

# MECCANO



(REG. U. S. TRADE MARK 83171)

## INSTRUCTIONS

### FOR OUTFIT No. 0.

Price 25 Cents

**MECCANO COMPANY**  
INCORPORATED

No. 22.0

ELIZABETH,

NEW JERSEY

AMERICAN EDITION



## A TALK WITH NEW MECCANO BOYS



THE Meccano No. 0 Outfit is the first step in the Meccano system. With it 70 working mechanical models can be made, each one a perfect little toy. After you have made them all, you will wish to go on building and you can do this either by adding new parts to your No. 0 or by purchasing a No. 0A Accessory Outfit, thus converting your No. 0 into a No. 1. You will then be able to build 105 models, including larger and better cranes, bridges, wagons, trucks, windmills, etc.

You never come to the end of Meccano fun. There is always more ahead—always some new, ingenious and interesting model to build. Each one, as it is completed, “tuned up,” and set going, brings a joy and satisfaction beyond anything which boys have ever previously experienced.

As you progress in Meccano you obtain a greater variety of parts, gear wheels, pulley wheels, worm wheels, couplings, cranks, and all manner of perfectly-made real engineering parts. These enable you to construct

complicated mechanical movements without any difficulty. The most wonderful feature of Meccano is that it is *real engineering*; it is fascinating and delightful to play with, and yet so simple that even an inexperienced boy may join in the fun—without first having to study or learn anything.

## THE LIFE OF A MECCANO BOY

A Meccano boy is the nappiest boy in the world. He builds models from the Meccano Instruction books; invents new models; has a try at the Competitions which are always being held in connection with the hobby; joins a Meccano Club and by wearing the club button proclaims himself to be the friend of millions of other Meccano boys all over the world. He reads the *Meccano Magazine* regularly and corresponds with his friend the Editor when he feels like it. Time never hangs heavily on his hands and he is too busy and too happy to grumble.

The *Meccano Magazine* is the Meccano boy's newspaper. It tells him of the latest Meccano models; what Meccano Clubs are doing; how to correspond with other Meccano boys; the Competitions that are running, etc. It contains interesting articles on engineering and electrical subjects and deals with many other topics of interest to boys, including suggestions from Meccano boys for new Meccano parts and correspondence columns in which the Editor replies to his readers' enquiries. Write to the Editor, *Meccano Magazine*, 1004 Elizabeth Ave., Elizabeth, N. J., and he will send you a copy FREE. It is sent regularly to subscribers at the rate of 15 cents for three issues, or 30 cents for six.

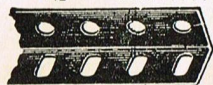
## HOW TO BUILD WITH MECCANO

Follow the instructions closely at first, and build the models just as you see them. Then take each model and try to improve our design. Every model can be made in a dozen different ways. Screw up all the nuts and bolts and you will find that you can play with the trucks, cranes, signals, etc., and obtain many hours of fun from them.



# Particulars and Prices of Meccano Parts

Part No.		Cents
1	Perf. Strips, 12½" long..... (½ doz.)	45
1A	" " 9½" " " " " "	35
2	" " 5½" " " " " "	25
2A	" " 4½" " " " " "	20
3	" " 3½" " " " " "	20
4	" " 3" " " " " "	20
5	" " 2½" " " " " "	15
6	" " 2" " " " " "	15
6A	" " 1½" " " " " "	15



7	Angle Girders, 24½" long..... each	25
7A	" " 18½" " " " " "	20
8	" " 12½" " " " " "	60
8A	" " 9½" " " " " "	55
9	" " 5½" " " " " "	45



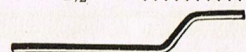
10	Flat Brackets..... ½ doz.	05
11	Double Brackets..... each	03



12	Angle Brackets..... doz.	12
12A	Angle Brackets, 1"..... each	05



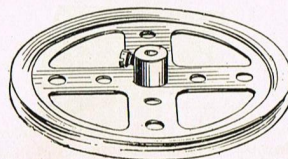
13	Axle Rods, 11½" long..... each	10
13A	" " 8" " " " " "	10
14	" " 6" " " " " "	05
15	" " 5" " " " " "	05
15A	" " 4½" " " " " "	05
16	" " 3½" " " " " "	05
17	" " 2" " " " " "	02
18A	" " 1½" " " " " "	02



19	Crank Handles..... each	10
19A	Wheels, 3" diam. with set screw.....	20



Part No.		Cents
20	Flanged Wheels..... each	25



19B	Pulley Wheels, 3" diam. with centre boss and set screw..... each	25
20A	Pulley Wheels, 2" diam. with centre boss and set screw.....	20



21	Pulley Wheels, 1½" diam. with centre boss and set screw..... each	20
22	Pulley Wheels, 1" diam. with set screw.....	10
22A	Pulley Wheels, 1" diam. without centre boss and set screw.....	05
23	Pulley Wheels, ½" diam. without set screw.....	05
23A	Pulley Wheels, ½" diam. with set screw.....	10



24	Bush Wheels..... each	15
----	-----------------------	----



Pinion

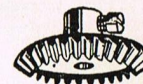


Gear

25	Pinion Wheels, ¾" diam..... each	25
26	" " ½" " " " " "	15
27	Gear Wheels (to gear with ¾" pinion).....	30
27A	Gear Wheels (to gear with ½" pinion).....	35



Part No.		Cents
28	Contrate Wheels, 1½" diam..... each	50
29	" " ¾" " " " " "	30



Bevel Gear



1" Gear

30	Bevel Gears..... each	55
31	Gear Wheels, 1"-40 teeth.....	65



32	Worm Wheels..... each	25
----	-----------------------	----



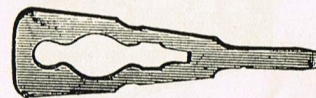
33	Pawls, complete..... each	05
33A	Pivot Bolts with Nuts.....	06



34	Spanners..... each	10
----	--------------------	----



35	Spring Clips, per box..... doz.	15
----	---------------------------------	----



36	Screw Drivers..... each	10
36A	Special Screwdrivers.....	50



## Particulars and Prices of Meccano Parts—(Continued)

Part No.		Cents
37	Nuts and Bolts, per box	doz. 15
37A	Nuts, per box	" 05
37B	Bolts, per box	" 10
38	Washers	" 05
40	Hanks of Cord	each 05



41	Propeller Blades	per pair 15
----	------------------	-------------



43	Springs	each 05
----	---------	---------



	Cranked Bent Strip	Double Bent Strip
44	Cranked Bent Strips	each 05
45	Double Bent Strips	each 05



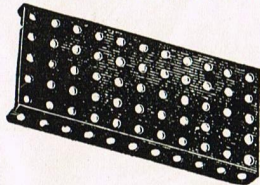
46	Double Angle Strips, 2 1/2" x 1"	each 05
	(See also Nos. 60 and 112)	



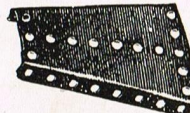
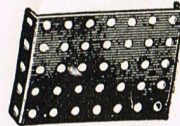
50	Eye Pieces	each 05
----	------------	---------



52	Perf. Flanged Plates, 5 1/2" x 2 1/2"	each 25
52A	Flat Plates	See No. 70



Part No.		Cents
53	Perf. Flanged Plates, 3 1/2" x 2 1/2"	each 20
53A	Flat Plates	See No. 70



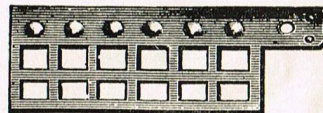
54	Perforated Flanged Sector Plates, each	20
56	Manual of Instructions	" 35
56A	Instruction Manual, No. 2	" 35



57	Hooks	each 02
57A	Hooks (Scientific)	" 02
58	Spring Cord, per length	" 30
59	Collars with Set Screws	" 05



60A	Double Angle Strips, 1 1/2" x 1/2"	1/2 doz. 18
60	" " " 2 1/2" x 1/2"	" 20
60B	" " " 3 1/2" x 1/2"	" 25
60C	" " " 5 1/2" x 1/2"	" 36

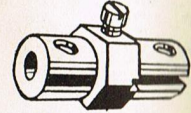
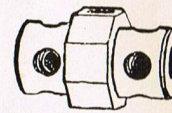


61	Windmill Sails	each 10
----	----------------	---------

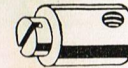


62	Cranks	each 15
62A	" Threaded	" 15
	Bell—See No. 127	

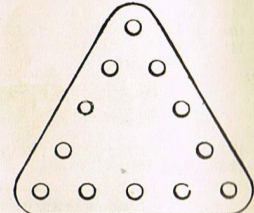
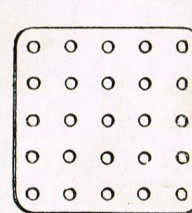
Part No.		Cents
63	Couplings	each 15



	Octagonal Coupling		Strip Coupling	
63A	Octagonal Couplings	each	20	
63B	Strip Couplings	"	20	



64	Threaded Bosses	each 06
65	Centre Forks	" 10
66	Weight, 50 grms.	" 20
67	" 25	" 15
68	Wood Screws, 1/2"	doz. 10
69	Set Screws	" 10
69A	Grub Screws	" 10



70	Flat Plates, 5 1/2" x 2 1/2"	each 15
72	" " 2 1/2" x 2 1/2"	" 10
52A	" " 5 1/2" x 3 1/2"	" 15
53A	" " 4 1/2" x 2 1/2"	" 12
76	Triangular Plates, 2 1/2"	" 05
77	" " 1"	" 04



80	Screwed Rods, 5"	each 15
80A	" " 3 1/2"	" 12
81	" " 2"	" 10
82	" " 1"	" 05



## Particulars and Prices of Meccano Parts—(Continued)

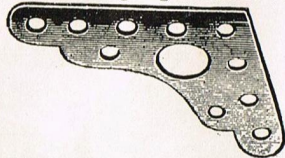
Part No.		Cents
89	Curved Strips, 5 1/2" .....	each 05
90	" " 2 1/2" .....	1/2 doz. 25
94	Sprocket Chain .....	per yard 25



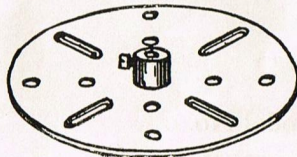
95	Sprocket Wheels, 2" .....	each 25
96	" " 1" .....	" 20



97	Braced Girders, 3 1/2" long .....	1/2 doz. 20
98	" " 2 1/2" " .....	" 15
99	" " 12 1/2" " .....	" 75
99A	" " 9 1/2" " .....	" 60
100	" " 5 1/2" " .....	" 50
101	Healds for Looms .....	doz. 45
102	Single Bent Strips for Looms .....	each 05
103	Flat Girders, 5 1/2" long .....	" 10
103A	" " 9 1/2" " .....	" 12
103B	" " 12 1/2" " .....	" 15
104	Shuttles .....	" 1.20
105	Reed Hooks .....	" 10
106	Rollers, Cloth .....	" 40
106A	" Sand .....	" 45
107	Tables for Designing Machines ..	" 25



108	Architraves .....	each 09
-----	-------------------	---------



109	Face Plates, 2 1/2" diam. ....	each 20
-----	--------------------------------	---------

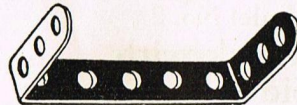
Part No.		Cents
110	Rack Strips, 3 1/2" .....	each 10



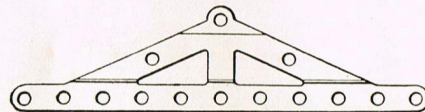
129	Rack Segments, 3" diam. ....	each 20
-----	------------------------------	---------



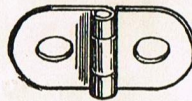
111	Bolts, 3/4" .....	each 02
-----	-------------------	---------



112	Double Angle Strips, 2 1/2" x 1 1/2", each	06
112A	" " 3" x 1 1/2" 1/2 doz.	36
(See also Nos. 46 and 60)		



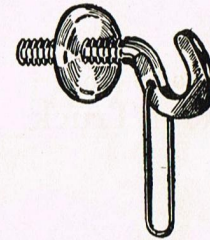
113	Girder Frames .....	each 10
-----	---------------------	---------



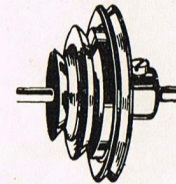
114	Hinges (pair) .....	per pair 20
-----	---------------------	-------------



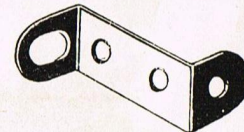
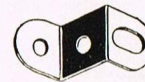
115	Threaded Pins .....	each 05
120	Buffers .....	" 05



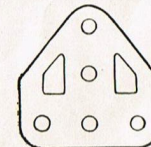
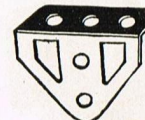
Part No.		Cents
121	Train Couplings .....	each 15
122	Miniature Sacks .....	(1/2 doz.) 30



123	Cone Pulleys .....	each 50
-----	--------------------	---------



124	Reversed Angle Brackets, 1" (1/2 doz.)	25
125	" " 1/2" " "	20



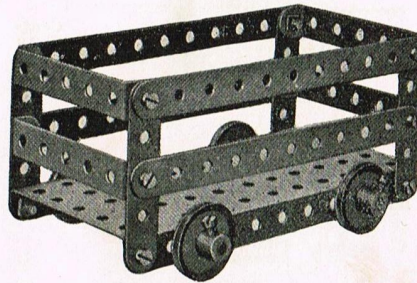
126	Trunnions .....	each 15
126A	Flat Trunnions .....	" 06
127	Simple Bell Cranks .....	" 10
128	Boss " " .....	" 15



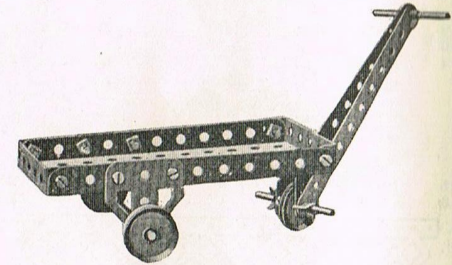
# Trucks and Luggage Carts



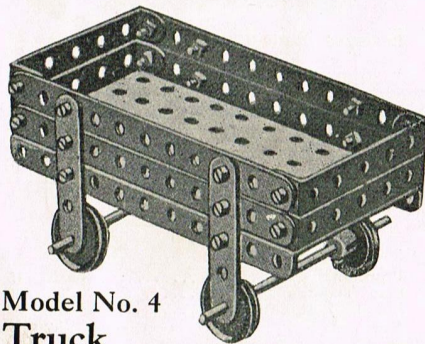
Model No. 1  
Flat Truck



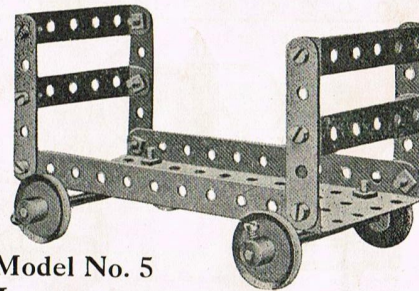
Model No. 2  
Truck with  
Sides



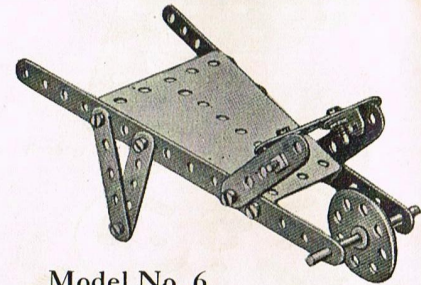
Model No. 3  
Luggage  
Cart



Model No. 4  
Truck



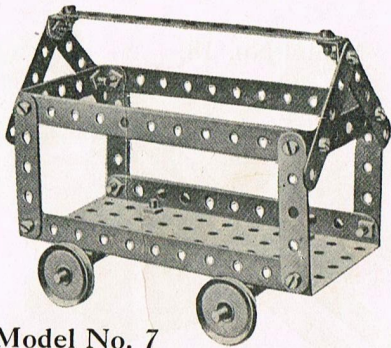
Model No. 5  
Luggage  
Truck



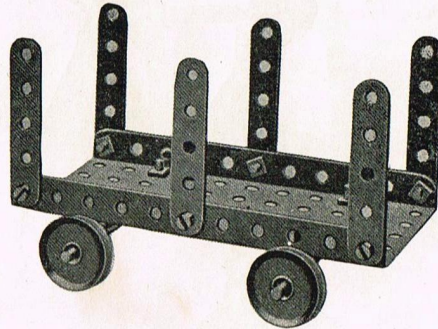
Model No. 6  
Barrow



# Trucks and Luggage Carts *(Continued)*

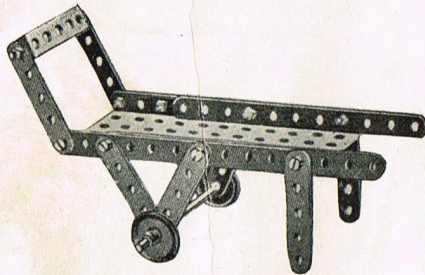
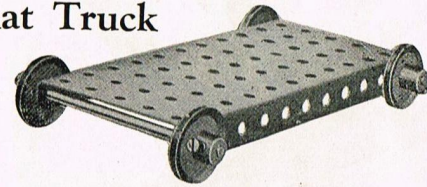


Model No. 7  
Covered Truck

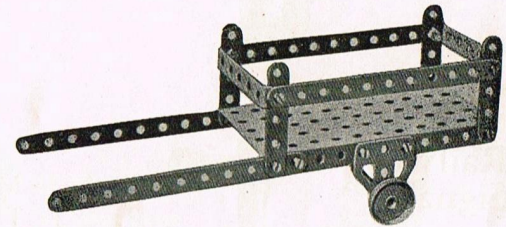


Model No. 8  
Timber Truck

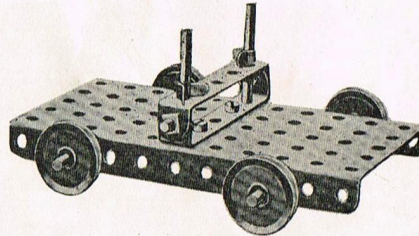
Model No. 9  
Flat Truck



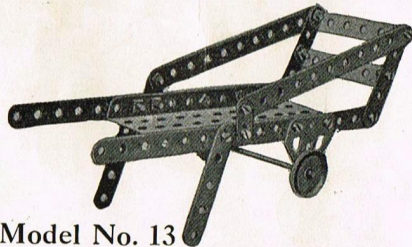
Model No. 10  
Luggage Barrow



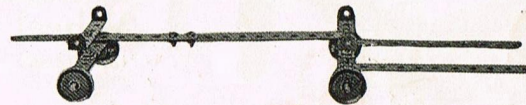
Model No. 12  
Luggage Cart



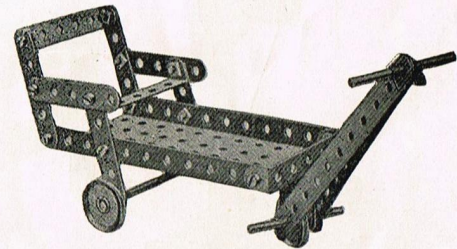
Model No. 11  
Timber Truck



Model No. 13  
Coster's Barrow



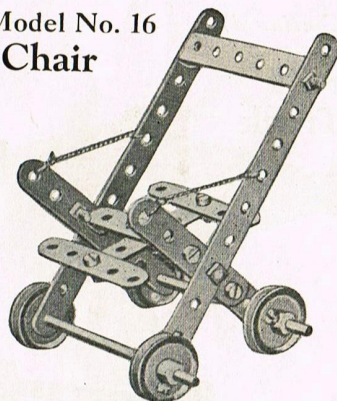
Model No. 14—Timber Drag



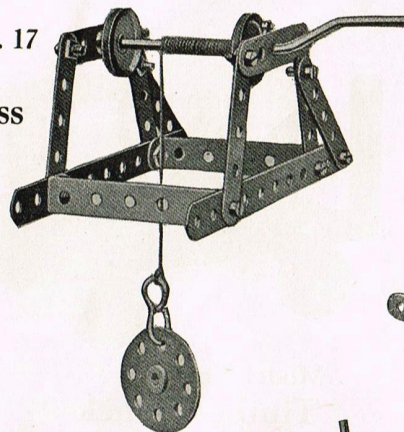
Model No. 15  
Bath Chair



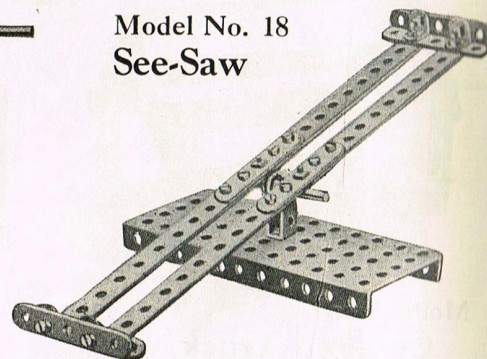
Model No. 16  
Go Chair



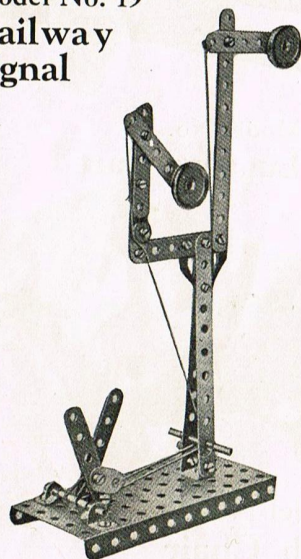
Model No. 17  
Well  
Windlass



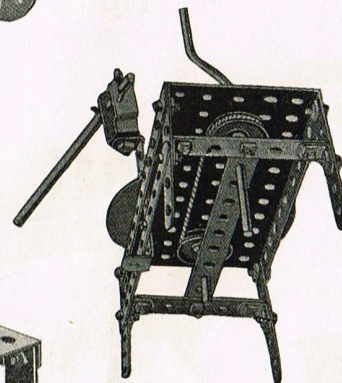
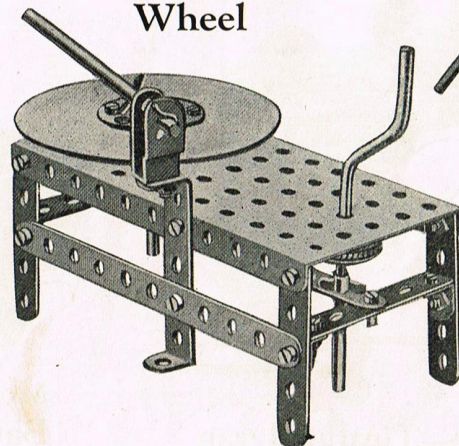
Model No. 18  
See-Saw



Model No. 19  
Railway  
Signal

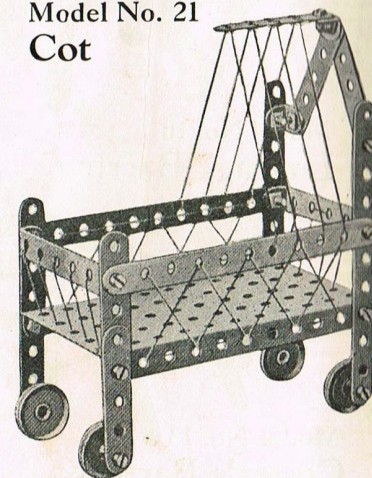


Model No. 20  
Potter's  
Wheel



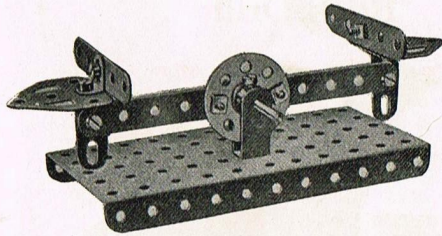
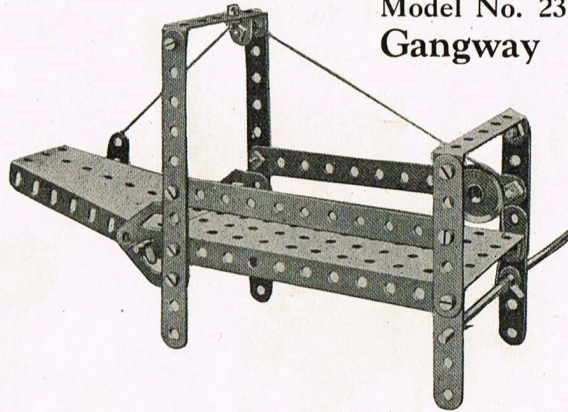
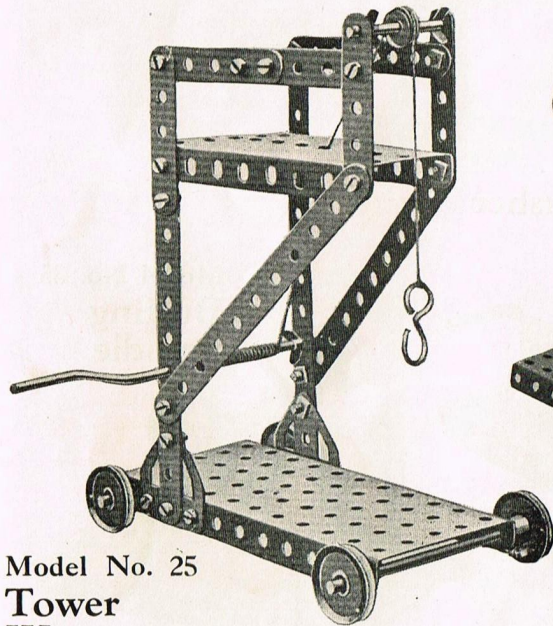
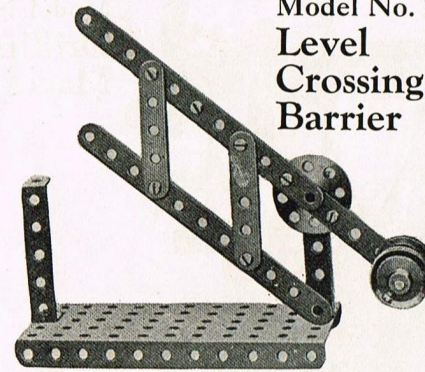
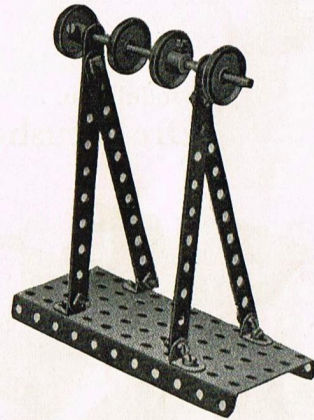
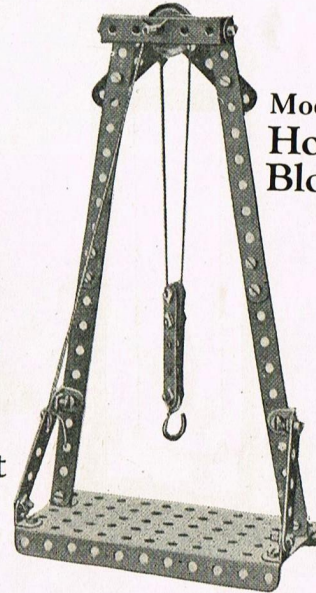
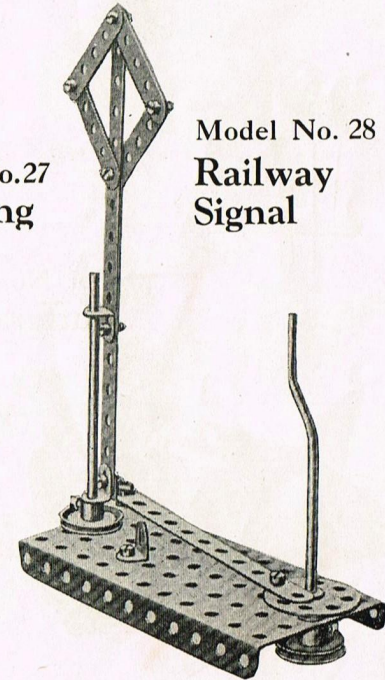
Potter's  
Wheel  
(underneath  
view)

Model No. 21  
Cot

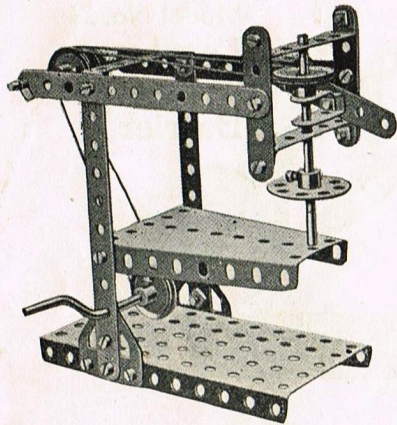




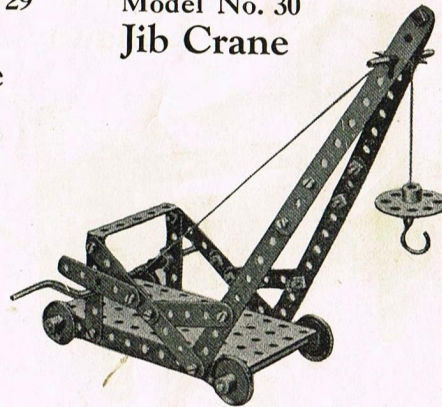
Model No. 22—Scales

Model No. 23  
GangwayModel No. 24  
Level  
Crossing  
BarrierModel No. 25  
Tower  
WagonModel No. 26  
Pulley ShaftModel No. 27  
Hoisting  
BlockModel No. 28  
Railway  
Signal

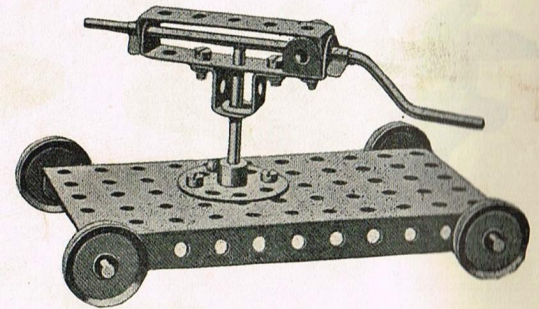




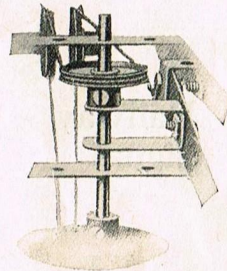
Model No. 29  
Drilling  
Machine



Model No. 30  
Jib Crane

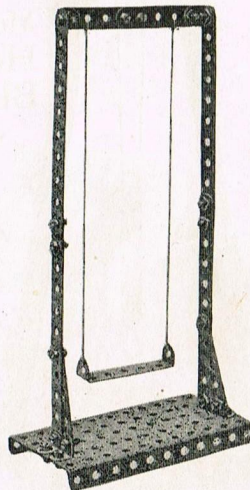
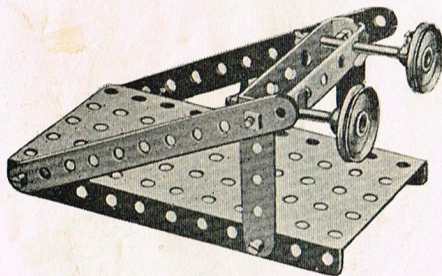


Model No. 31  
Rock Drill

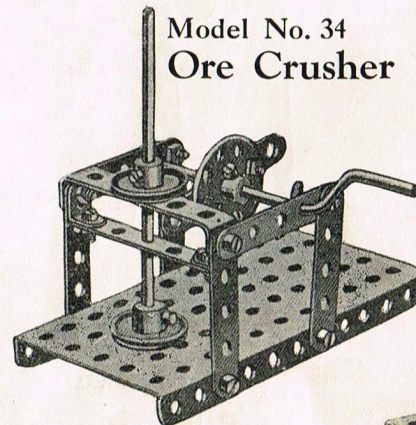


*Detail of  
Drilling  
Machine.*

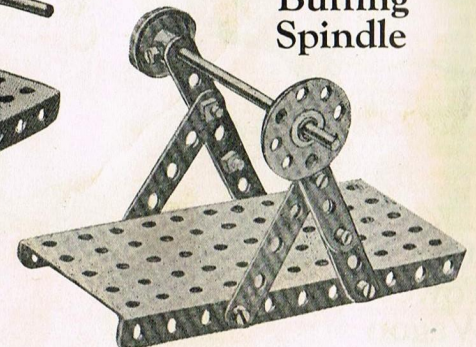
Model No. 32  
Buffers



Model No. 33  
Swing



Model No. 34  
Ore Crusher

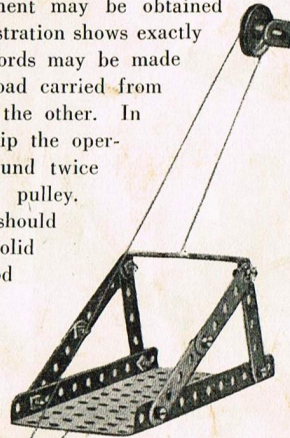


Model No. 35  
Buffing  
Spindle

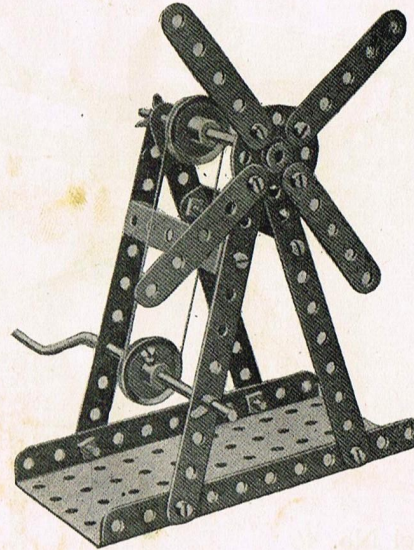


## Model No. 36 Telfer Span

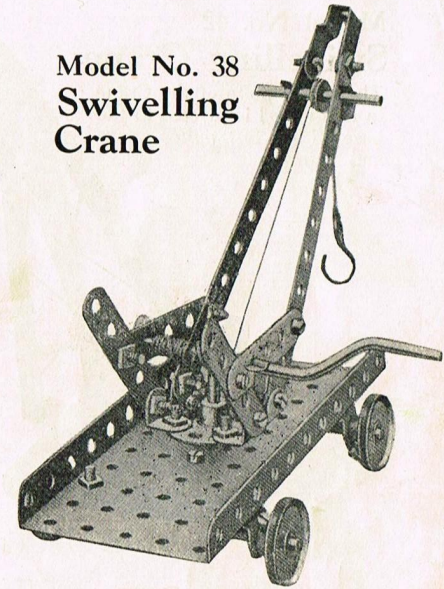
Many hours of enjoyment may be obtained from this model. The illustration shows exactly how it is worked. The cords may be made to any length, and the load carried from one side of the room to the other. In order to give a better grip the operating cord should be wound twice round the crank handle pulley. The body of the telfer should be screwed down to a solid base with ordinary wood screws, and the pulley bracket screwed in a suitable position on the opposite side of the room.



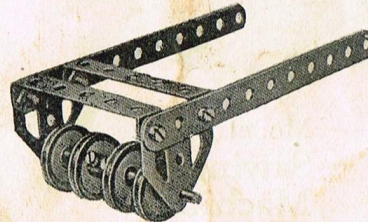
## Model No. 37 Windmill



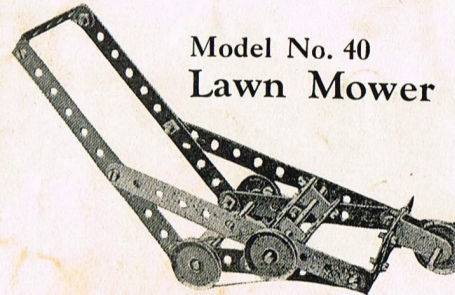
## Model No. 38 Swivelling Crane



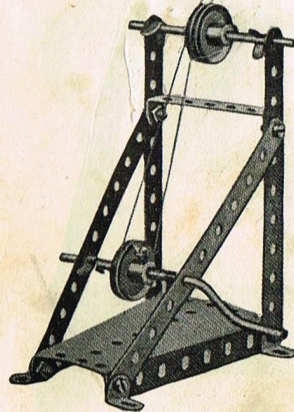
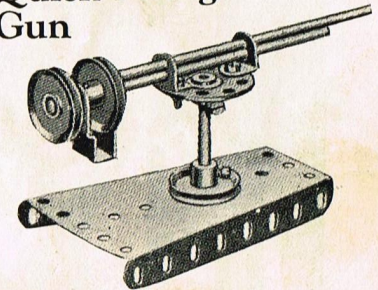
## Model No. 39 Furrow Roller



## Model No. 40 Lawn Mower



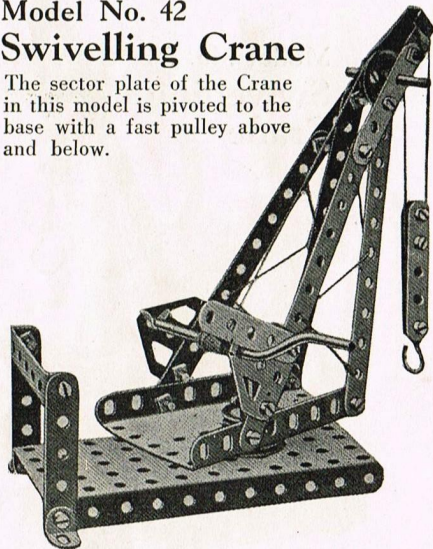
## Model No. 41 Quick-Firing Gun



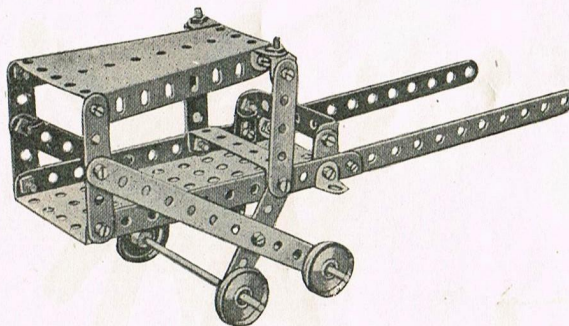


### Model No. 42 Swivelling Crane

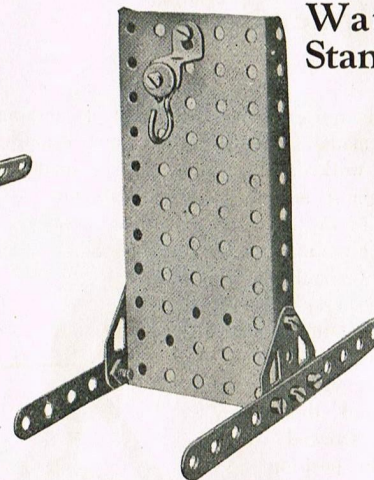
The sector plate of the Crane in this model is pivoted to the base with a fast pulley above and below.



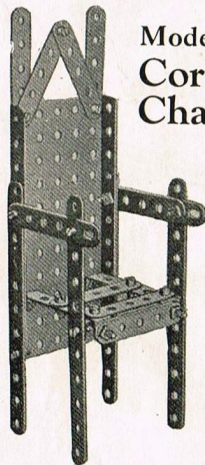
### Model No. 43 Ticca Gharry



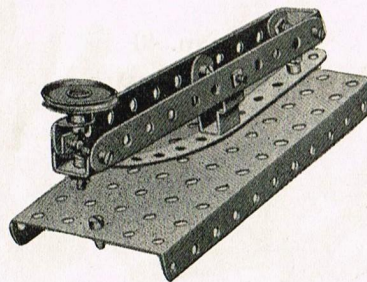
### Model No. 44 Watch Stand



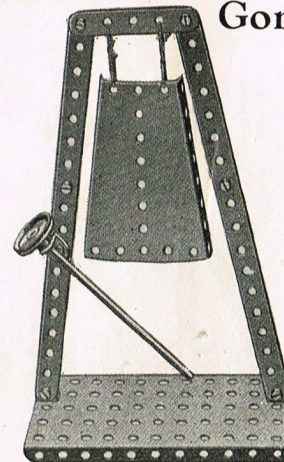
### Model No. 45 Coronation Chair



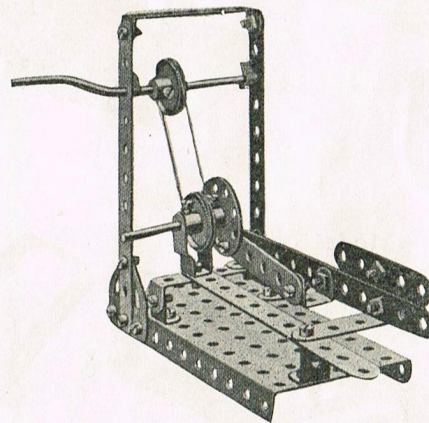
### Model No. 46 Telegraph Key



### Model No. 48 Gong



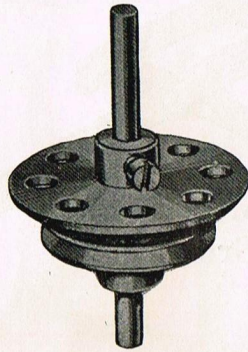
### Model No. 47 Sawing Machine



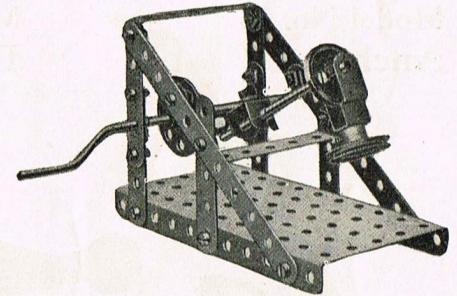
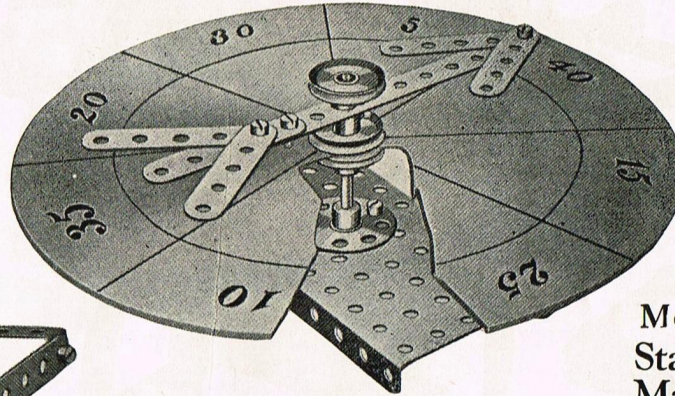


## Model No. 50—Roulette Wheel

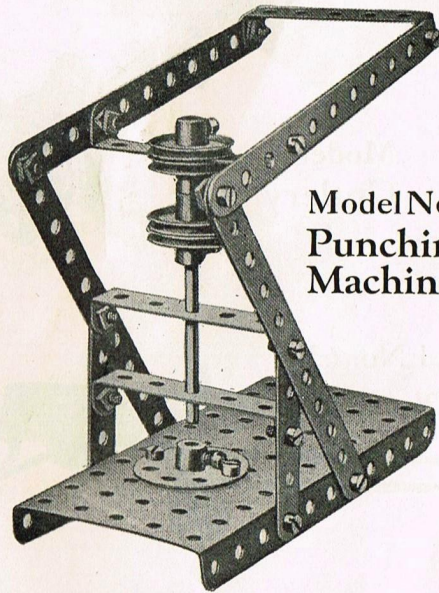
Cut out a circular piece of cardboard and mark as shown to form scoring board. This is clamped between two 1" pulley wheels. The pointer revolves freely on the upright spindle and is held in position by another 1" pulley wheel.



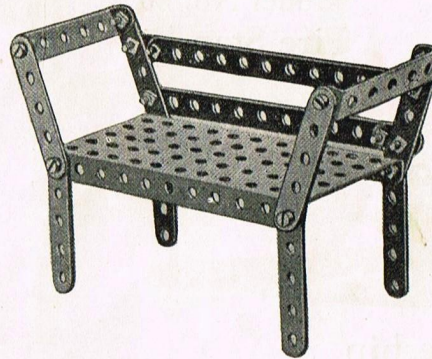
Model No. 49  
Spinning Top



Model No. 51  
Mechanical  
Hammer

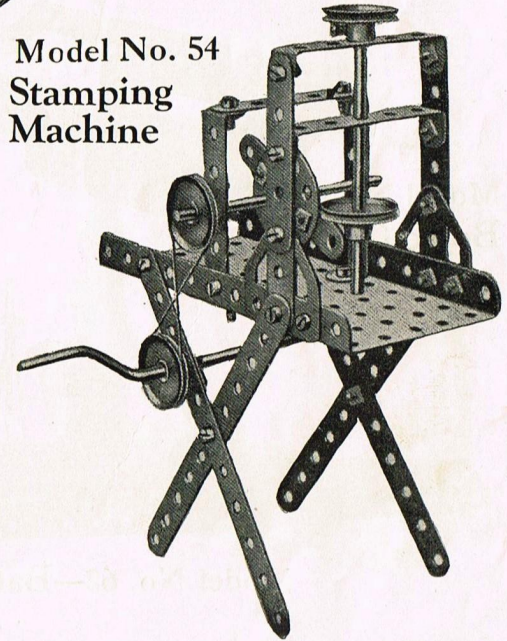


Model No. 52  
Punching  
Machine



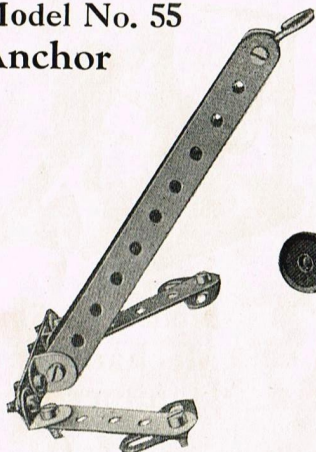
Model No. 53—Settee

Model No. 54  
Stamping  
Machine

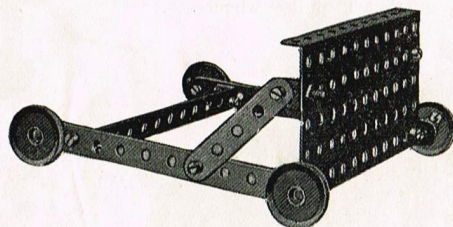




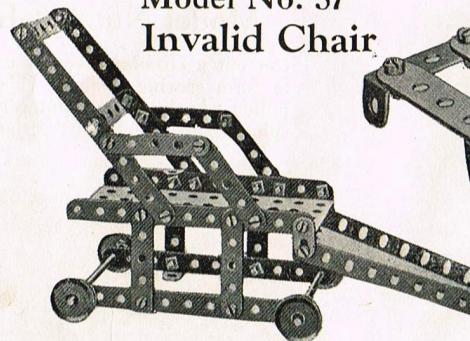
Model No. 55  
Anchor



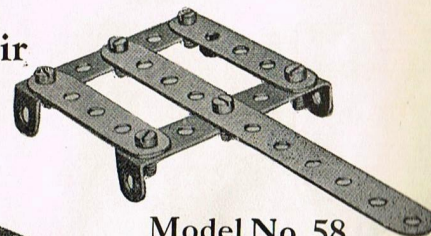
Model No. 56  
Devil Wall



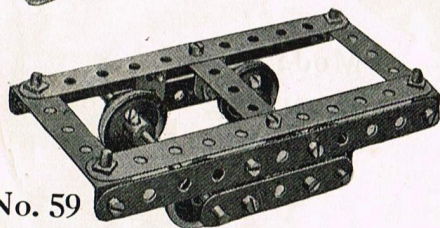
Model No. 57  
Invalid Chair



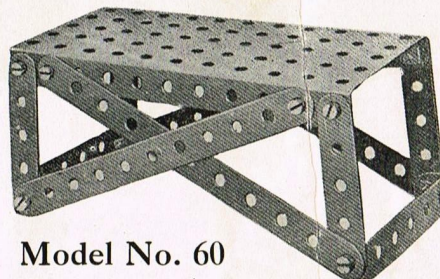
Model No. 58  
Grill



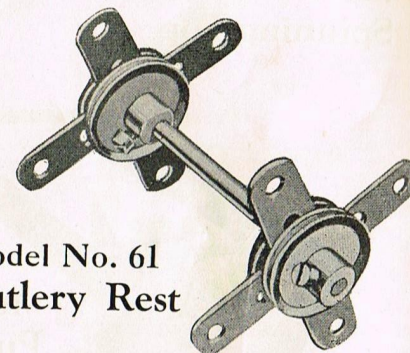
Model No. 59  
Bogie Car



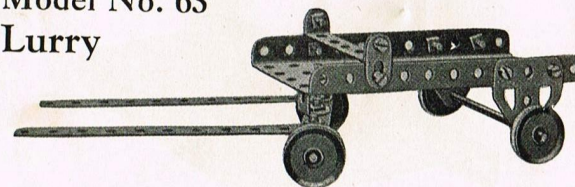
Model No. 60  
Fire Stand



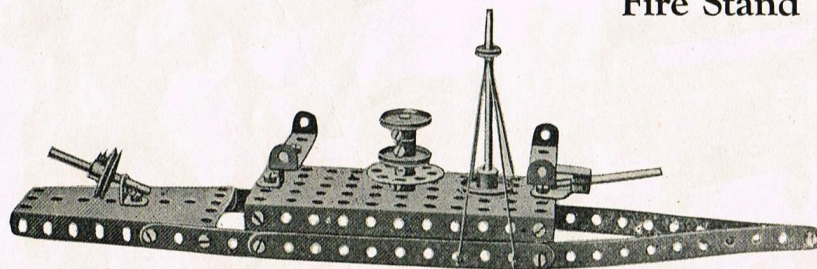
Model No. 61  
Cutlery Rest



Model No. 63  
Lurry

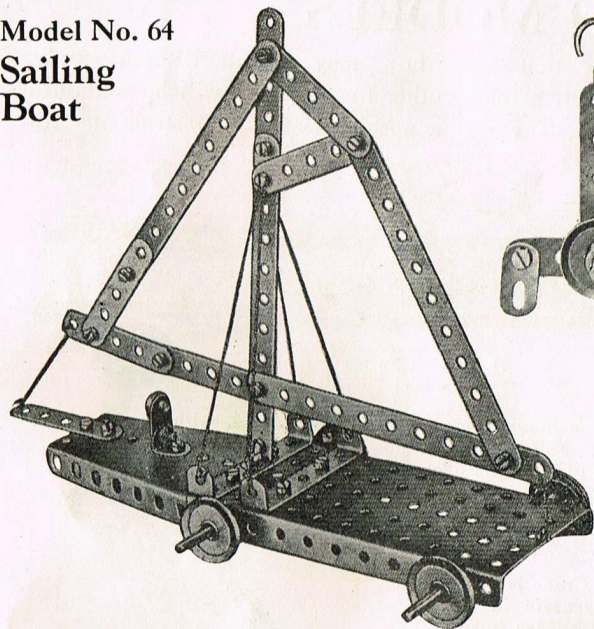


Model No. 62—Battleship

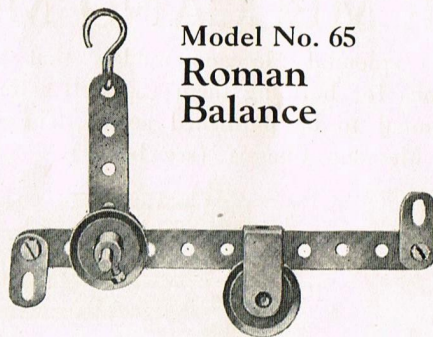




Model No. 64  
**Sailing  
Boat**



Model No. 65  
**Roman  
Balance**



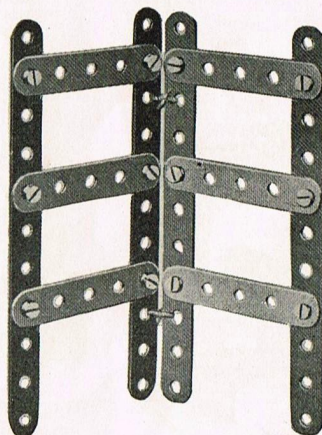
Model No. 66  
**Vegetable  
Chopper**



Model No. 67  
**Mail-Bag  
Hanger**



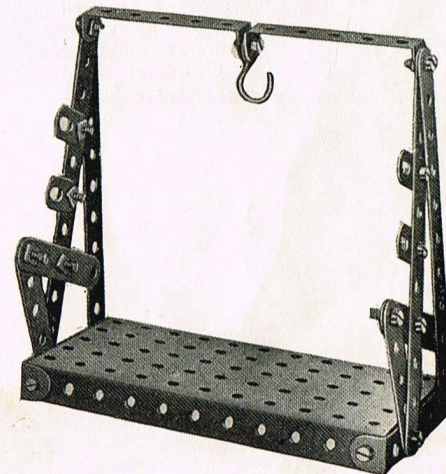
Model No. 69  
**Clothes Horse**



Model No. 68  
**Shipyards  
Bogie**



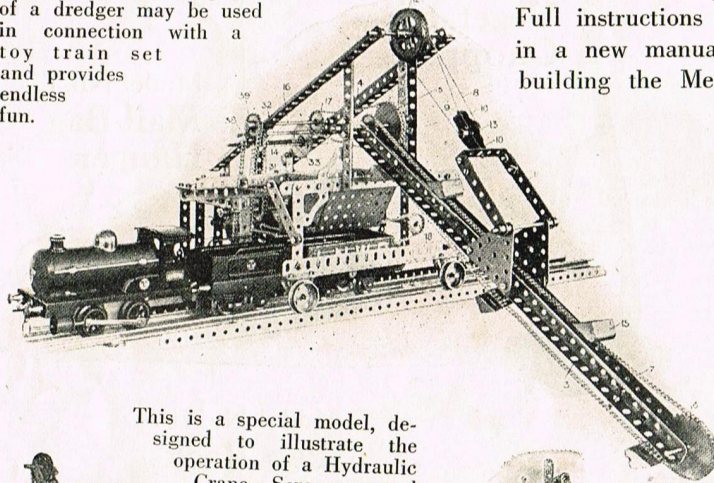
Model No. 70  
**Pen Rack**



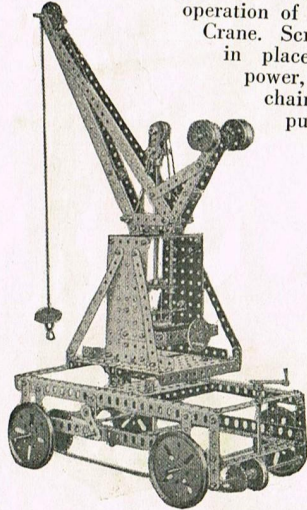


## A FEW CHOICE MECCANO MODELS

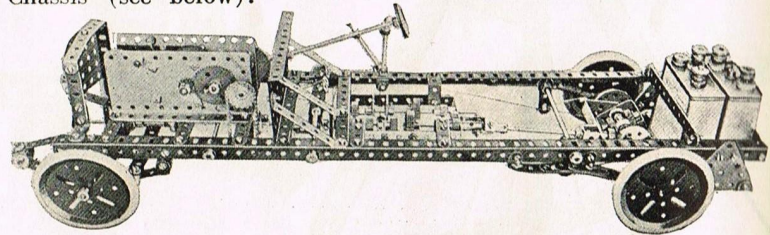
This splendid working model of a dredger may be used in connection with a toy train set and provides endless fun.



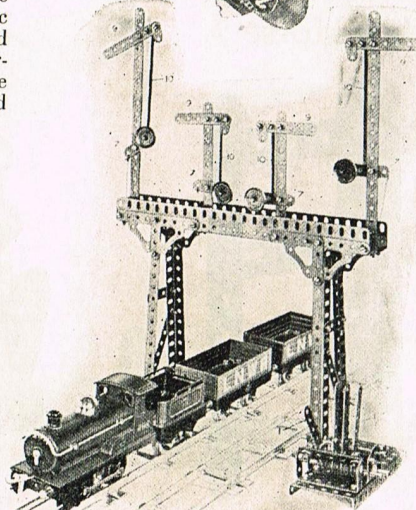
This is a special model, designed to illustrate the operation of a Hydraulic Crane. Screws are used in place of water-power, to move the chain or cord pulleys.



Here are five splendid Meccano models that any boy may build without study. Full instructions for building them (as well as many other fine models) will be contained in a new manual to be published soon. There is a special leaflet of instructions for building the Meccano Chassis (see below).

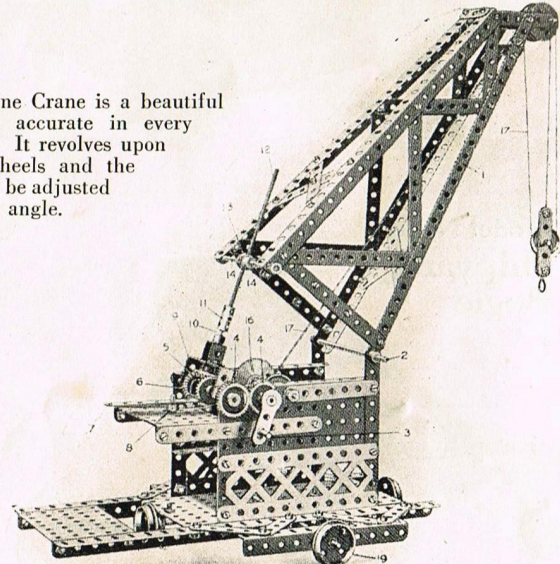


The Meccano Motor Chassis is a perfect model, with gear box and differential. Full instructions how to build it are contained in a beautifully illustrated leaflet, price 10 cents, postpaid.



Model 438. Signal Gantry.

This fine Crane is a beautiful model, accurate in every detail. It revolves upon four wheels and the jib may be adjusted to any angle.



Model 440. Revolving Crane.



## MECCANO INVENTOR'S ACCESSORY OUTFITS

New and valuable parts are added to the Meccano system from time to time, and for the convenience of Meccano boys we have made up selected assortments of these new parts in useful quantities. These may be purchased in special boxes, known as Inventor's Accessory Outfits. With them many models in the Manuals of Instruction may be greatly improved and a large number of further models made.



### Accessory Outfit "A"

This Outfit makes a splendid addition to any Meccano Outfit and with it a considerable amount of extra fun may be obtained. It contains large 3" Pulley Wheels, Gear Wheels, Washers, Sprocket Wheels, Sprocket Chain, and Meccano Braced Girders. For price see page 18.



### Accessory Outfit "B"

Every boy who is interested in engineering subjects will find this Outfit of the greatest service to him, not only providing him with new movements but also considerably extending the scope of his experiments.

The Outfit contains Bevel Gears, Gear Wheels, Flat Plates, Octagonal and Strip Couplings, Triangular Plates, Screwed Rods, Curved and Rack Strips, Hinges, and Buffers and Couplings (for constructing Trains). For price see page 18.

### Electrical Outfit

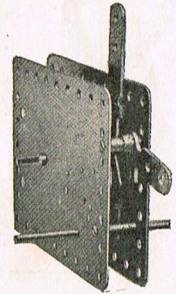
All Meccano boys are fascinated by electricity and never become tired of learning more about this wonderful subject. The application of electricity to the Meccano system adds a further and wonderful charm, and the joys of model-building are now increased by the fascinating pastime of carrying out delightful electrical experiments.

The Meccano Electrical Outfit contains a number of specially designed electrical parts which may be used in conjunction with any of the regular Outfits. For price see page 18.



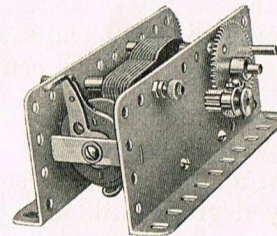
### Clockwork Motor

How splendid it is, after spending hours in building a model, to be able to set it in motion with a motor, just as do real engineers! The Meccano Clockwork Motor is specially made for this purpose and is a fine piece of mechanism—simple, powerful, and reliable. It is fitted with starting and stopping levers, and has a reversing movement. For price see page 18.



### Electric Motor

This motor serves the same purpose as the Clockwork Motor and may be run from dry batteries or—by employing a Meccano transformer—direct from the main. It is specially made to be built into Meccano models and is the most reliable and powerful toy electric motor made. The E1 motor will run one way only and has a pulley and pinion. The E2 motor has reversing motion, starting and stopping levers, and is fitted with gears. For prices see page 18.





## MECCANO PRICE LIST

### MECCANO OUTFITS

No. 0 Meccano Outfit.....	\$ 2.00
" 1 " " .....	3.00
" 1x " " (with one-way motor) ..	5.00
" 2 " " .....	6.00
" 2x " " (with reversing motor) .	8.50
" 3 " " .....	9.00
" 3x " " (with reversing motor) .	11.50
" 4 " " " " " ..	15.00
" 5 " " " " " ..	20.00
" 5x* " " " " " ..	25.00
" 6 " " " " " ..	40.00

\*The No. 5x Outfit also includes an Inventor's A Outfit and transformer.

### ACCESSORY OUTFITS

No. 0a Meccano Outfit.....	\$ 1.25
" 1A " " .....	3.00
" 2A " " .....	3.00
" 3A " " .....	6.00
" 4A " " .....	5.00
" 5A " " .....	20.00
Inventor's Accessory Outfit A .....	3.00
" " " B .....	7.00
Electrical " " .....	4.00

### MECCANO MOTORS

E1 Electric, one way .....	\$ 2.50
E2 " reversing .....	3.50
S1 Clockwork, reversing .....	3.00
Transformer (110 V. 60c. A. C. only) .....	2.50

Meccano is sold in seven different Outfits, numbered 0 to 6. All parts are of the same high quality and finish, the larger Outfits containing a greater quantity and variety of parts.

Each Outfit may be converted into the one next higher by the purchase of an Accessory Outfit. Thus, a No. 2 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. In this way, no matter which outfit you commence with, you may by degrees build up your Outfit to a No. 6.



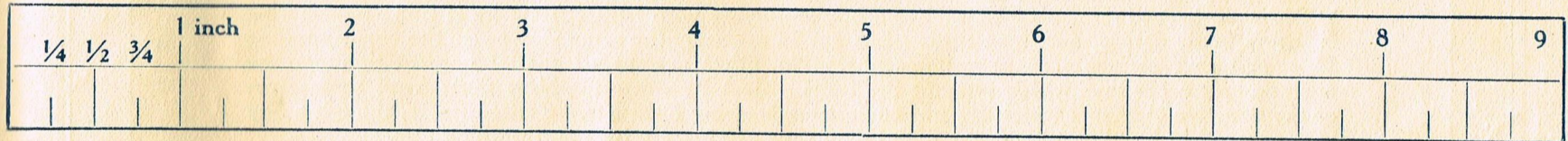
# CONTENTS OF No. 0 OUTFIT

No.	Quantity.
2. 5½" Perforated Strips .....	4
5. 2½" " " .....	9
10. Flat Brackets .....	5
11. Double " .....	2
12. Angle " .....	8
16. 3½" Axle Rods .....	2
17. 2" " " .....	2
19. Crank Handle .....	1

No.	Quantity.
22. 1" Pulley Wheels (with Set-screw) .....	4
23A. ½" " Wheel (without Set-screw) .....	1
24. Bush Wheel .....	1
35. Spring Clips .....	6
37. Nuts and Bolts .....	25
44. Cranked Bent Strip .....	1
52. Perforated Flange Plate, 5½" x 2½" .....	1
54. " " Sector Plate .....	1

No.	Quantity.
57. Hook .....	1
60. 2½" x ½" Double Angle Strips .....	4
125. ½" Reversed Angle Brackets .....	2
126A. Flat Trunnions .....	2
38. Washers .....	6
36. Screwdriver .....	1
40. Hank of Cord .....	1
56. Manual of Instructions No. 0 .....	1

This rule is provided for measuring rods, strips and other parts.





# MECCANO

Hornby's Original System, First Patented 1901

PATENTS AND DESIGNS, UNITED STATES

810,148	1,166,688	1,289,014	1,412,116
1,079,245	1,196,238	1,293,973	1,412,117
1,161,131	1,202,388	1,355,975	49,308

PATENTED THROUGHOUT THE WORLD

## Meccano is more than a Toy

**I**T is important to remember that when a boy is playing with MECCANO he is using engineering parts in miniature, and that these parts act in precisely the same way as do the corresponding engineering elements in actual practice. No other system of model construction can be correct, and other toys which attempt the same object by other methods must avail themselves of constructive elements which are not correct engineering elements. Consequently, though a boy may succeed in building playthings with them, they are merely toys and nothing else.