

MECCANO

by the MECCANO Boy





I AM THE MECCANO BOY

With my Meccano Outfit in front of me, I am the keenest, brightest and happiest boy living. All the boys, big boys and little boys, young boys and "old" boys, know and love my happy smile.

I play at building real working models and they give me endless fun. Not only do my Meccano models run and move and act, but they also do real work. My cranes lift loads, my lathes make useful little articles, my potter's wheel enables me to make vessels in clay; and so on. I've built more than a hundred models of great Towers and Bridges, Cranes and Elevators, and machinery of various kinds.

It's fine to be a Meccano boy, and that's why I want to tell you here about Meccano—the jolliest, manliest game ever.



Nut and Bolt

Steel Strip

Plate









It's Good Fun Building Meccano Models

Take any of the Meccano Outfits—there are seven different sizes—and you find that it is composed of a number of beautiful, plated and finished parts, some of which are illustrated here. These parts are made interchangeable. The same parts that go to the making of a Crane are used in a Bridge, a Tower, a Ship, and scores of other models. So you see that in a Meccano Outfit there are all the materials for making very many models, all different and distinct from each other. This is wonderful enough,

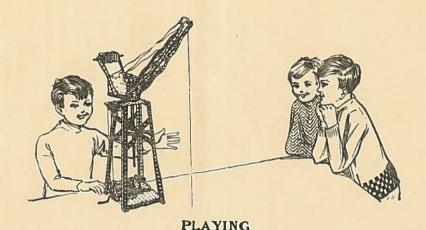
but perhaps it is even more wonderful to find how easy it is to build the models. Of course, you want to start building small and simple models first, just to get your hand in. It's half the fun,



A Meccano Outfit.

building better and bigger models each time.

You won't need to puzzle over instructions, because there are hardly any. You simply use your eyes and work straight from the clear pictures in the "Manual of Instructions" given with every Meccano Outfit. (See page 16.)

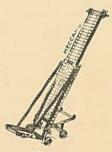


And It's Rare Fun Making the Models Work

The Meccano parts consist of bright, plated steel strips with holes pierced in them. When building you join the strips together with bolts which pass through the holes and are held by nuts which screw on, just like real engineering. These strips are of different lengths, but the holes are all the same size and the same distance apart, thus making it easy to see just where to pass the bolts through. There are also steel rods for axles, stays, and other parts; brass wheels and pulleys of different kinds and sizes, and beautifully made gear wheels. Then there are nuts and bolts by the score, angle brackets, sector plates — in fact everything necessary for building models big and little.







337in dmill

Catching the Load

Fire-escape

Working like a real engineer, you ply your screwdriver right merrily. Piece by piece the framework of the models steadily rises. And as the steel glints in the light, like

armor bright, your joy and enthusiasm mount up. For you see the models growing up, strong and rigid, bolted true and tight, under your own hands.

Then comes the exciting part of fitting the mechanical parts, the gearing, the spindles, the cranks and the cording. Every step is full of interest. You are



Meccano model of wood turn-ing lathe, driven with a Meccano electric motor.

continually discovering something new. You learn that there is a right way of doing everything, and the reasons become clear and plain without any telling. It is a proud moment, I can assure you, when you have put the finishing touches to a fine model, and you



Meccano model of Potter's Wheel, with which I can make little cups, vases, etc., in clay.

stand back to survey your handiwork. But it is an even prouder moment when you set the model to do its own particular work and note how beautifully it does it.

Boys, don't vou feel your fingers itching to get hold of those steel strips and bolts and nuts? I fancy I hear each of you saying to yourself, "I'm going to be a Meccano Boy, too, and

I'm going to build model after model, grander and grander, right up to those big cranes and railways and towers." That's the real Meccano spirit, the same spirit that invented and improved Automobiles, Aeroplanes, and Battleships

Now, supposing you started with a No. 2 Outfit. You build all the models set out in the Manual for this size, then you buy an Accessory Outfit to make up a No. 3 Out-



I love to design warships and aeroplanes. This model is quite a simple one, but it is good for getting your hand in.

fit, as explained on Page 15. I think this is a jolly good arrangement for helping a fellow who hasn't got too much pocket money.

Even the pleasure of building has its reward, for every model vou make provides hours of entertainment. Rainy days and long winter evenings no

longer put you in the doldrums. A table or even the floor is sufficient to set up an engineering shop or a factory, with all its buzz and excitement. Thus from your Meccano models you learn far more of the actual use of machinery and the

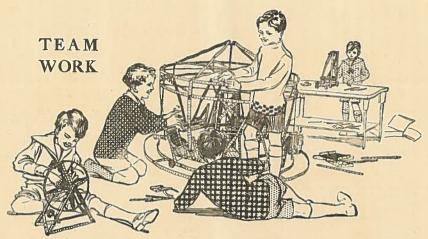
tremendous part it plays in doing the world's work than by reading in many books.

For instance, if you have a model engine, you can construct, organize, and run a miniature railway system, using Meccano Trucks, Bridges, Signals, Levelcrossings, Cranes for loading and unloading, etc. Or you can have an engineering shop with lathes, drilling, planing, die-stamping,



Boys who are interested in ma-chine construction will find Meccano a great help. I am building a Universal Crosshead which is frequently adopted in pumps and sim-

and other machines. Or you can have all the fun of the Fair with the Flip-flap, Joy Wheel, Cake-walk, Merrygo-round, and Flying Machine. There is no end to the games you can have with Meccano models.



How to Run a Meccano Workshop

Another good way of having a great time is to invite some of your chums round and set them all to building one of the big models, just as if you were a contractor. It's fine to be foreman on the job of making, say, the Merry-goround, the Inclined Railroad, or the Transporter Bridge. You give each of your men a section to build whilst you superintend the work of erection. Soon there is rivalry as to who will do his part best and quickest, and the fun goes fast and furious. And so the happy hours spin along.

I believe every boy is an inventor at heart, because boys are always wanting to make something or other. Unfortunately the material required is either not suitable or not to be had. Now Meccano is a great help and inspiration to boys of an inventive turn of mind. It supplies the ready means of enabling them to put their ideas into shape. Every model built with Meccano should act and work smoothly and effectively, because Meccano is based on correct engineering principles and can be applied in hundreds of ways to build models not included in the Manual.



INVENTING

Necessity is the Mother of Invention, but Meccano is the Father—So say all Meccano Boys

You will soon discover for yourself how endless are the ways in which Meccano can be used. But remember this, that other toys which attempt the same object as Meccano are not built on correct engineering principles.

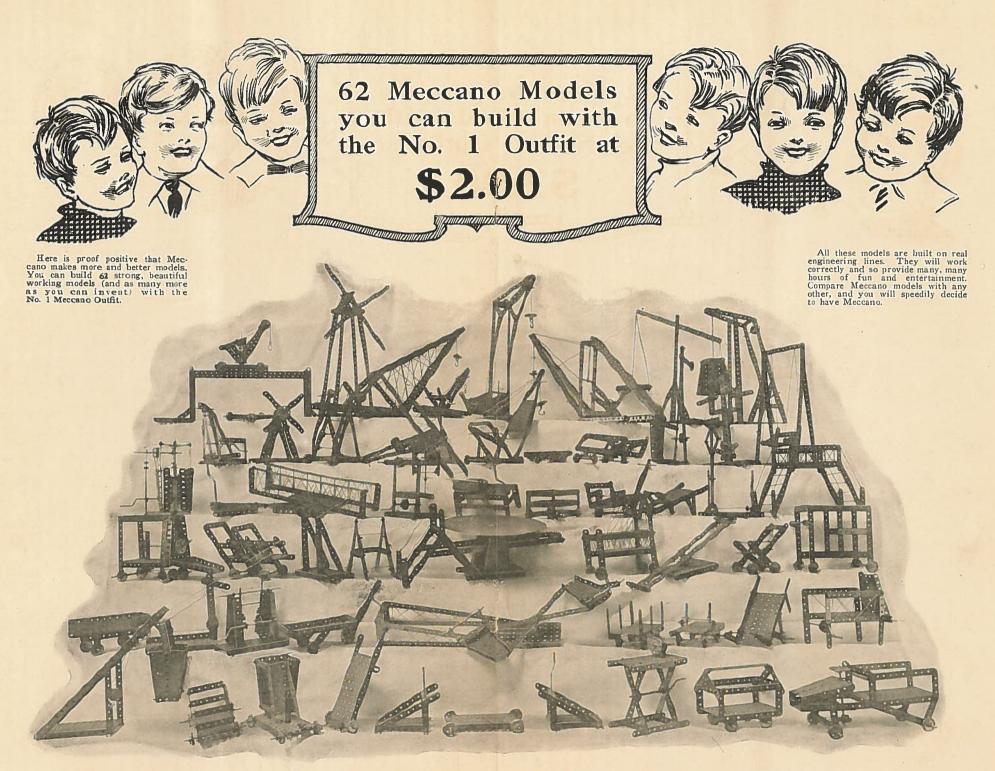
You would be surprised to know the amount of interest grown-ups take in Meccano. Thousands of fathers like nothing better than to join their boys in building or working the models. They all declare Meccano to be the brightest

and best hobby ever invented for boys. This clearly proves the true merit and wonderful fascination of Meccano.

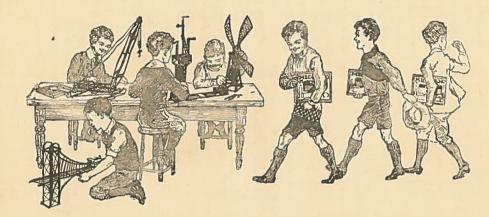
Now, boys, make certain you get Meccano. Don't be put off with any imitation if you want to avoid being desperately disappointed.

MECCANO is a brain builder.

Boys, now is your opportunity. Obtain your Meccano outlits from your dealer at once and get busy.



A NEW TOY EVERY DAY





These boys are the great engineering inventors of the future.

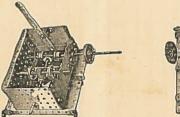


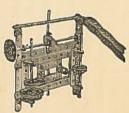
They are working in a world of engineering romance and the knowledge they are acquiring may some day help to raise them to a pinnacle of fame as inventors and constructors of some of the most famous and glorious engineering achievements the world has ever seen.



Every boy is a born inventor, and when he is playing with Meccano he is developing his mind on right lines, which is very important, as he is using engineering parts in miniature which act in precisely the same way as the corresponding engineering elements would do in actual practice.







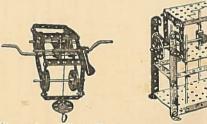
A Few Examples of Mechanical Portions of Meccano Models,



To the parent who studies the welfare and future of the boy, Meccano makes an appeal so strong that it must be heard. How many hundred thousands of dollars are spent every Christmas, and in fact every day (for every day is some child's birthday), on toys, often expensive, which are broken in a few days and discarded!

Meccano is more than a pastime—it is a great moral force for the training of a boy. No boy who uses Meccano can be a bad boy. The hobby teaches him to think. It teaches him patience. It teaches him thoroughness because every model must be thoroughly and properly constructed and fixed up accurately and firmly before it will work properly. It teaches him order and method, because he learns to take care of the beautiful Meccano parts, and to put them away carefully and in proper order after he has used them. It teaches him to invent, because after he has made all the models shown in the book of instructions he can go on designing others for himself. There is no engineering movement which he cannot demonstrate and make use of with Meccano.

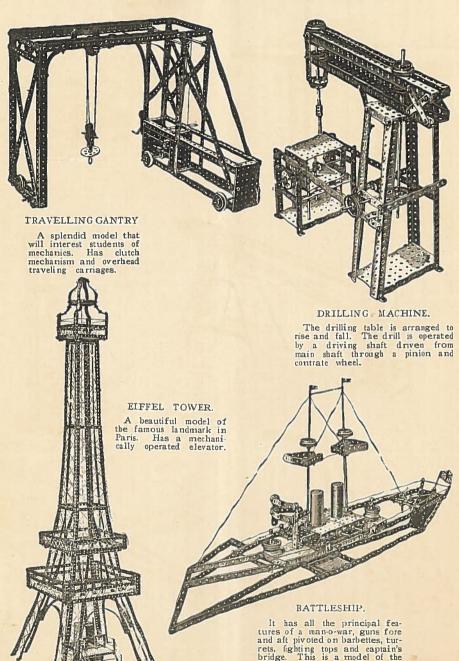
Meccano is engineering; it is educational; it may be, and has been, the means of starting many a bright boy on a prosperous career in what is probably the most important field of experiment and research in modern times—engineering and mechanics.



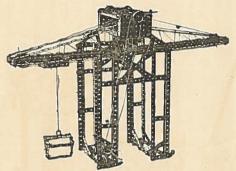


Illustrating Neat Design and Correct Methods of Construction

A few more of the Splendid

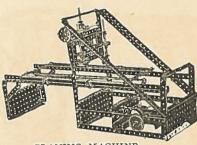


Models from the Meccano Repertory



TRAVELLING GANTRY CRANE.

A very powerful type of crane with overhead gear and travelling frame. The bucket for carrying the load is raised and lowered by means of the gearing in the vertical frame.

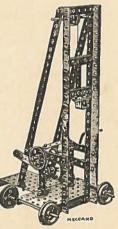


PLANING MACHINE.

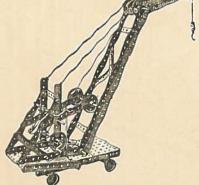
Used in engineering works for ma-chining rough castings to exact sizes. This job is fixed on the horizontal table, which travels backwards and



An interesting model from which boys can derive a great deal of in-terest and fun. Has a mechanically operated travelling trolley and tip



PILE DRIVER
Used for driving in Pier
supports or in making modern streets.



LEVER BALANCED LUFFING JIB CRANE. This is another variety of the

splendid cranes a boy can make with Meccano. It illustrates the importance of balance and leverage.



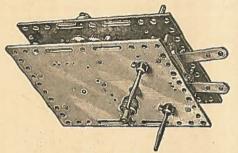
MONOPLANE.
This fine model gives a boy a good working idea of design and forms a basis on which to build flying models of air-craft.

Monoplanes and Aeroplanes are useful

great Battleships used in the European War.

MECCANO MOTORS FOR MECCANO MODELS

All Meccano Models Can be Worked by Hand or by Motor as Desired



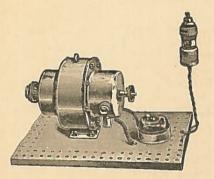
No. 2 Meccano Spring Motor.

Meccano Spring Motor.

Water Motor

An admirable substitute for the Meccano Electric Motor where current is not available. It is supplied with two tubes, one with an adaptor for attachment to the water tap and the other to carry away the waste water. It is of one-sixtieth horse-power at a pressure of 30 pounds.

Meccano Water Motor complete with tubes for fitting, price, \$4.



Meccano Electric Motor.

No. 2 Meccano Spring Motor is suitable for driving models made with all Outfits. It has three driving spindles, one with a clutch movement, and each can be worked independently. It has also a starting button and a reversing movement.

No. 2, price, \$6.00.



Electric Motor

It differs from all previous types of electric motors, being totally enclosed, thus making it entirely safe to run by inexperienced users in the home. No fear of shocks. It is designed to be used in connection with models where a greater power is required than is provided by the spring motors. It is operated by a simple switch and is readily connected to any lamp-holder. It is important when purchasing the motor to see that it corresponds to the voltage of the current it is to be connected with. Price, \$17.50.

HOW TO START MECCANO

JUST buy the outfit that suits your purse. If you desire to spend \$4 you will buy the No. 2 outfit. Additional parts can always be obtained either separately or in the form of Accessory outfits, and the most convincing fact in proof of the fascination exercised by

Meccano upon the boy mind, is that a boy who has been presented with one outfit invariably asks for the Accessory outfits to enable him to progress to more complicated and interesting models.

A No. 2a Accessory Outfit costing \$2 would now convert the original No. 2 outfit into a No. 3. This again could be converted into a No. 4 by the purchase of a No. 3a Accessory Outfit costing \$4, and so on up to the No. 6 Outfit, covering the whole series of models. When the constant and untiring pleasure which Meccano gives has been recognized the expense will not be grudged.



Price List of Meccano

Frice List of Meccano						
	No.	10	Meccano Out	fit \$	1.00	
	No.	1	66 66	• • • • • • • • • • • • • • • • • • • •	2.00	
	No.		66 66		4.00	
	No.	_	66 66	***********		
					6.00	
	No.		66 66		0.00	
	No.	5		Packed in neat and well made cardboard box		
				complete with No. 1 Spring Motor 1	4.00	
	No.	5	66 66			
				mahogany stained box with lock and key,		
				1	8 00	
	No.		16 66		8.00	
	140.	0		Presentation Outfit, packed in well made		
				mahogany stained box with lock and key,		
				complete with No. Spring Motor 3	36.00	
	Meccano Accessory Outfits					
	No. Oa Containing sufficient parts to convert					
				a Meccano No. 0 into a No. 1 outfit	1.00	
	No.			" No. 1 into a No. 2 "	2.00	
	No.	2a	4.6	" No. 2 into a No. 3 "	2.00	
	No.	3a	44	" No. 3 into a No. 4 "	4.00	
	No.	4a	46	" No. 4 into a No. 5 " packed in		
		10		neat and well made cardboard box	4.00	
	No	4-	Ditto Pos		4.00	
	110.	та	lask and	eked in well made mahogany stained box with	0.00	
	2.1	_	lock and		8.00	
	No. 5a Containing sufficient parts to convert a Meccano No. 5 into a					
					3.00	
	No.	5a		cked in well made mahogany stained box with		
			lock		8.00	
					0.00	
	Spring Motors Are Not Included in Accessory Outfits					

A Page About the Book of Instructions and the Models it Shows How to Build

The Meccano Book of Instructions (The Manual) is a wonderful production, consisting of 134 pages. Each model is shown in full detail, bigger and clearer than those in this book. Where printed instructions are needed, these are clearly and simply given, and many supplementary enlarged illustrations of working parts that are at all intricate are also given, so that any boy may find everything easy and straightforward.

Many new models have been added to the already large Meccano reper-



tory. These, besides being of an exceptionally interesting character, further demonstrate the adaptability of Meccano to any design having a sound mechanical basis. The wood-turning lathe, the potter's wheel, and such like models, because of their special usefulness, are certain to have hosts of admirers.

Here is an abbreviated list, giving an idea of the variety of models shown in the Book of Instruction:

Revolver Truck Baggage Truck Endless Rope Railway Drop Stamp Automatic Dial Press Polishing Spindle Ore Crusher Stamping Mill Traveling Ladder Windmills of Various Types Railway Signal Monoplanes Turntable Gangway Railway Footbridge of Signals Motor Van Extension Ladder and Running

Tower Wagon Pile Driver Cake Walk Pithead Gear Level Crossing Fire Escape Warehouse and Elevator Cable Railway Coal Hoist Motor Bus Lighthouses Telpher Line Inclined Railroad Cranes of All Types Bridges of All Types And 100 other models

[Carriage

The Manual gives also numerous designs demonstrating the main elementary fundamentals of mechanics. These convey to the young mind the meaning and purpose of the underlying principles far more quickly, interestingly, and effectively than by reading alone. This book of instructions accompanies all outfits from No. 1 upwards. (An abridged edition is given with No. O Outfit.) The mere perusal of it is a delight to young and old, and affords striking proof of the inexhaustible resources of pleasure and instruction in Meccano.

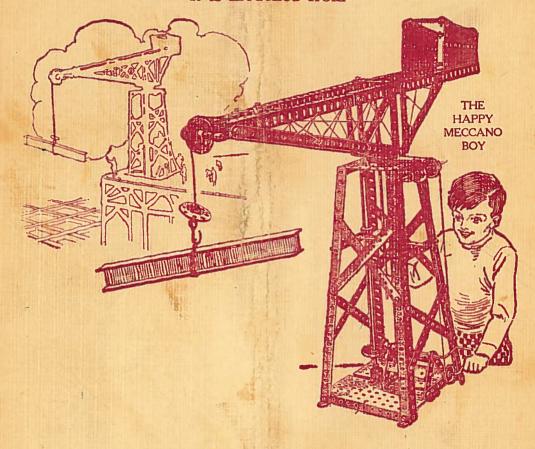
Meccano is obtainable everywhere of all Toy Dealers, Toy Departments and Stores

MECCANO COMPANY Inc. 71 West 23d St. New York

See the Girder Crane I built with

MECCANO

It works just like the big one it is modelled from



ACKEMANN BROS.

The Big Store ELGIN, ILLINOIS



See how all the Bright Boys run for Meccano