

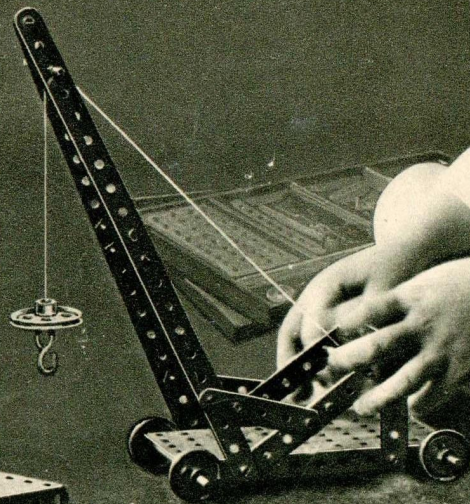
# MECCANO

(PATENTED)

## INSTRUCTIONS

FOR THE N<sup>o</sup> 0 OUTFIT

PRICE 4<sup>d</sup>



N<sup>o</sup> 180  
MECCANO LTD. LIVERPOOL.  
619/150

"Two Minds with but  
a Single Thought"

COPYRIGHT 1919.  
By MECCANO LTD.



## the development of their knowledge of mechanical and engineering principles.

This is surely an ambitious programme, and we can assure our Meccano boys that we shall use every endeavour to establish an organisation of boys, for boys, and conducted as much as possible by boys, which will have a profound effect for good on the lives of all who take part in it.

The Headquarters of the Guild will be at the offices of the Meccano Works in Liverpool. At the head, guiding, controlling, and taking a personal interest in every member, will be the President, and the holder of this office will be Mr. Frank Hornby, inventor of Meccano, and Chairman and Managing Director of Meccano Limited. Associated with the Guild will be Meccano Clubs all over the country, run by Club Leaders and other officials; and finally the great army of club members—thousands upon thousands of clean, busy, happy boys, each with a definite purpose, each a member of a great happy family.

620/250.



Existing Meccano Clubs should at once apply for affiliation with the Meccano Guild, giving the following particulars:—

- (1) Name of Club.
- (2) Name and address of Club Leader.
- (3) Number of Members on roll.
- (4) Address where club meetings are held.
- (5) The last report and balance-sheet.

### The Meccano Club Certificate

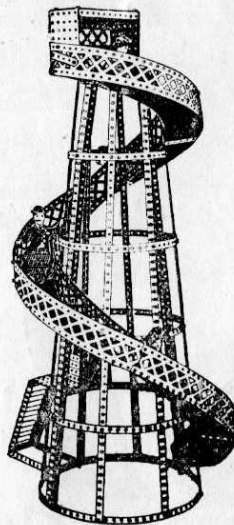
Where a club can show that it is a real live organisation a Certificate of Affiliation to the Guild will be granted, and the club will be allowed to avail itself of all the privileges of membership.

Every boy who is not yet a member of a Meccano Club should apply for individual membership of the Guild, on the enclosed form.

# A TALK WITH NEW MECCANO BOYS

Boys! This book is only the beginning of Meccano. You will get lots of fun building the models which it contains, but best of all it will show you what a fine hobby Meccano is, and how easy and delightful it is to build models with it.

Wouldn't you like to build all the splendid Meccano models which you have seen on exhibition in the toy-shops, and in our advertisements, and in the books and leaflets which we publish? Nothing could be easier; all the Meccano parts fit in with those you have in your No. 0 Outfit. This is the advantage of the standardisation of the whole Meccano system. Once you have got the idea of the equidistant holes, and the interchangeable parts, you can do anything with them. Take, for instance, one of the models which looks most complicated—the Meccano loom. It is just as easy for you to build it as it is for an engineer or a skilled mechanic.



*Who shall play with the Helter-Skelter first?*



That is what the Meccano system does—the *genius and skill and knowledge are in the parts*, and all you have to do is to screw them together. And when you have made a model such as the loom, you can do something with it. You can weave ties and belts in all colours and designs, just as good as the best you can buy in the shops. Our big Manual of Instructions shows you how to make this model, and it also shows you how to make the Helter-Skelter, and the big Cranes and Bridges, and all the prize models

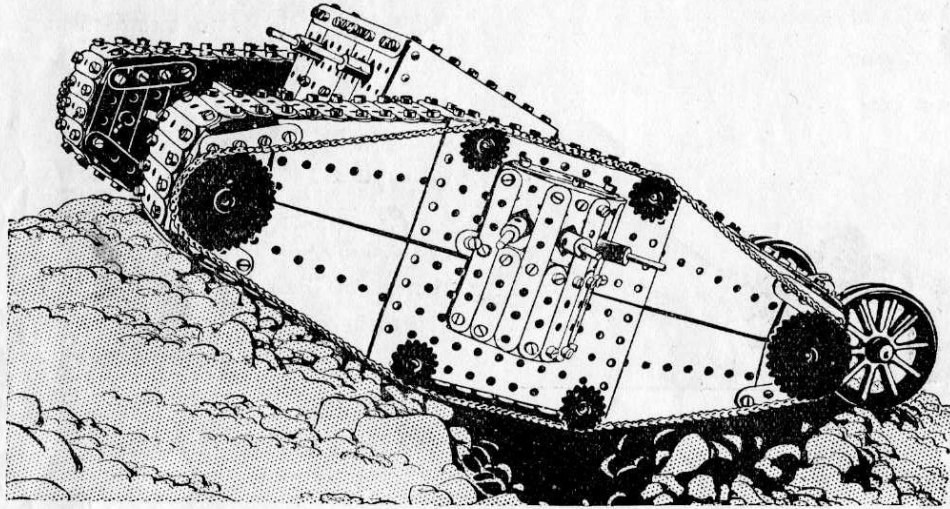
which have been sent in by expert Meccano boys, and which took big money prizes.

Remember, boys, that with Meccano you can make anything and everything which you can make with any other system, and that no other system can make the Meccano models.

**THE NEW FULL MECCANO MANUAL OF INSTRUCTIONS CONTAINS  
HUNDREDS OF PRIZE-WINNING MODELS.  
GET YOUR COPY AT ONCE.**



**YOU can build this Model  
of the wonderful British  
Tank with MECCANO**



## Meccano is Easy

Meccano is so easy, and our instructions are so complete, that we do not believe you will have any trouble; but if there is anything you do not quite understand, or if you have any suggestions to make, do not fail to write to us.

## Boys! Build Bigger Models

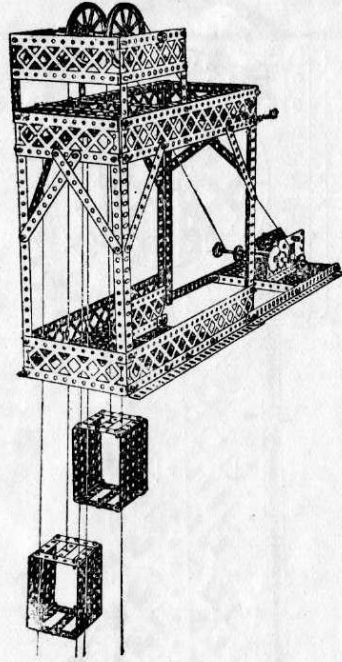
When you have completed all the models in this book, your next purchase will be a No. 0a Accessory Outfit. This will convert your No. 0 Outfit into a No. 1. You will receive a large number of extra parts, and a big Manual of Instructions. You will be able to build scores of new and fascinating models, and will then realise what a wonderful hobby Meccano is.

## The Meccano Magazine

This is a splendid Magazine, which is published for Meccano users. You will miss a lot of fun and pleasure if you do not become a regular reader. It contains articles on Meccano topics; essays by Meccano boys; tips to model-builders; replies to boys' queries by the Editor; announcements of new prize competitions which are running all the time, and which enable you to win valuable prizes; lists of prize-winners; and all kinds of useful information for boys. Write to the Editor, and he will send you your first copy FREE. If you wish to receive the Meccano Magazine regularly, you should send 4d. in stamps to cover postage on the next four issues. A double subscription of 8d. will, of course, ensure your receiving the next eight issues. Address your letters to the Editor, Meccano Works, Binns Road, Liverpool.



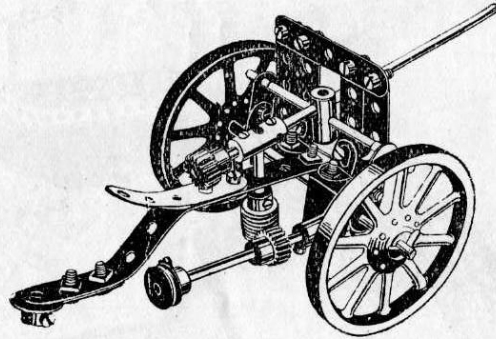
# SPLENDID NEW MECCANO MODELS



## Pit Head Gear

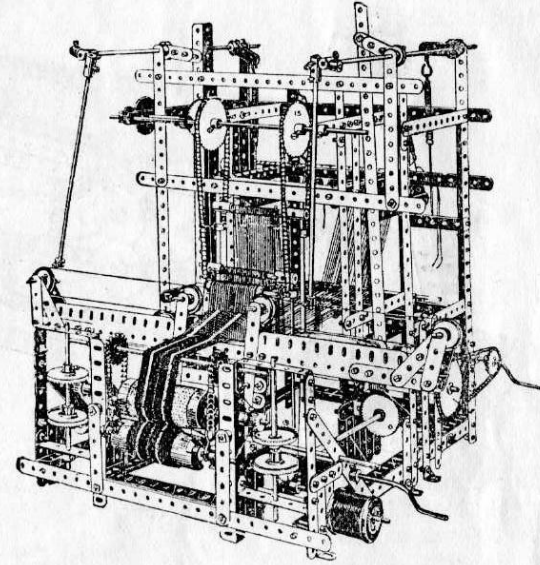
A fine toy, giving great fun. The cages work up and down, carrying loads. Note the splendid use of the Meccano braced girder

These are just one or two of the fine new models which Meccano makes. The complete Meccano Manual is full of good things—hundreds of prize-winning models from all over the world. Get your copy at once. It costs 2/6 or 2/9 post paid.



## Meccano Field Gun

Easy to make and furnishes endless amusement

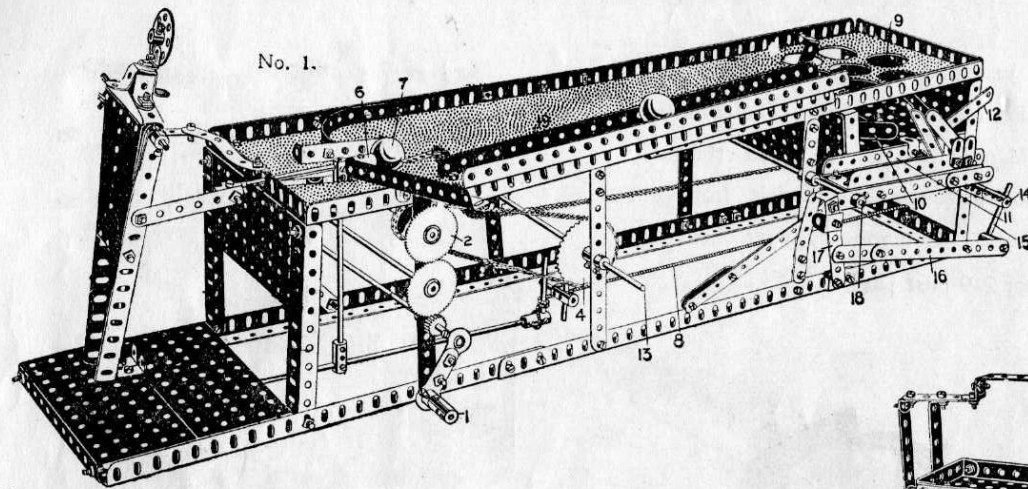


## Meccano Loom

The mechanism is fully automatic and it is only necessary to turn the handle to weave ties, belts, etc., in all designs and colours. This is a Meccano triumph which every Meccano boy must make. It will teach you all about weaving. Full instructions how to make it in the full Manual of Instructions



THE MORE MECCANO YOU HAVE, THE BIGGER AND BETTER THE MODELS YOU CAN BUILD



These are a few models taken from our big Manual, which contains more than 300 just as good.

No. 1 is an Automatic Bagatelle Player. The balls are automatically played by the figure at the end of the table, and, after making the score, are returned to the player.

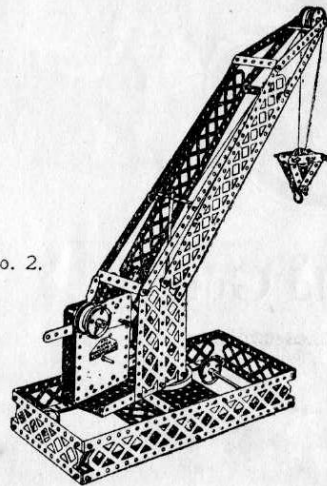
No. 2 is a beautifully designed Crane worked with a Meccano Clockwork Motor. It works perfectly.

No. 3 is a Ladies' Needlework Basket, easy to make, and most useful.

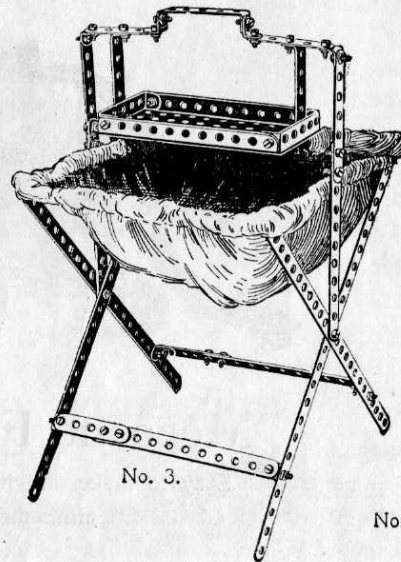
No. 4 is a type of Weighing Machine which will be familiar to every boy. It works perfectly, and can be scaled to weigh correctly.

Full instructions for building these, and hundreds of other models, will be found in the big Meccano Manual of Instructions.

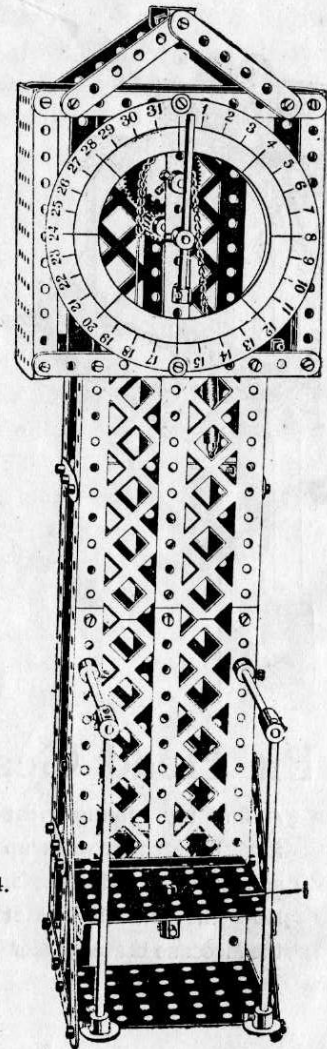
No. 2.



No. 3.



No. 4.





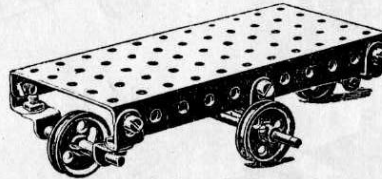
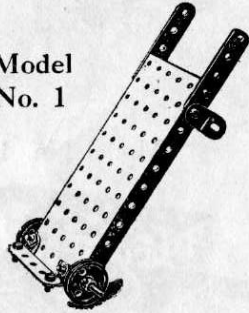
# HOW TO BUILD WITH MECCANO

Follow the instructions closely at first, and build the models just as you see them. Then take each model and try to improve on our design. Every model can be made in a dozen different ways. Screw them all up tight, and you will find that you can play with the trucks and cranes and signals, &c., and do all kinds of work with them.

The braced girder and the large wheels are, of course, separate parts which you can either purchase separately or in the Inventor's Outfit, but wherever they are shown the ordinary Meccano strips and wheels may be used instead.

## Trucks and Luggage Carts

Model  
No. 1

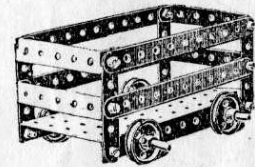


Model No. 2



Fig. 2A

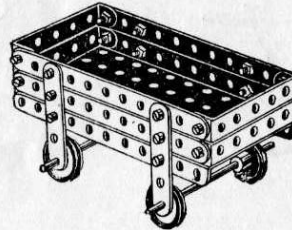
Model No. 3



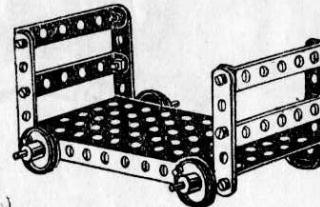
In a Revolver Truck (Model No. 2) the two end wheels are always raised just a little higher than the two centre wheels with a moderate amount of play on the axles, so that the Truck may be quickly revolved upon the centre wheels.

The bearings for the end axles are formed by connecting two angle brackets together, as shown in Fig. 2A, and bolting them in each end hole at the sides of the plate.

Model No. 5

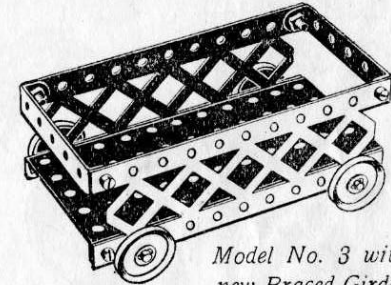
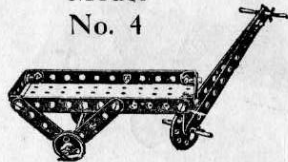


Model No. 6



(7)

Model  
No. 4

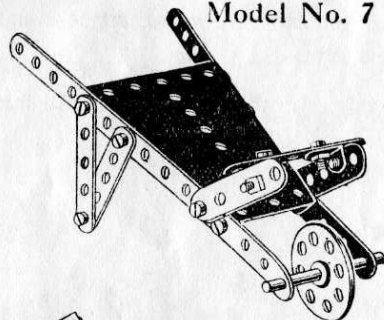


Model No. 3 with  
new Braced Girder

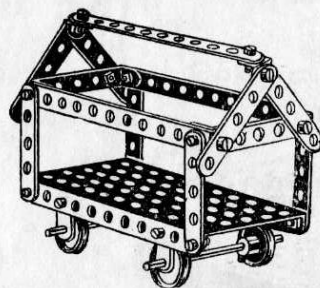


# Trucks and Luggage Carts *(continued)*

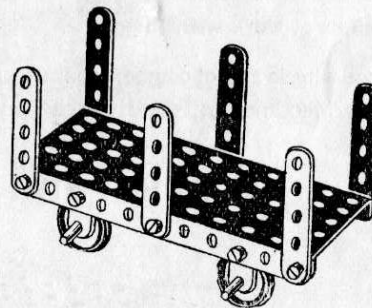
Model No. 7



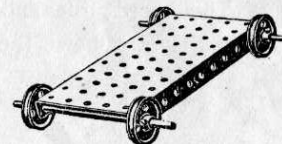
Model No. 8



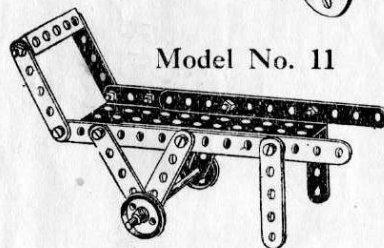
Model No. 9



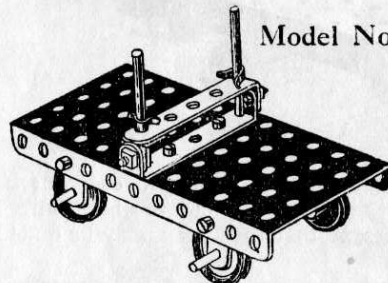
Model No. 10



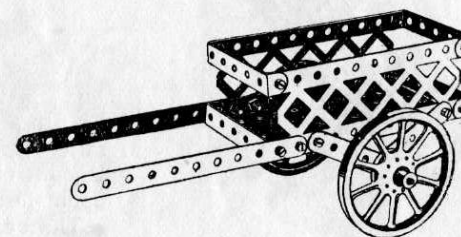
Model No. 11



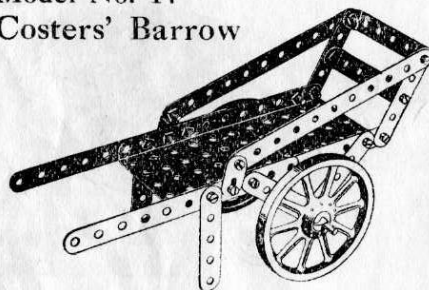
Model No. 12



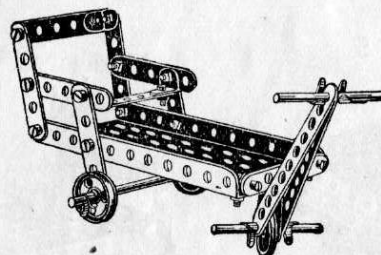
Model No. 13



Model No. 14  
Costers' Barrow

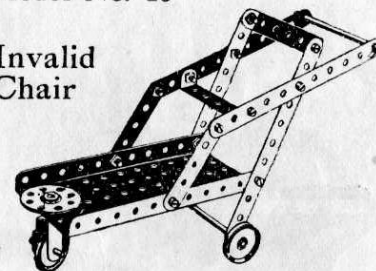


Model No. 15



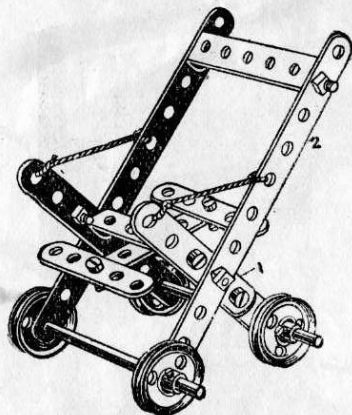
Model No. 16

Invalid  
Chair

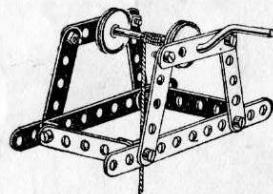




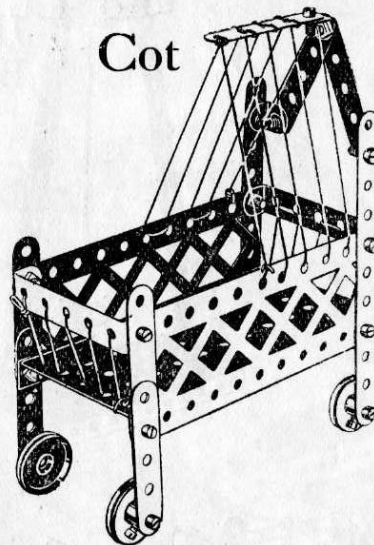
Model No. 17  
**Go Chair**



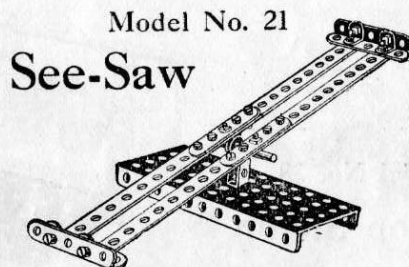
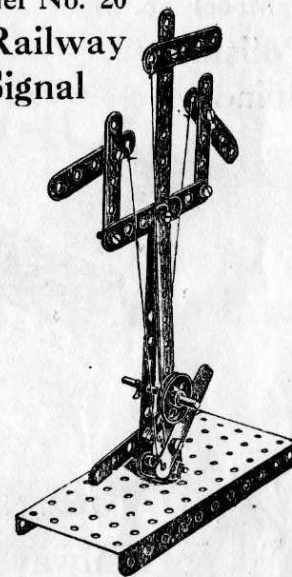
Model No. 18  
**Well Windlass**



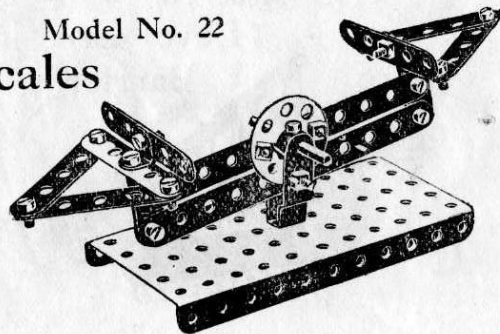
Model No. 19  
**Cot**



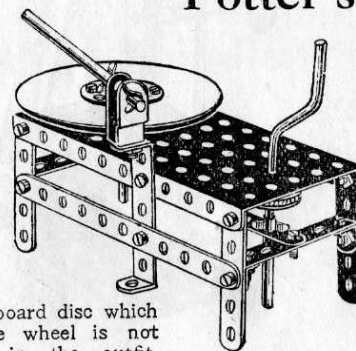
Model No. 20  
**Railway Signal**



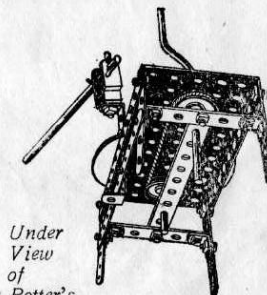
Model No. 22  
**Scales**



Model No. 23  
**Potter's Wheel**

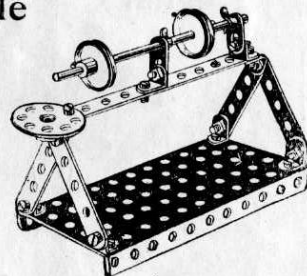


The cardboard disc which forms the wheel is not provided in the outfit.

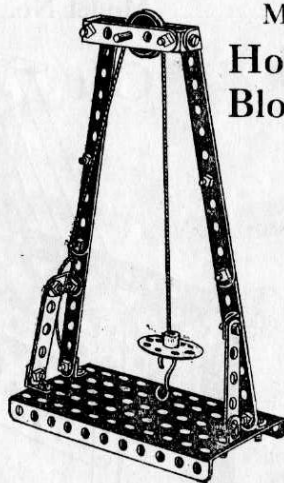


*Under View of Potter's Wheel*

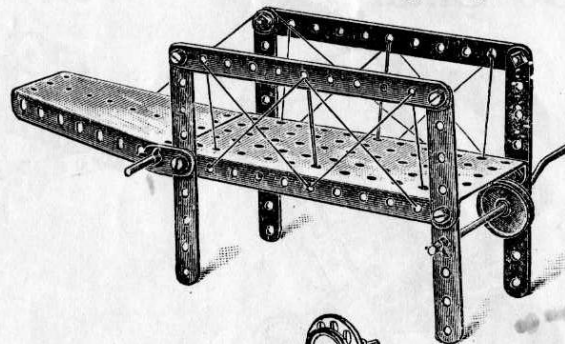
Model No. 24  
Polishing  
Spindle



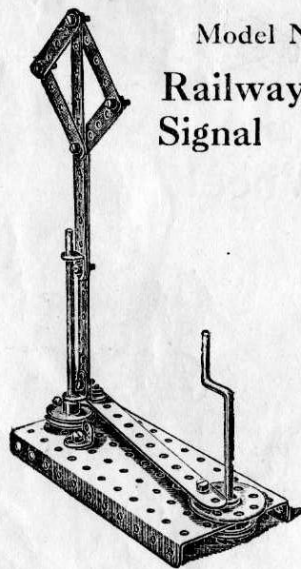
Model No. 25  
Hoisting  
Block



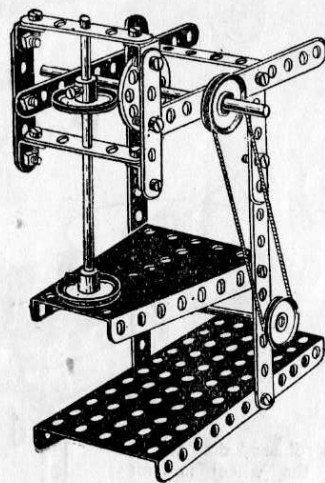
Model No. 26  
Gangway



Model No. 27  
Railway  
Signal

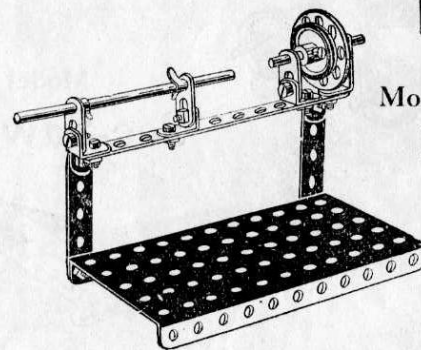


Model No. 28  
Drop Stamp

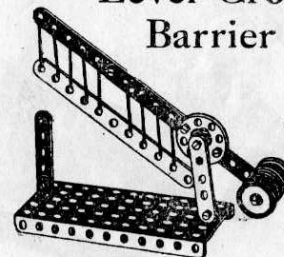


The stamp of this model is raised and dropped by a  $2\frac{1}{2}$ " strip attached to a bush wheel.

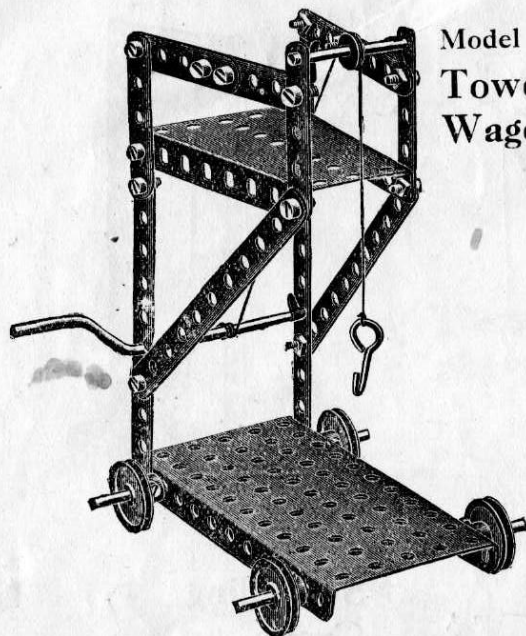
Model No. 29  
Lathe



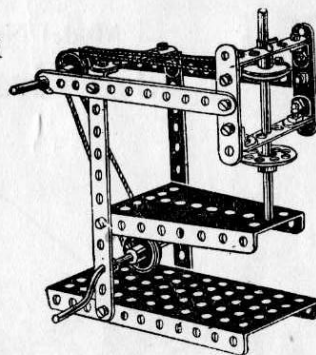
Model No. 30  
Level Crossing  
Barrier



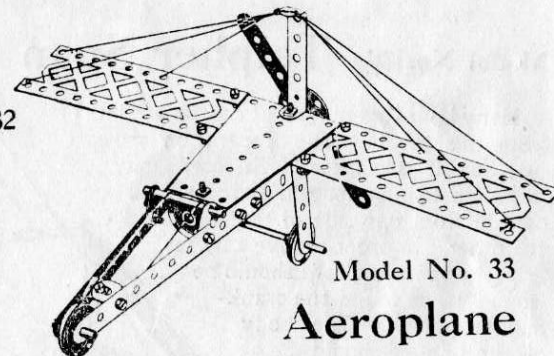




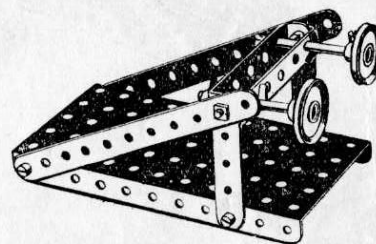
Model No. 31  
**Tower  
Wagon**



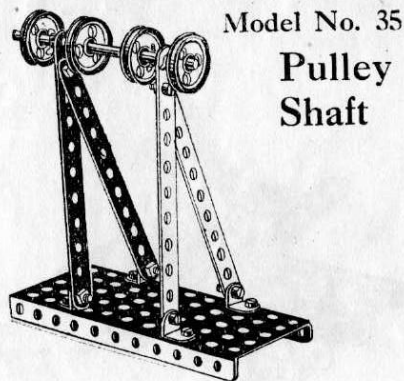
Model No. 32  
**Drilling  
Machine**



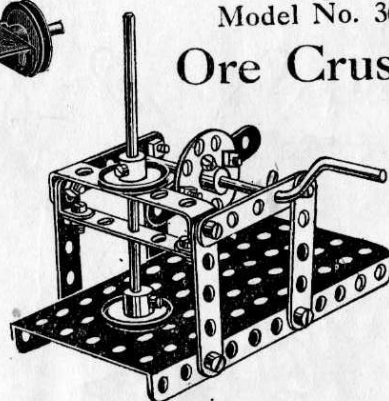
Model No. 33  
**Aeroplane**



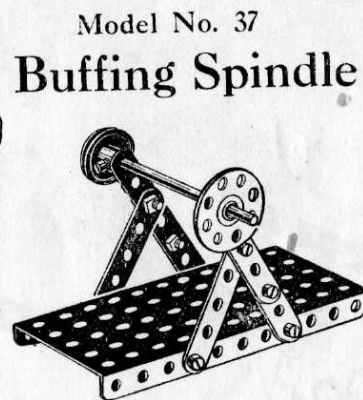
Model No. 34  
**Buffers**



Model No. 35  
**Pulley  
Shaft**



Model No. 36  
**Ore Crusher**



Model No. 37  
**Buffing Spindle**

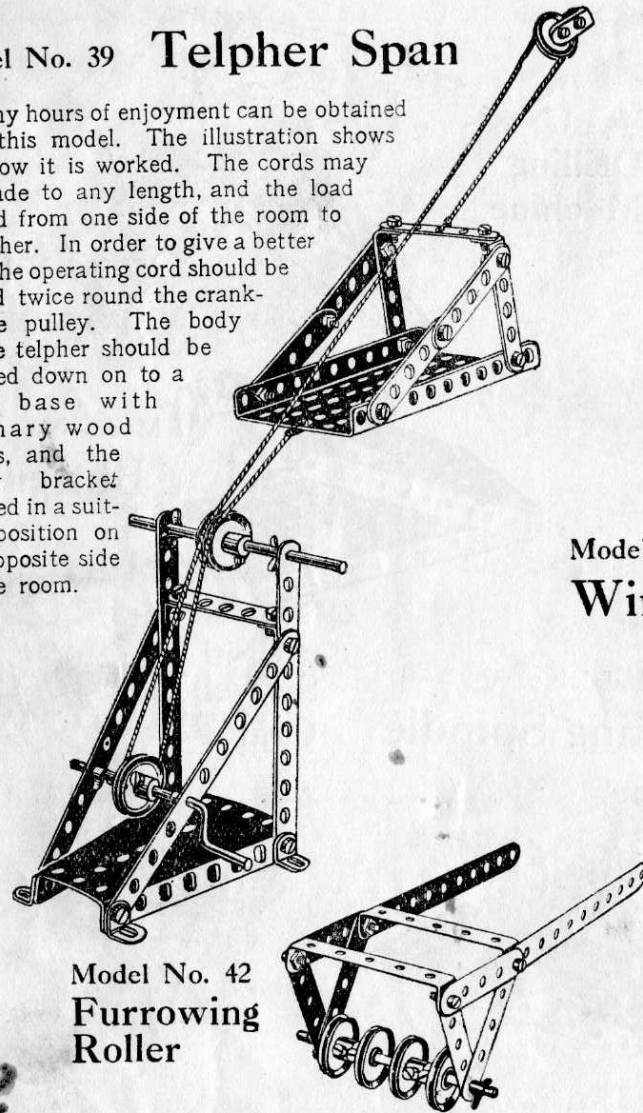


Model No. 38  
**Swivelling  
Crane**

The sector plate of the Crane in this model is pivoted to the base.

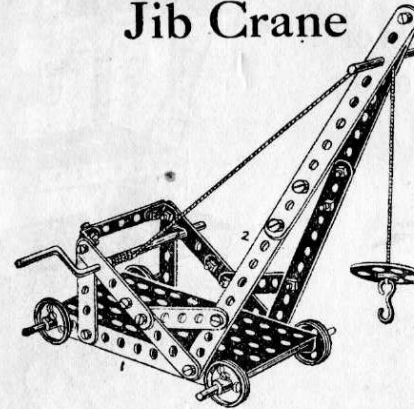
## Model No. 39 Telpher Span

Many hours of enjoyment can be obtained from this model. The illustration shows just 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 telpher should be screwed down on to a solid base with ordinary wood screws, and the pulley bracket screwed in a suitable position on the opposite side of the room.

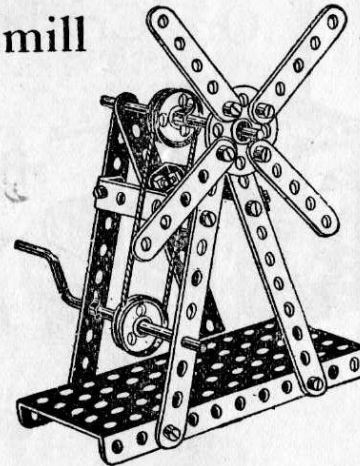


Model No. 42  
Furrowing  
Roller

## Model No. 40 Jib Crane

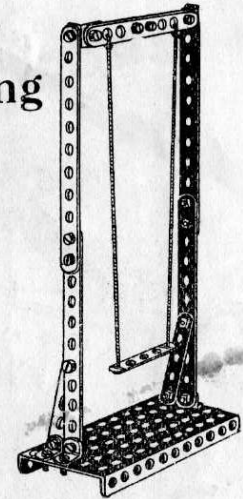


## Model No. 43 Windmill

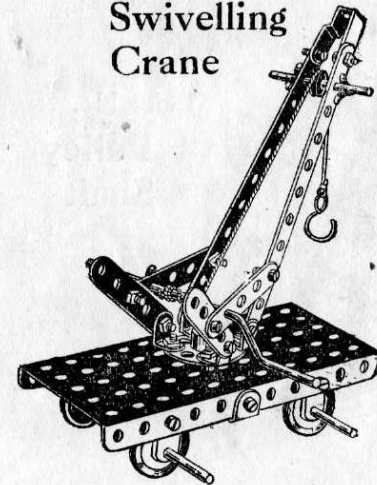


(12)

## Model No. 41 Swing

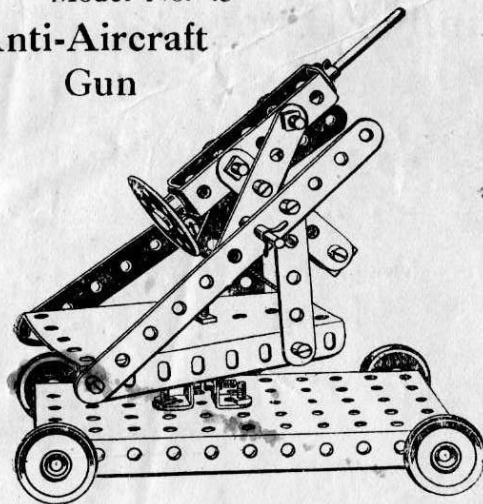


## Model No. 44 Swivelling Crane

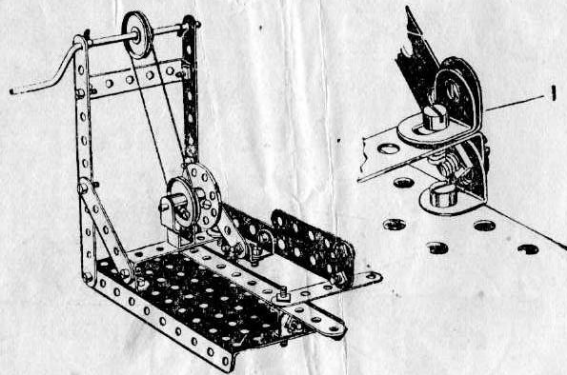




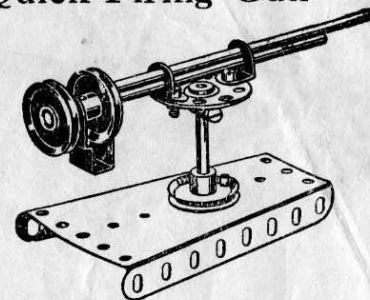
Model No. 45  
**Anti-Aircraft  
Gun**



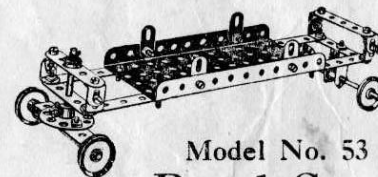
Model No. 46  
**Sawing Machine**



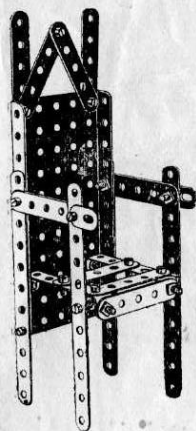
Model No. 47  
**Quick-Firing Gun**



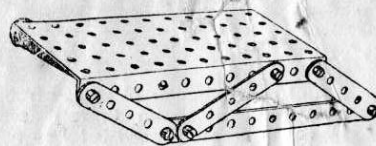
Model No. 51  
**Boiler Truck**



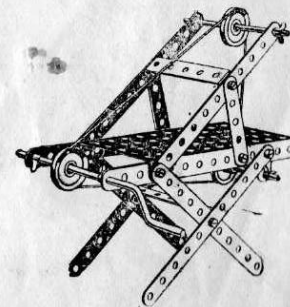
Model No. 48  
**Coronation Chair**



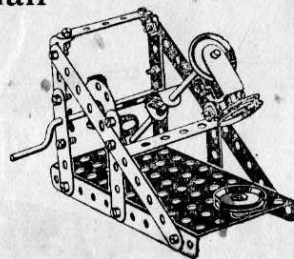
Model No. 50  
**Sleigh**



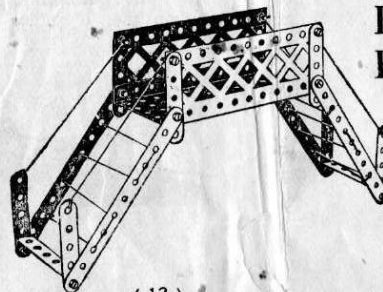
Model No. 53  
**Band Saw**



Model No. 49  
**Mechanical  
Hammer**

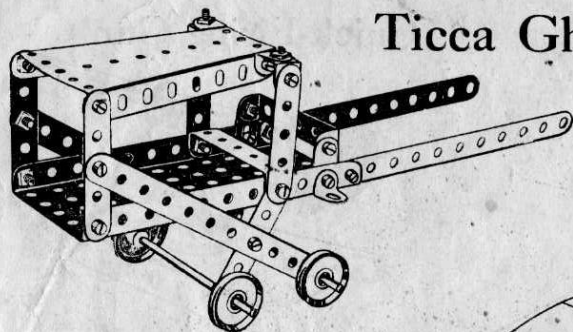


Model No. 52  
**High Level  
Bridge**



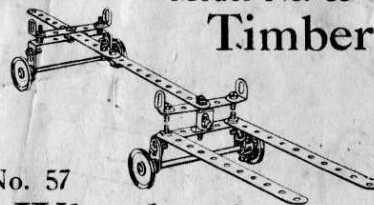
Model No. 54

# Ticca Gharry



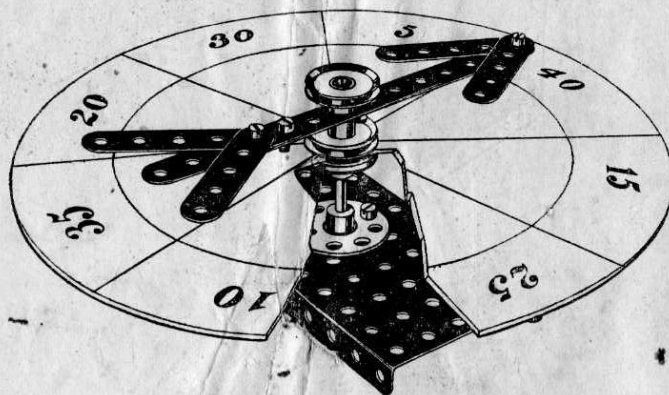
Model No. 55

# Timber Drag



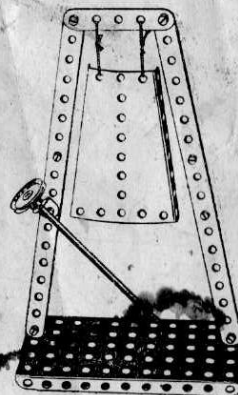
Model No. 57

# Roulette Wheel



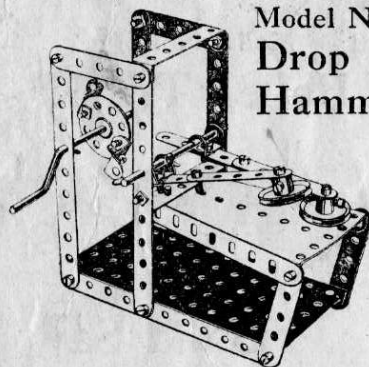
Model No. 58

# Gong



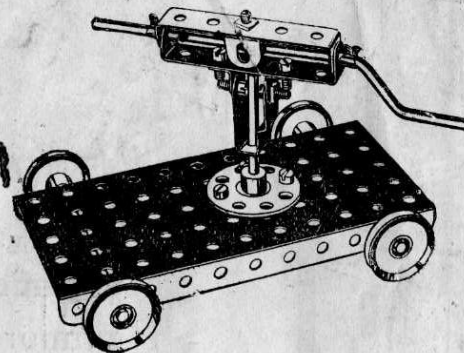
Model No. 56

# Drop Hammer



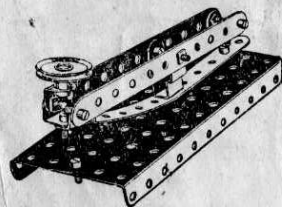
Model No. 61

# Rock Drill



Model No. 59

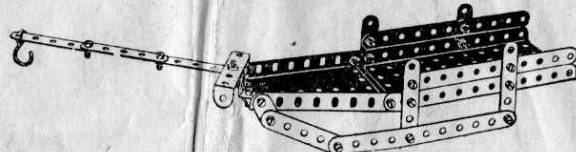
# Telegraph Code Key



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.

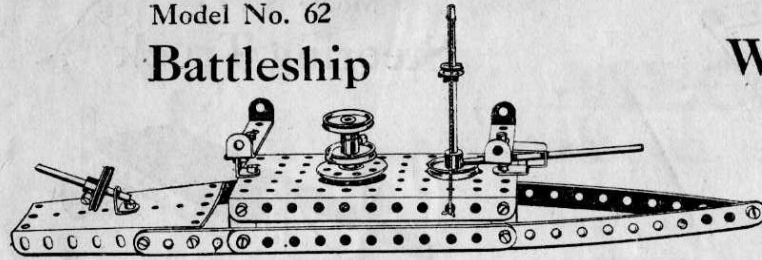
Model No. 60

# Sleigh

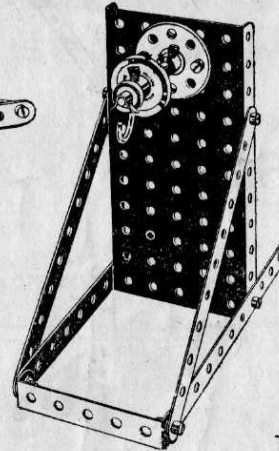




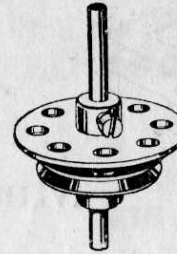
Model No. 62  
**Battleship**



Model No. 63  
**Watch Stand**



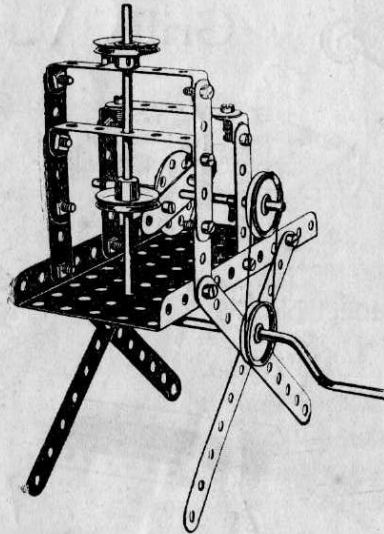
Model No. 64  
**Spinning Top**



Model  
No. 65  
**Mail Bag  
Hanger**



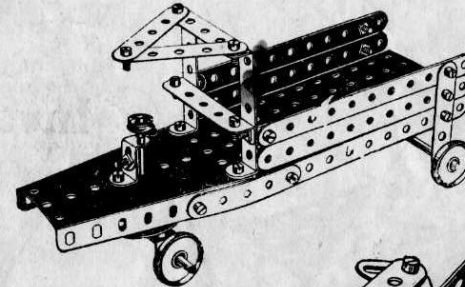
Model No. 66  
**Stamping  
Machine**



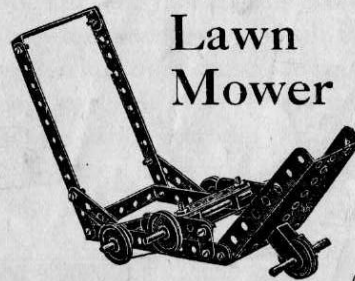
Model  
No. 67  
**Rocking  
Chair**



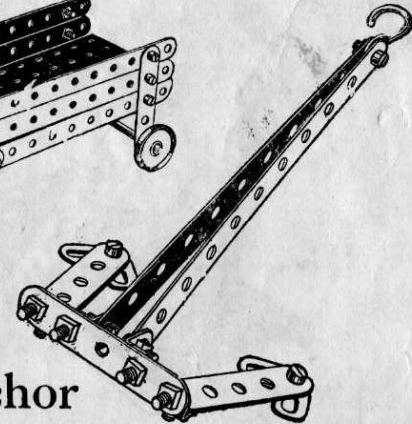
Model No. 68  
**Motor Lorry**



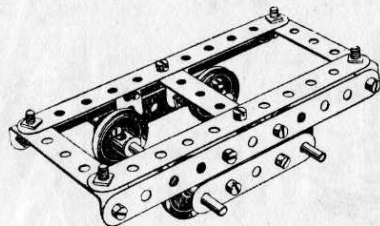
Model No. 69  
**Lawn  
Mower**



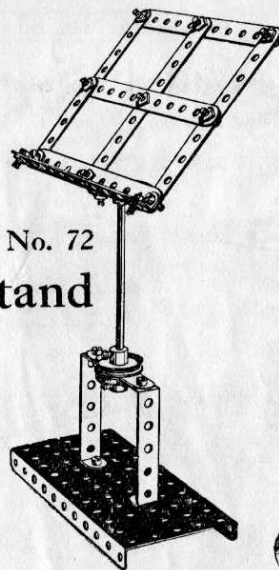
Model  
No. 70  
**Anchor**



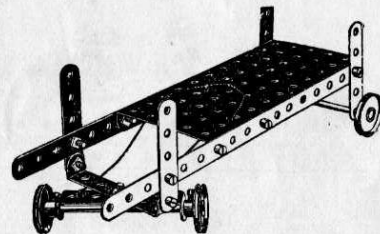
Model No. 71 **Bogey Car**



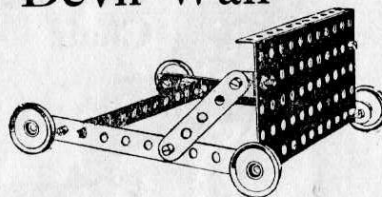
Model No. 72  
**Music Stand**



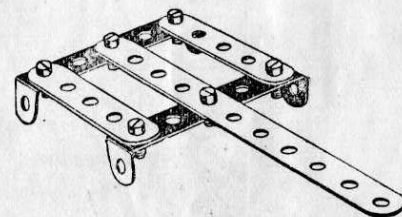
Model No. 73  
**Steering Truck**



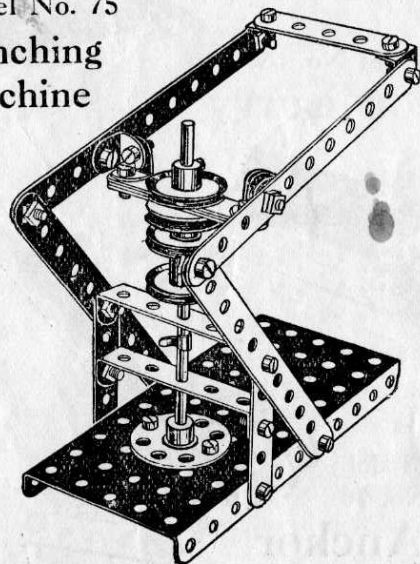
Model No. 74  
**Devil Wall**



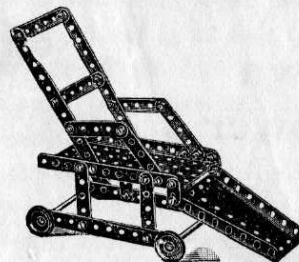
Model No. 77  
**Grill**



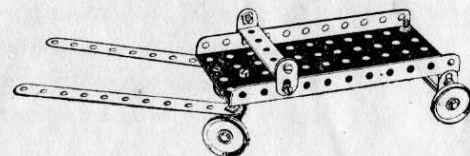
Model No. 75  
**Punching Machine**



Model No. 76  
**Invalid Chair**



Model No. 78  
**Lurry**





# MECCANO

**HORNBY'S ORIGINAL SYSTEM PATENTED 1901**

Patents and Designs, Great Britain.

<b>22,962-13</b>	<b>577,272</b>	<b>2085-11</b>	<b>3869-14</b>
<b>20,535-13</b>	<b>577,207</b>	<b>4183-14</b>	<b>4564-15</b>
<b>21,117-12</b>	<b>648,958</b>		

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 the corresponding engineering elements would do in actual practice. No other system of model construction could, therefore, be correct. Other toys which attempt the same object by other methods must avail themselves of other 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, and his mind, as regards proper mechanical construction and methods, is distorted instead of instructed. He thus learns wrong principles, and, when his ambition tempts him to invent or construct more elaborate models, he will be stopped by the deficiencies of his non-mechanical system.

## Prices of Meccano Accessory Parts

No.		s.	d.	No.		s.	d.	No.		s.	d.
1.	Perforated Strips, 12½" long .. ½ doz.	1	3	22A.	1" diam., without set screw ..	each	0 3	54.	Perforated Sector Plates ..	each	0 5
2.	" " 5½" " " " " 0 9	0	9	23.	½" " " " " " " " 0 2	0	2	56.	Instruction Manuals, No. 1, 2/6; No. 2, 1/3		
3.	" " 3½" " " " " 0 5	0	5	23A.	½" " with " " " " " " 0 6	0	6	57.	Hooks ..	each	0 1
4.	" " 3" " " " " 0 4	0	4	24.	Bush Wheels ..	"	0 8	58.	Spring Cord, per length ..	"	1 0
5.	" " 2½" " " " " 0 4	0	4	25.	Pinion Wheels, ¾" diam. ..	"	1 3	59.	Collars and Set Screws ..	"	0 3
6.	" " 2" " " " " 0 4	0	4	26.	" " ½" " " " " " 0 9	0	9	60.	Bent Strips, 2½" long ..	per ½ doz.	0 9
6A.	" " 1½" " " " " 0 3	0	3	27.	Gear Wheels, 50 teeth to gear with ¾" pinion ..	each	0 10	61.	Windmill Sails ..	"	each 0 3
8.	Angle Girders, 12½" long ..	2	3	27A.	Gear Wheels, 56 teeth to gear with ½" pinion ..	each	1 0	62.	Cranks ..	"	0 6
9.	" 5½" " " " " 1 3	1	3	28.	Contrate Wheels, 1½" diam. ..	"	1 3	63.	Couplings ..	"	0 9
10.	Flat Brackets ..	"	0 3	29.	" " ¾" " " " " " 1 0	1	0	65.	Centre Forks ..	"	0 3
11.	Double Brackets ..	each	0 1	32.	Worm Wheels ..	"	0 10	68.	Wood Screws, ½" ..	doz.	0 3
12.	Angle Brackets ..	doz.	0 6	33.	Pawls ..	"	0 3	69.	Set Screws ..	"	0 4
13.	Silver Steel Axle Rods, 11½" long, each	0	5	34.	Spanners ..	"	0 3	69A.	Grub Screws ..	"	0 4
13A.	Axle Rods, 8" long ..	"	0 3	35.	Spring Clips ..	per box (doz.)	0 6	94.	Sprocket Chain ..	per yard	1 0
14.	" 6" " " " " 0 2	0	2	36.	Screw Drivers ..	each	0 3	95.	" Wheels, 2" diam. ..	each	0 6
15.	" 5" " " " " 0 2	0	2	36A.	" " Special ..	"	1 9	96.	" 1" " " " " 0 4	"	0 4
15A.	" 4½" " " " " 0 2	0	2	37.	Nuts and Bolts ..	per box (doz.)	0 6	97.	Braced Girders, 3½" long ..	½ doz.	0 9
16.	" 3½" " " " " 0 1	0	1	37A.	Nuts ..	"	0 3	98.	" " 2½" " " " " 0 6	"	0 6
17.	" 2" " " " " 0 1	0	1	38.	Washers ..	doz.	0 2	99.	" " 12½" " " " " 1 9	"	1 9
18A.	" 1" " " " " 0 1	0	1	40.	Hanks of Cord ..	two for	0 3	100.	" " 5½" " " " " 1 0	"	1 0
19.	Crank Handles ..	"	0 3	41.	Propeller Blades ..	per pair	0 6	101.	Healds, for Looms ..	doz.	0 9
19A.	Wheels, 3" diam. ..	"	0 8	43.	Springs ..	each	0 2	102.	Single Bent Strips, for Looms ..	each	0 2
19B.	Pulley Wheels, 3in. diam. with set screw ..	each	1 3	44.	Cranked Bent Strips ..	"	0 2	103.	Flat Girders, 5½" long ..	"	0 2
20.	Flanged Wheels ..	"	0 9	45.	Double Bent Strips ..	"	0 2	104.	Shuttles ..	"	1 0
	Pulley Wheels.			46.	Large Bent Strips ..	"	0 3	105.	Reed Hooks ..	"	0 3
20A.	2" diam., with set screw ..	each	1 0	47A.	Dynamometers (tension) ..	"	2 6	106.	Rollers ..	"	0 6
21.	1½" " " " " " 0 9	0	9	50.	Eye Pieces ..	"	0 2	107.	Tables, for Designing Machines ..	"	1 0
22.	1" " " " " " 0 6	0	6	52.	Perforated Flanged Plates, 5½" × 2½" ea.	0	6	S1.	Spring Motor ..	"	12 6
				53.	" " 3½" × 2½" ea.	0	5	E1.	Electric Motor ..	"	10 0
								E2.	" " " " " " " "	"	15 0

## Contents of No. 0 Outfit.

No.		Quantity	No.		Quantity
2.	5½" Perforated Strips .. .. .	4	35.	Spring Clips .. .. .	4
5.	2½" " " " " " " " " " " "	9	36.	Combined Screwdriver and Spanner .. .. .	1
10.	Flat Brackets .. .. .	4	37.	Nuts and Bolts .. .. .	25
12.	Angle Brackets .. .. .	8	40.	Hank of Cord .. .. .	1
15A.	4½" Rods .. .. .	2	44.	Cranked Bent Strip .. .. .	1
17.	2" Rods .. .. .	2	52.	Perforated Flanged Plate, 5½×2½ .. .. .	1
19.	Small Crank Handle .. .. .	1	54.	Perforated Sector Plate .. .. .	1
22.	1" Pulley Wheels with set screws .. .. .	4		Manual of Instructions, No. O .. .. .	1
23.	¾" Pulley Wheel without set screw .. .. .	1	57.	Hook .. .. .	1
24.	Bush Wheel .. .. .	1	60.	2½" Bent Strips .. .. .	2



# Price List

No. 0.	Meccano Outfit	...	...	...	...	...	...	6/-
No. 1.	"	"	...	...	...	...	...	10/-
No. 2.	"	"	...	...	...	...	...	20/-
No. 3.	"	"	...	...	...	...	...	30/-
No. 4.	"	"	...	...	...	...	...	50/-
No. 5.	"	"	...	...	...	Packed in neat and well-made cardboard box		70/-
Do.	"	Presentation Outfit	...	...	...	...	...	100/-
						Packed in superior oak cabinet with lock and key		
No. 6.	"	"	"		Ditto		ditto	180/-
No. 0A.	Meccano Accessory Outfit	(containing sufficient parts to convert a Meccano No. 0 Outfit into a No. 1)						5/-
No. 1A.	"	"	"	(containing sufficient parts to convert a No. 1 Outfit into a No. 2)				11/-
No. 2A.	"	"	"	(containing sufficient parts to convert a No. 2 Outfit into a No. 3)				12/-
No. 3A.	"	"	"	(containing sufficient parts to convert a No. 3 Outfit into a No. 4)				22/-
No. 4A.	"	"	"	(containing sufficient parts to convert a No. 4 Outfit into a No. 5)				17/6
No. 5A.	"	"	"	(containing sufficient parts to convert a No. 5 Outfit into a No. 6)				65/-
				Packed in neat and well-made cardboard box				
Do.	"	"	"	Packed in superior oak cabinet with lock and key				95/-
Meccano Inventors' Accessory Outfit		...	...	...	...	...	...	10/-



