 and 4-7 Manuals in which a total

number of 846 models is illustrated. The Standard Mechanisms Manual contains a fine selection

The Meccapo Manuals are all beautifully printed and the illustrations are in half-tone throughout.

No. 00a converts a No. 00 Outfit into a No. 0



No. 3a Accessory Outfit



Oil Can No. 1

This is a miniature Oil Can that will give every satisfaction. It is strongly made and it functions perfectly. Price 6d.

Meccano

Lubricating Oil

This oil is specially prepared

for lubricating Meccano Clockwork and Electric

Motors, Steam Engine,

The Purpose of Meccano Accessory Outfits

Meccano Accessory Outfits connect the main Outfits from No. 00 to No. 7. They may be well described as the stepping stones to bigger and better models. A No. 00 Outfit may be converted into a No. 0 by adding to it a No. 00a Accessory Outfit, and a No. 0a would then convert it into a No. 1. In this way, no matter with which Outfit a boy commences, he may build it up by degrees until he possesses all the parts contained in the largest Outfit.

Special Inventor's Outfit

This Outfit makes a valuable addition to any keen model-builder's equipment. It is intended specially for boys who already have Meccano and who wish to satisfy their inventive inclinations by building models from their own designs. The parts contained include four large Pulley Wheels with Dunlop Tyres, Ball Race, Ship's Funnel, Pulley Blocks, Channel Bearing, Crane Grab, and many others. Price 17/6

12/6

23/6

15/-50/-

80/-

200/-



Special Inventor's Outfit



Oil Can No. 2 ("K" Type)

This Oil Can is a beautiful replica in miniature of a patented Oil Can known to all engineers. It is finished in burnished copper and the oil is ejected drop by drop by depressing the valve. Length 4 ins. Price 3/6

Meccano Enamel

The Meccano enamel has been introduced to enable model-builders to convert nickel parts to colour or to touch up coloured parts should such treatment become necessary through mishandling.

It is available in red, green and grey, each colour being identical in shade with the enamels used in the Meccano Factory for spraying Meccano parts.

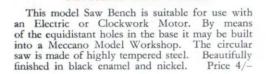
Price, per tin, 8d.



Meccano Saw Bench

No. 00-3 ,, ,, ... ,,

Standard Mechanisms Manual ... ,,



of real engineering movements that may be built with Meccano. These Manuals may also be purchased attractively bound together in full cloth cover, and lettered in gold. Bound Manual of Instructions (comprising No. 0 Manual of Instructions ... Price 6d. a 00-3 Manual, a 4-7 Manual and a Standard

... Price 7/6 Mechanisms Manual) Meccano Book of New Models ... ,, 6d.

Meccano Shafting Standards

These Shafting Standards are designed on the Meccano system, with equidistant holes. Our illustration shows how serviceable shafting may be constructed from Meccano parts with the aid of the Large Standard.

Standard only, Large ...







In order to obtain the fullest possible enjoyment from the Meccano hobby the models should be operated with a Meccano motor or Steam Engine. It is great fun to set in motion a Crane, Ship-coaler, Motor Car, Windmill, or any other Meccano model and to work it in exactly the same manner as its "big brother" in real life.

The Meccano Motors and Steam Engine are strongly made and the utmost care is taken in their manufacture to ensure that they will give satisfaction. The side plates and bases are pierced with the standard Meccano equidistant holes, which enables a motor or engine to be built into any Meccano model in the exact position required.

Various combinations of gears may be mounted on the motors and engine for the purpose of reducing the speed of the driving spindles, and thereby increasing the lifting power. The Motors and Steam Engine have forward and reverse movements, a feature that greatly enhances the fun of running the models.

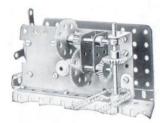
Meccano Electric Motor No. 1 (6-volt)



The 6-volt Motor is specially designed to build into Meccano models. It may be run from a 6volt accumulator or, by employing the Transformer described below, from the main. It is fitted with reversing motion and provided with stopping and starting controls. gearing is interchangeable. Price 15/6

IMPORTANT.—The 6-volt Motor will not run satisfactorily from dry cells.

An Interesting Gear Train



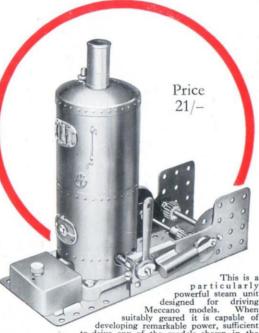
This illustration shows how easy it is to mount gearing on a Meccano Electric Motor. In this example the final shaft of the gear train rotates once in every 171 revolutions of the armature, thus providing a slow, powerful drive.

Transformer



By means of this transformer the Meccano Electric Motor No. 1 (6-volt) may be driven from the house supply (alternating current only). It is available for all standard supply voltages, from 100 to 250 inclusive, at all standard frequencies. supply voltage and frequency must be specified when ordering. Complete with length of flex and adapter for connection to an ordinary lamp socket. Price 30/-

Meccano Steam Engine



Manuals. On actual test it has lifted over 56 lbs. The base and side plates of the engine are drilled with standard Meccano equidistant holes, so that the engine may be built into any model. A single cylinder of the oscillating type is employed, steam being admitted to it through a special reversing block. Operation of the reversing lever enables the crankshaft to run in either direction. This is a feature generally found only on expensive model steam engines. The crankshaft is fitted with a special compensated flywheel, thus ensuring steady running at all speeds. SAFETY. The spirit container for the lamp is placed well outside the boiler-casing, eliminating all risks of the spirit becoming heated. The boiler is fitted with an efficient spring safety valve of heavy gauge brass and there is no danger whatever of the boiler

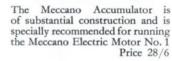
FINISH. The cylinder, reversing block, crank disc, and pin, are all machined from solid brass and steel. The base, side plates, and spirit container are finished in colour and the boiler casing is of oxidised brass finish.

Resistance Controller

By employing this variable resistance the speed of the Meccano Electric Motor No. 1 (6-volt) may be regulated as desired. The controller is connected in series with the motor and accumulator, or with the motor and transformer if a transformer is used as the source of power. It will not regulate the speed of a high-voltage motor connected to the main. Price 3/6



Accumulator (6-volt, 20-amps)





Meccano Clockwork Motor

This splendid Motor, which is specially designed for operating Meccano models, is a compact self-contained power unit.

An efficient governor controls the powerful spring that is fitted on the motor and ensures a long steady run at each winding. Brake and reverse levers enable the motor to be stopped, started and reversed as required. Supplied complete with winding key and Price 7/6 full instructions.





The World's Best Magazine for Boys

The "Meccano Magazine" is the Meccano boy's newspaper. He reads it regularly and consults his friend the Editor in all his difficulties.

The Magazine tells him of the latest Meccano models; what Meccano Clubs are doing; how to correspond with other Meccano boys; the Competitions that are running. It contains splendid articles on such subjects as Railways, Famous Engineers and Inventors, Electricity, Bridges, Cranes, Wonderful Machinery, Aeronautics, Latest Patents, Radio,

Stamps, Photography, Books and other topics of interest to boys, including suggestions for new Meccano parts and correspondence columns in which the Editor replies to his readers' enquiries. The Magazine is published on the first of each month.

Write to the Editor, "Meccano Magazine," Old Swan, Liverpool, enclosing 6d. in stamps. He will then forward a specimen copy of the "M.M.," post free. If you wish to become a regular subscriber the rates are 4/- for six issues or 8/- for twelve issues, post free.

If you prefer to do so, you may order the Magazine from your Meccano dealer or from any newsagent or bookstall, price 6d.

Order early to avoid disappointment.

Price

6d.

LECCANO MAGAZINE WONDERFUL MACHINERY LIVES OF FAMOUS INVENTORS

COMPETITIONS

MECCANO LTD., BINNS ROAD,

MECCANO MAGAZINE

OLD SWAN, LIVERPOOL.

AERONAUTICS

RAILWAYS

STAMPS

LATEST

PATENTS

ELECTRICITY