

MECCANO



(TRADE MARKS 296321, 12633, 10274)

INSTRUCTIONS

FOR OUTFITS Nos. 0 to 3

1/-

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No. 26A

EXPORT EDITION

A TALK WITH NEW MECCANO BOYS



MECCANO OUTFITS contain accurately-made and highly-finished engineering parts with which any known mechanical movement may be reproduced in model form. With Meccano you can accomplish more than with any other constructional toy, for no other system has its possibilities. No study is needed to enable you to build models with Meccano—the genius is in the Meccano parts.

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 that you 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 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 happiest boy in the world. He builds models from the Meccano Instruction books; invents new models; joins the Meccano Guild and a Meccano Club and by wearing the Guild badge 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 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.

The subscription rate to the *Meccano Magazine* is 2/- for six issues or 4/- for twelve issues, post free. A specimen copy will be sent you post free for 4d. Write to the Editor, *Meccano Magazine*, Binns Road, Liverpool, England, enclosing a remittance in stamps for this amount.





MECCANO GUILD
MEMBER'S CERTIFICATE.

THE MECCANO GUILD

THE MECCANO GUILD is an organisation for boys, started at the request of boys and conducted as far as possible by boys. The Guild is a great fraternal organisation of which all Meccano boys should become members, for its primary object is to bring them together. The Guild makes these boys feel that they are all members of a great brotherhood, each trying to help the others to get the very best out of life and it cannot fail to have a profound effect for good on the lives of its members.

MECCANO CLUBS

MECCANO CLUBS are founded and established under the guidance of the Guild Secretary at Headquarters and at the present time there are active Clubs in over one hundred towns and villages in the United Kingdom and in many countries Overseas. Each Club has its Leader, Secretary, Treasurer, and other officials all of whom, with the exception of the Leader, are boys. Write for information how to form a club, if there is no club near you.

Special awards are given to Club members for good work in connection with their Club and medallions are awarded in connection with the Recruiting Campaign, full particulars of which will be sent on request.

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 firmly and you will find that you can play with the trucks, cranes, signals, etc., and obtain many hours of fun.

For convenience Meccano parts are sold in nine Outfits of varying size, numbered 00 to 7. The quality and finish of the parts are of the same high standard throughout the series, but as the Outfits increase in size they contain larger quantities and greater varieties of parts. Each Outfit may be converted into the one next higher by the purchase of an Accessory Outfit (see page 62). Thus, if a No. 2 is the first Outfit bought, it may be converted into a No. 3 by adding to it a No. 2A. A No. 3A would then convert it into a No. 4 and so on up to No. 7. In this way, no matter with what Outfit you commence, you may build it up by degrees to a No. 7.

The separate Meccano parts may be bought at any time in any quantity.



SPECIAL MERIT MEDALLIONS.

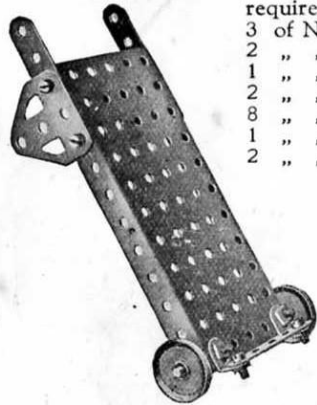


RECRUITING MEDALLION.

These Models can be made with MECCANO Outfit No. 0.

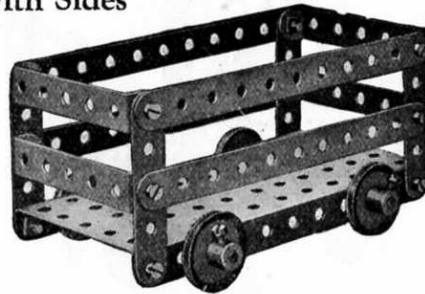
Trucks and Luggage Carts

**Model No. 1
Flat Truck**



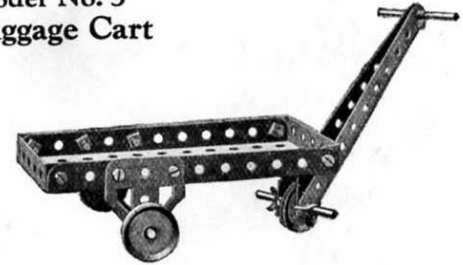
Parts
required:
3 of No. 5
2 " " 12
1 " " 16
2 " " 22
8 " " 37
1 " " 52
2 " " 126A

**Model No. 2
Truck with Sides**



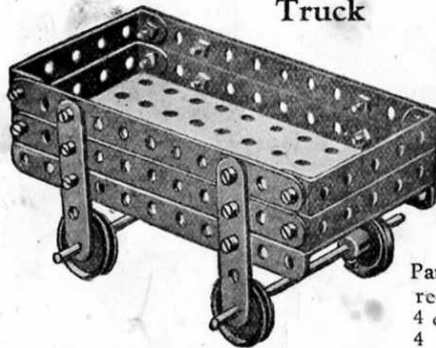
Parts required:
4 of No. 2 | 4 of No. 22
4 " " 5 | 12 " " 37
2 " " 16 | 4 " " 48A
1 of No. 52

**Model No. 3
Luggage Cart**



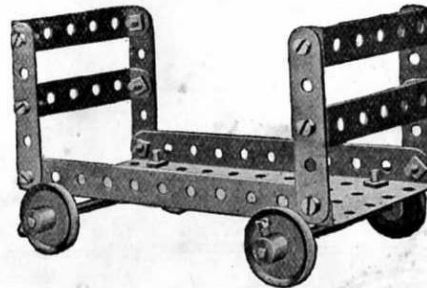
Parts required:
2 of No. 2 | 9 of No. 37
1 " " 16 | 1 " " 44
2 " " 17 | 2 " " 48A
3 " " 22 | 1 " " 52
4 " " 35 | 2 " " 126A

**Model No. 4
Truck**



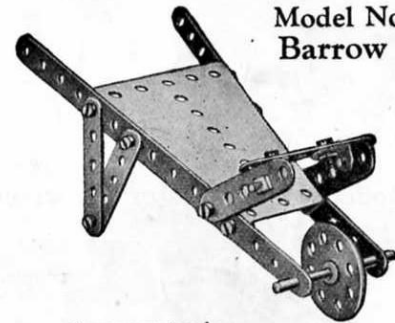
Parts
required:
4 of No. 2
4 " " 5
2 " " 16
4 " " 22
16 " " 37
4 " " 48A
1 " " 52

**Model No. 5
Luggage Truck**



Parts required:
4 of No. 5 | 16 of No. 37
2 " " 16 | 4 " " 48A
4 " " 22 | 1 " " 52

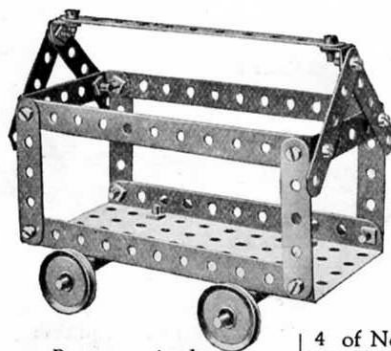
**Model No. 6
Barrow**



Parts required:
2 of No. 2 | 1 of No. 24
9 " " 5 | 2 " " 35
2 " " 12 | 14 " " 37
1 " " 17 | 1 " " 54

These Models can be made with MECCANO Outfit No. 0.

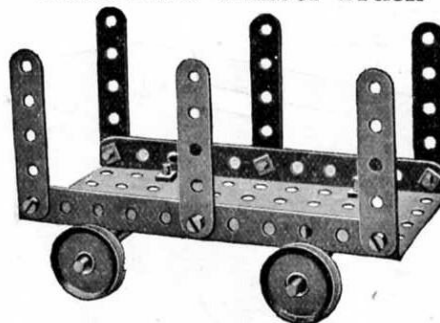
**Model No. 7
Covered Truck**



Parts required		4 of No. 22
3 of No. 2	2 of No. 12	20 " " 37
8 " " 5	2 " " 16	4 " " 48A
		1 " " 52

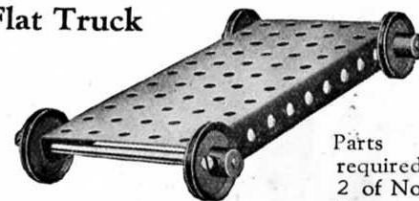
Trucks and Luggage Carts (continued)

Model No. 8 Timber Truck



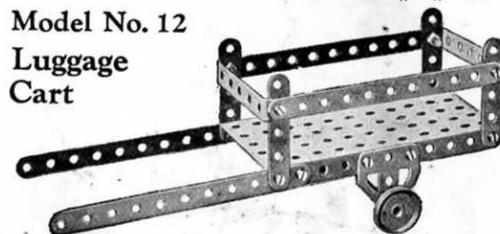
Parts required:	
6 of No. 5	10 of No. 37
2 " " 16	2 " " 48A
4 " " 22	1 " " 52

**Model No. 9
Flat Truck**



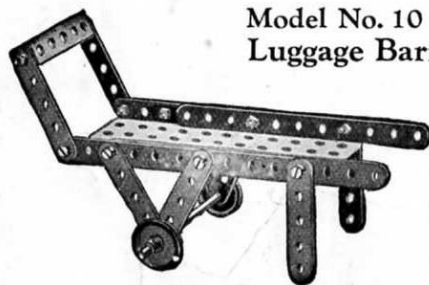
Parts required:	
2 of No. 16	
4 " " 22	
1 " " 52	

**Model No. 12
Luggage Cart**



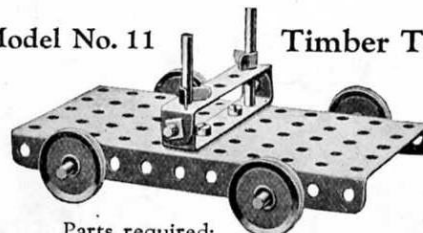
Parts required:	
4 of No. 2	14 of No. 37
4 " " 5	2 " " 48A
1 " " 16	1 " " 52
2 " " 22	2 " " 126A

**Model No. 10
Luggage Barrow**



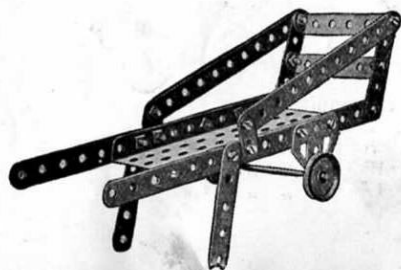
Parts required:	
2 of No. 2	
8 " " 5	
1 " " 16	
2 " " 22	
10 " " 37	
1 " " 48A	
1 " " 52	

Model No. 11 Timber Truck



Parts required:	
2 of No. 16	4 of No. 35
2 " " 17	4 " " 37
4 " " 22	2 " " 48A
	1 of No. 52

Model No. 13 Coster's Barrow



Parts required:	
4 of No. 2	
4 " " 5	
1 " " 16	
2 " " 22	
16 " " 37	
2 " " 48A	
1 " " 52	
2 " " 126A	

Model No. 14 Timber Drag



Parts required:	
4 of No. 2	2 of No. 16
2 " " 11	4 " " 22
	8 of No. 37
	4 " " 48A

**Model No. 15
Bath Chair**

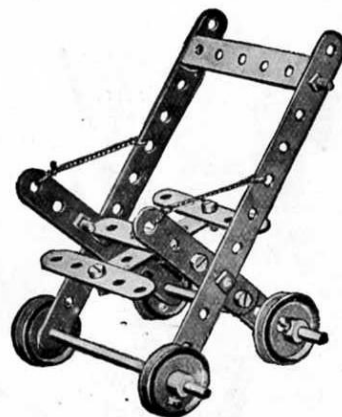


Parts required:	
1 of No. 16	13 of No. 37
2 " " 17	1 " " 44
3 " " 22	3 " " 48A
4 " " 35	1 " " 52

These Models can be made with MECCANO Outfit No. 0.

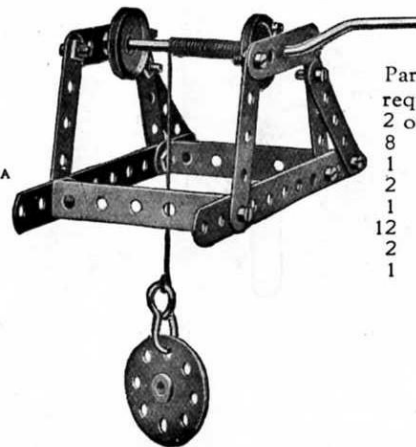
7

Model No. 16 Go Chair



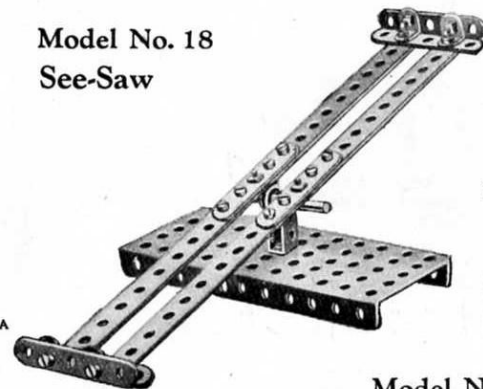
Parts required:		
2 of No.	2	
7 " "	5	
2 " "	16	
4 " "	22	
11 " "	37	
2 " "	48A	

Model No. 17 Well Windlass



Parts required:		
2 of No.	2	
8 " "	5	
1 " "	19	
2 " "	22	
1 " "	24	
12 " "	37	
2 " "	48A	
1 " "	57	

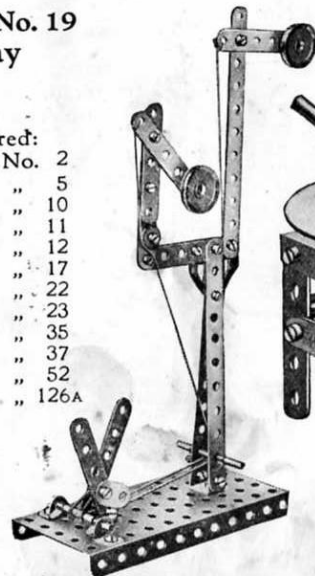
Model No. 18
See-Saw



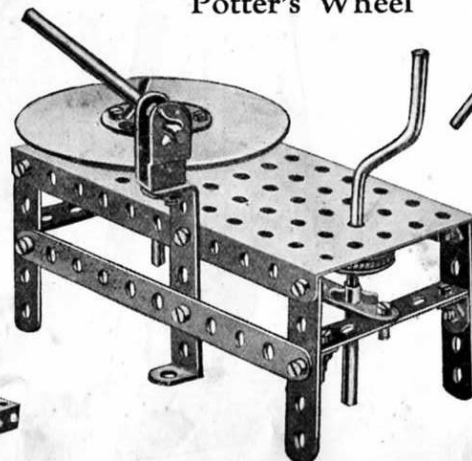
Parts required:		
4 of No.	2	
6 " "	5	
6 " "	12	
1 " "	17	
15 " "	37	
1 " "	44	
1 " "	52	

Model No. 19
Railway
Signal

Parts required:		
3 of No.	2	
7 " "	5	
2 " "	10	
2 " "	11	
2 " "	12	
2 " "	17	
2 " "	22	
1 " "	23	
4 " "	35	
21 " "	37	
1 " "	52	
1 " "	126A	



Model No. 20
Potter's Wheel



Potter's Wheel
(underneath view)

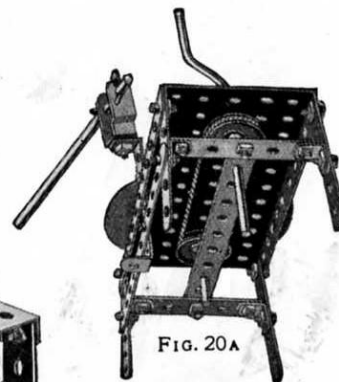
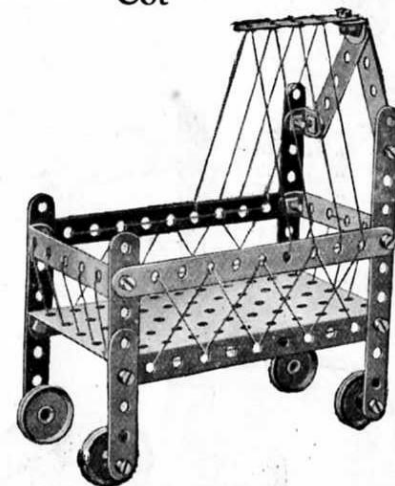


FIG. 20A

Parts required:		
3 of No.	2	1 of No. 24
4 " "	5	2 " "
1 " "	16	17 " "
1 " "	19	1 " "
2 " "	22	3 " "
		1 of No. 52

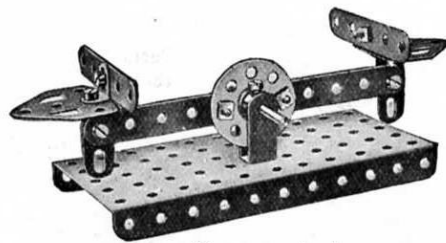
Model No. 21
Cot



Parts required:		
4 of No.	2	4 of No. 22
7 " "	5	18 " "
3 " "	12	2 " "
		1 of No. 52

These Models can be made with MECCANO Outfit No. 0.

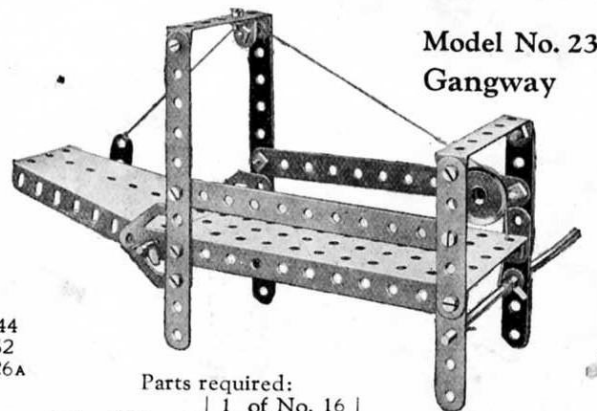
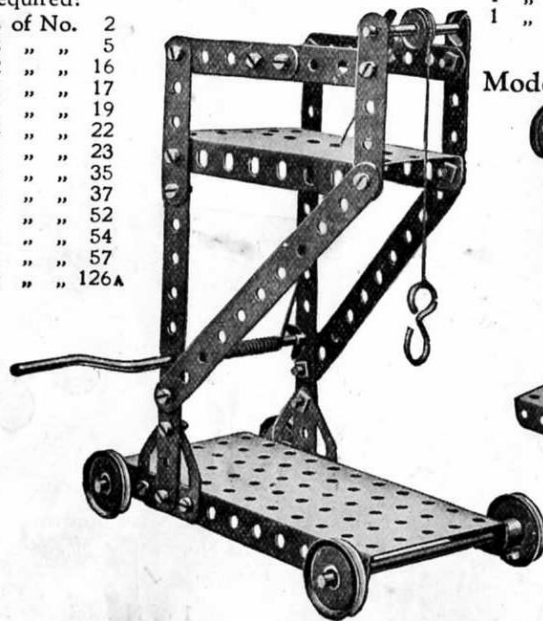
Model No. 22 Scales



Parts required:		
1 of No. 2	2 of No. 12	1 of No. 44
2 " " 5	1 " " 17	1 " " 52
2 " " 10	1 " " 24	2 " " 126A
	9 " " 37	

Model No. 25 Tower Wagon

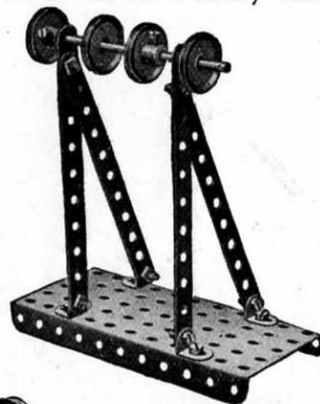
Parts required:		
4 of No. 2		
8 " " 5		
2 " " 16		
1 " " 17		
1 " " 19		
4 " " 22		
1 " " 23		
4 " " 35		
24 " " 37		
1 " " 52		
1 " " 54		
1 " " 57		
2 " " 126A		



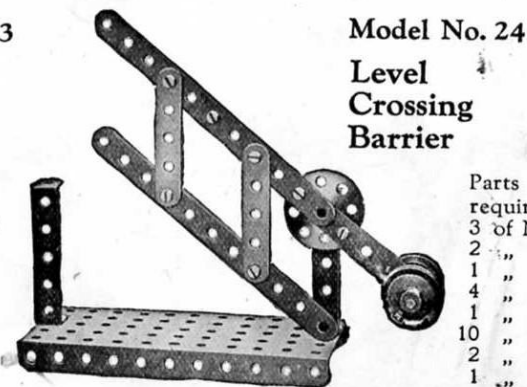
Model No. 23
Gangway

Parts required:		
4 of No. 2	1 of No. 16	
4 " " 5	1 " " 19	
1 " " 10	1 " " 22	2 of No. 48A
1 " " 12	1 " " 23	1 " " 52
	4 " " 35	1 " " 54
	18 " " 37	2 " " 126A

Model No. 26 Pulley Shaft



Parts required:		
4 of No. 2	10 of No. 37	
4 " " 12	2 " " 38	
1 " " 16	1 " " 52	
4 " " 22		



Model No. 24
Level
Crossing
Barrier

Parts required:		
3 of No. 2		
2 " " 5		
1 " " 17		
4 " " 22		
1 " " 24		
10 " " 37		
2 " " 48A		
1 " " 52		

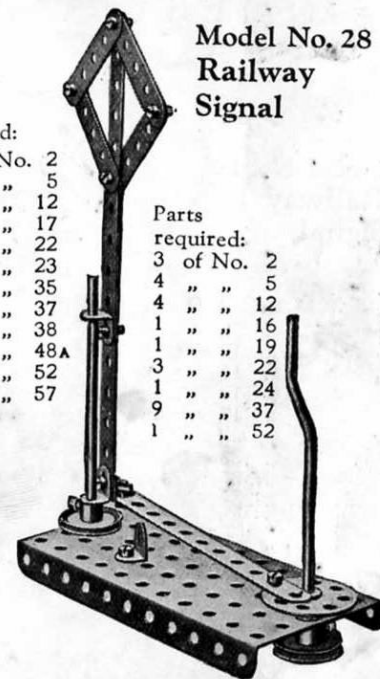
Model No. 27
Hoisting Block

Parts required:		
4 of No. 2		
6 " " 5		
6 " " 12		
1 " " 17		
1 " " 22		
1 " " 23		
2 " " 35		
25 " " 37		
3 " " 38		
2 " " 48A		
1 " " 52		
1 " " 57		



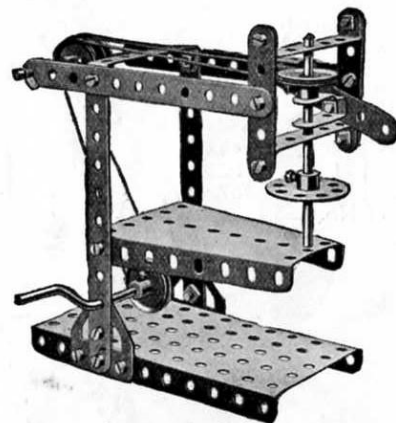
Model No. 28
Railway
Signal

Parts required:		
3 of No. 2		
4 " " 5		
4 " " 12		
1 " " 16		
1 " " 19		
3 " " 22		
1 " " 24		
9 " " 37		
1 " " 52		



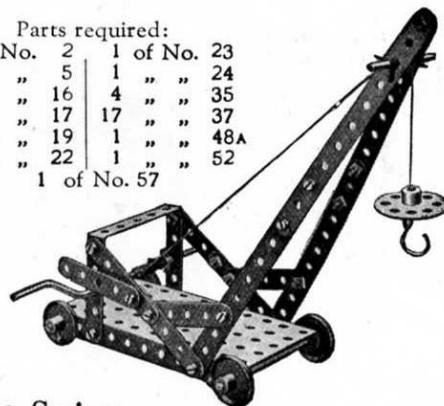
These Models can be made with MECCANO Outfit No. 0.

Model No. 29 Drilling Machine



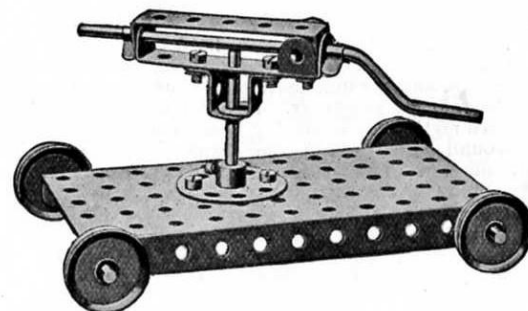
Parts required:	
4 of No. 2	2
3 " " 5	5
1 " " 11	11
2 " " 16	16
1 " " 19	19
4 " " 22	22
1 " " 24	24
4 " " 35	35
19 " " 37	37
1 " " 44	44
3 " " 48A	48A
1 " " 52	52
1 " " 54	54
2 " " 126A	126A

Model No. 30 Jib Crane



Parts required:	
4 of No. 2	2
9 " " 5	5
2 " " 16	16
1 " " 17	17
1 " " 19	19
4 " " 22	22
1 of No. 57	57
1 of No. 23	23
1 " " 24	24
4 " " 35	35
17 " " 37	37
1 " " 48A	48A
1 " " 52	52

Model No. 31 Rock Drill



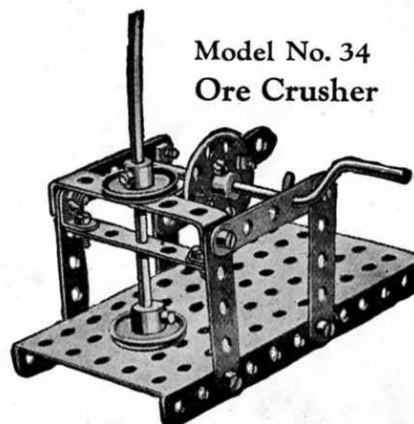
Parts required:	
1 of No. 19	19
4 " " 22	22
2 of No. 16	16
1 " " 24	24
1 " " 17	17
2 " " 35	35
4 of No. 37	37
2 " " 48A	48A
1 " " 52	52
2 " " 125	125

Model No. 33 Swing



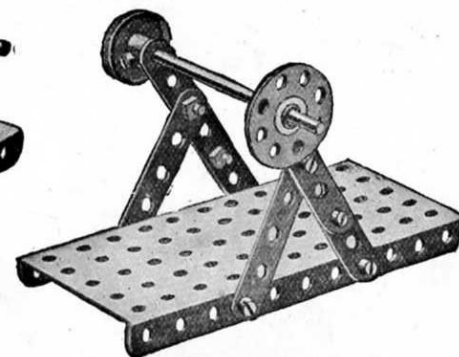
Parts required:	
4 of No. 2	2
4 " " 5	5
6 " " 12	12
20 of No. 37	37
1 " " 48A	48A
1 " " 52	52

Model No. 34 Ore Crusher



Parts required:	
6 of No. 5	5
2 " " 10	10
1 " " 16	16
1 " " 19	19
2 " " 22	22
1 of No. 24	24
2 " " 35	35
10 " " 37	37
2 " " 48A	48A
1 " " 52	52

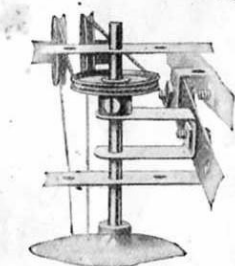
Model No. 35 Buffing Spindle



Parts required:	
6 of No. 5	5
1 " " 16	16
1 " " 22	22
1 of No. 24	24
8 " " 37	37
1 " " 52	52

FIG. 29A
(Detail of
Drilling
Machine)

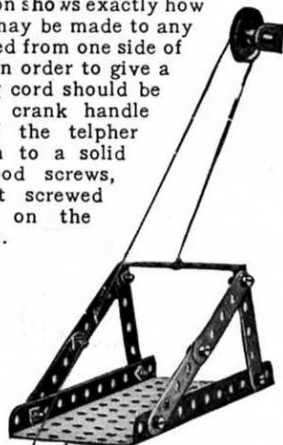
Model No. 32 Buffers



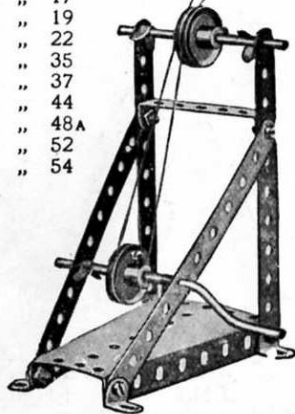
Parts required:	
2 of No. 2	2
2 " " 5	5
2 " " 17	17
2 " " 22	22
2 of No. 35	35
6 " " 37	37
2 " " 48A	48A
1 " " 52	52

Model No. 36 Telfer Span

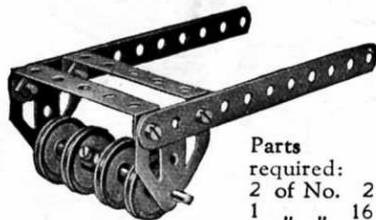
Many hours of enjoyment may be obtained from this model. The illustration shows exactly how it is worked. The cords may be made to any length, and the load carried from one side of the room to the other. In order to give a better grip, the operating cord should be wound twice round the crank handle pulley. 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.

**Parts****required:**

4	of No.	2
6	" "	5
4	" "	12
1	" "	16
1	" "	17
1	" "	19
4	" "	22
6	" "	35
14	" "	37
1	" "	44
2	" "	48A
1	" "	52
1	" "	54



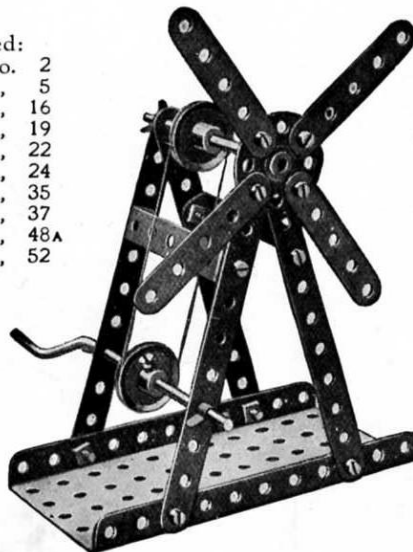
**Model No. 39
Furrow Roller**

**Parts****required:**

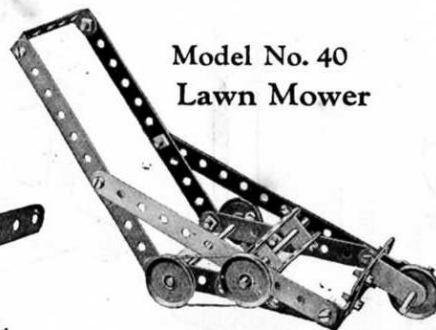
2	of No.	2
1	" "	16
4	" "	22
4	" "	37
2	" "	48A
2	" "	126A

Model No. 37 Windmill**Parts**

4	of No.	2
4	" "	5
1	" "	16
1	" "	19
2	" "	22
1	" "	24
4	" "	35
12	" "	37
2	" "	48A
1	" "	52



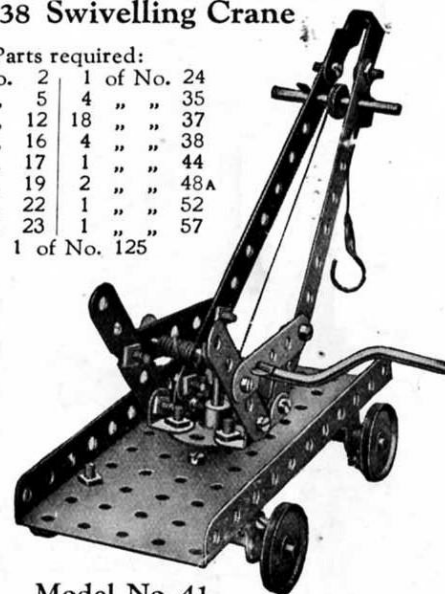
**Model No. 40
Lawn Mower**

**Parts required**

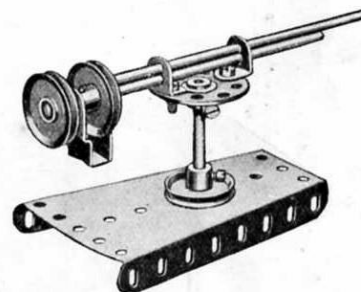
4	of No.	2	1	of No.	17
7	" "	5	4	" "	22
2	" "	11	19	" "	37
2	" "	16	1	" "	44
3 of No. 48A					

Model No. 38 Swivelling Crane**Parts required:**

2	of No.	2	1	of No.	24
4	" "	5	4	" "	35
4	" "	12	18	" "	37
2	" "	16	4	" "	38
2	" "	17	1	" "	44
1	" "	19	2	" "	48A
4	" "	22	1	" "	52
1	" "	23	1	" "	57
1 of No. 125					



**Model No. 41
Quick-Firing Gun**

**Parts required:**

2	of No.	12	1	of No.	24
2	" "	16	4	" "	37
1	" "	17	1	" "	44
1 of No. 54					

These Models can be made with MECCANO Outfit No. 0.

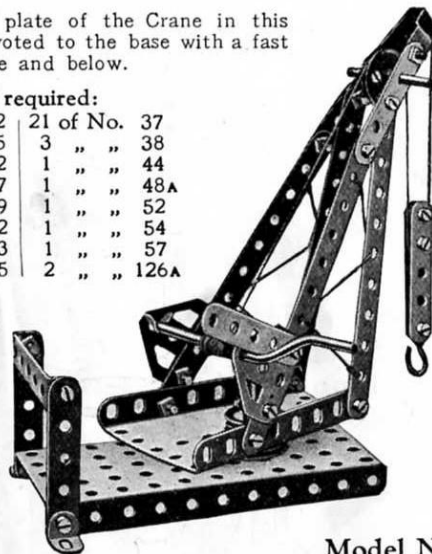
11

Model No. 42 Swivelling Crane

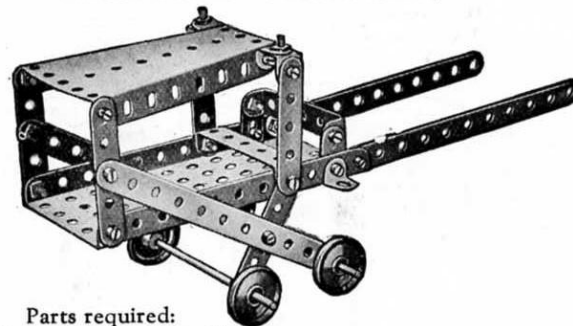
The sector plate of the Crane in this model is pivoted to the base with a fast pulley above and below.

Parts required:

4 of No. 2	21 of No. 37
7 " " 5	3 " " 38
2 " " 12	1 " " 44
2 " " 17	1 " " 48A
1 " " 19	1 " " 52
4 " " 22	1 " " 54
1 " " 23	1 " " 57
2 " " 35	2 " " 126A



Model No. 43 Ticca Gharry



Parts required:

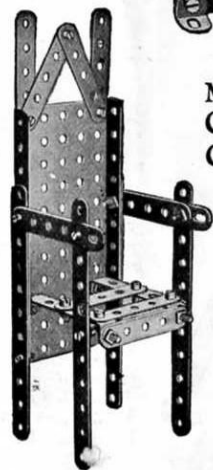
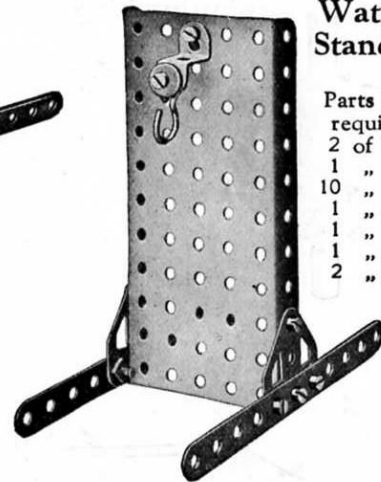
4 of No. 2	2 of No. 16
6 " " 5	4 " " 22
2 " " 10	22 " " 37
6 " " 12	1 " " 52
1 of No. 54	

Model No. 44

Watch Stand

Parts

2 of No. 2	2
1 " " 23	
10 " " 37	
1 " " 52	
1 " " 57	
1 " " 125	
2 " " 126A	

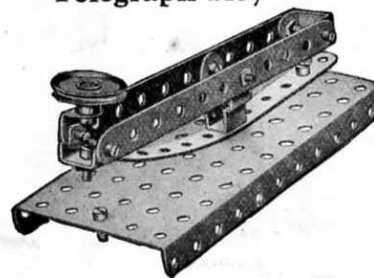


Model No. 45 Coronation Chair

Parts required:

4 of No. 2	2
9 " " 5	
2 " " 10	
2 " " 12	
19 " " 37	
2 " " 48A	
1 " " 52	

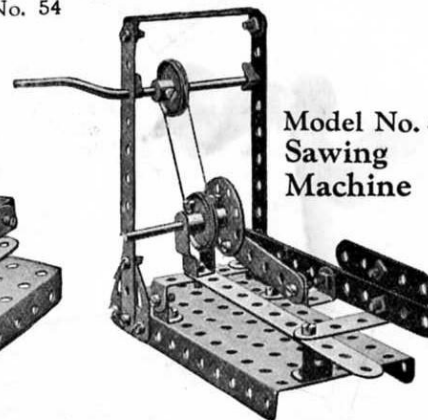
Model No. 46 Telegraph Key



Parts required:

3 of No. 2	1 of No. 22
1 " " 10	11 " " 37
2 " " 11	1 " " 44
1 " " 12	1 " " 52

Model No. 47 Sawing Machine



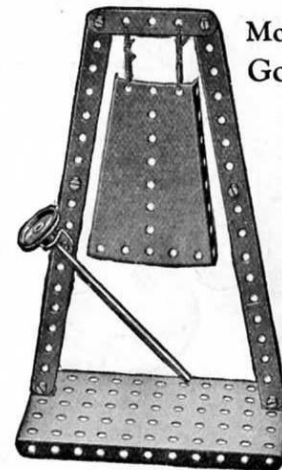
Parts required:

4 of No. 2	1 of No. 24
3 " " 3	2 " " 35
4 " " 12	23 " " 37
1 " " 17	1 " " 44
1 " " 19	2 " " 48A
2 " " 22	1 " " 52
2 of No. 126A	

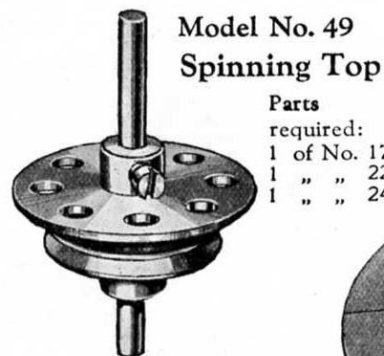
Model No. 48 Gong

Parts required:

4 of No. 2	2
1 " " 5	
3 " " 12	
1 " " 16	
1 " " 22	
7 " " 37	
1 " " 52	
1 " " 54	

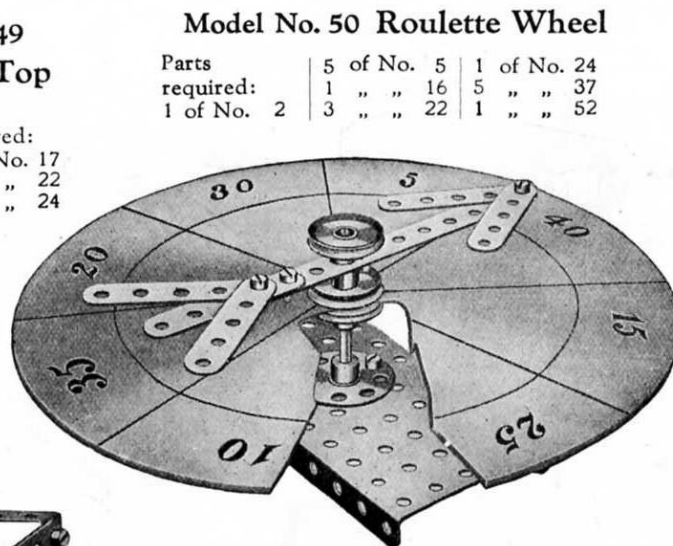


These Models can be made with MECCANO Outfit No. 0.



**Model No. 49
Spinning Top**

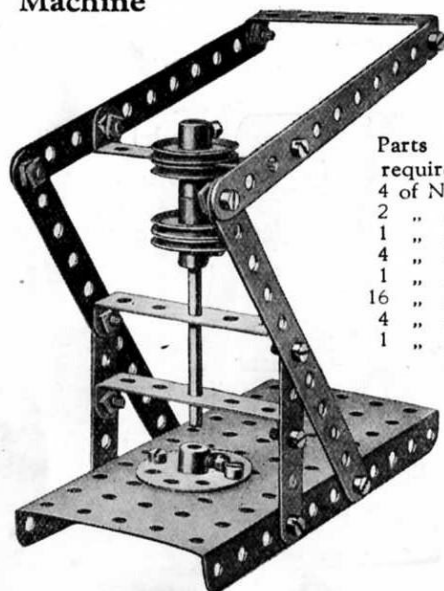
Parts
required:
1 of No. 17
1 " " 22
1 " " 24



Model No. 50 Roulette Wheel

Parts required:	5 of No. 5	1 of No. 24
	1 " " 16	5 " " 37
	3 " " 22	1 " " 52
	1 of No. 2	

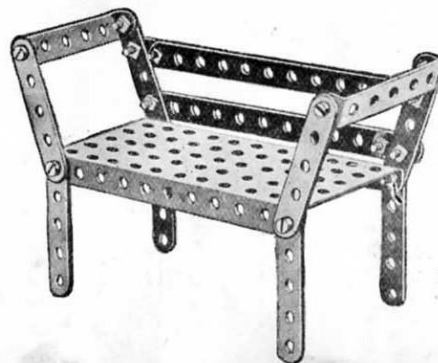
**Model No. 52
Punching
Machine**



Parts
required:
4 of No. 2
2 " " 5
1 " " 16
4 " " 22
1 " " 24
16 " " 37
4 " " 48A
1 " " 52

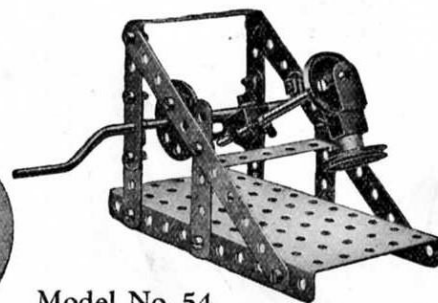
Cut out a circular piece of cardboard and mark as shown to form scoring board. This is clamped between two 1" pulley wheels. The pointer revolves freely on the upright spindle and is held in position by another 1" pulley wheel.

Model No. 53 Settee



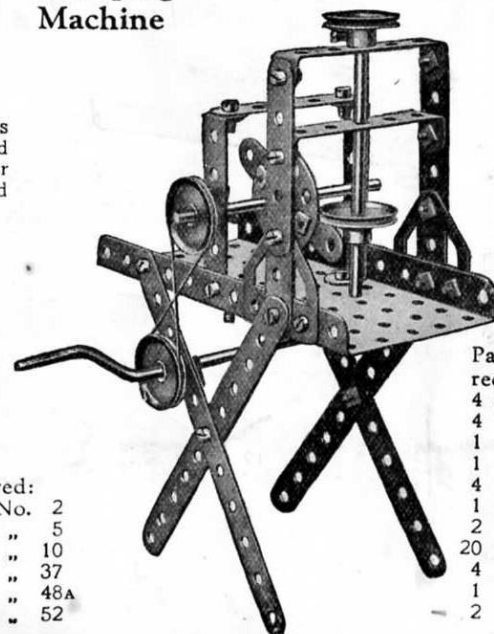
Parts
required:
2 of No. 2
8 " " 5
3 " " 10
15 " " 37
2 " " 48A
1 " " 52

**Model No. 51
Mechanical Hammer**



Parts
required:
2 of No. 2
6 " " 5
1 " " 11
1 " " 12
1 " " 16
1 " " 19
2 " " 22
1 " " 24
4 " " 35
18 " " 37
1 " " 44
3 " " 48A
1 " " 52

**Model No. 54
Stamping
Machine**



Parts
required:
4 of No. 2
4 " " 5
1 " " 16
1 " " 19
4 " " 22
1 " " 24
2 " " 35
20 " " 37
4 " " 48A
1 " " 52
2 " " 126A

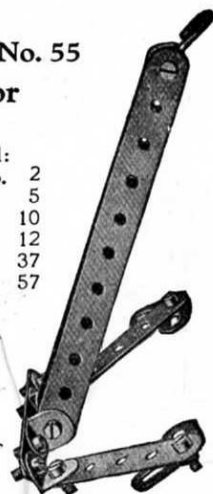
These Models can be made with MECCANO Outfit No. 0.

Model No. 55
Anchor

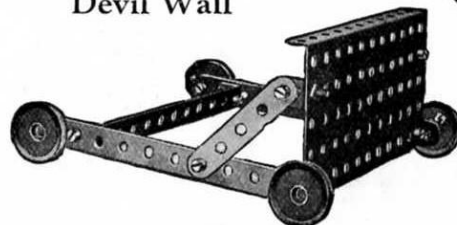
Parts

required:

2	of No.	2
3	"	5
4	"	10
4	"	12
11	"	37
1	"	57



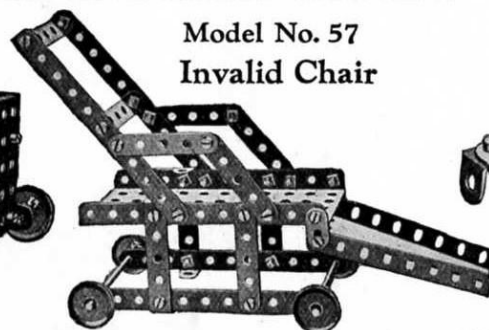
Model No. 56
Devil Wall



Parts required:

3	of No.	2	4	of No.	22
2	"	5	18	"	37
6	"	12	1	"	52

Model No. 57
Invalid Chair

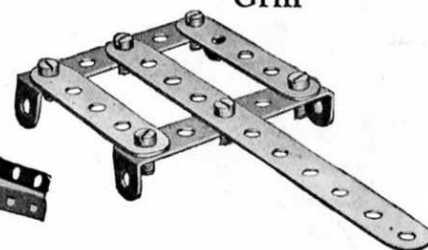


Parts

required:

2	of No.	10	4	of No.	48A
2	"	16	1	"	52
4	"	22	1	"	54
6	"	5	24	"	37

Model No. 58
Grill



Parts required:

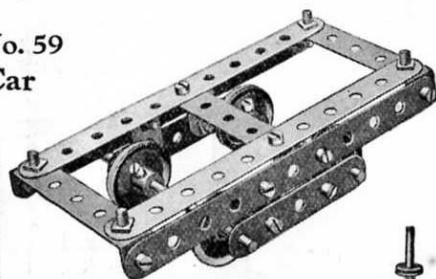
1	of No.	2	6	of No.	37
2	"	5	2	"	48A

Model No. 59
Bogie Car

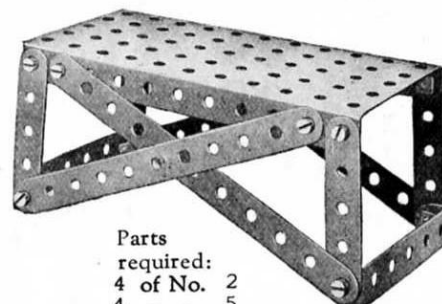
Parts

required:

4	of No.	2
3	"	5
4	"	10
2	"	16
4	"	22
18	"	37



Model No. 60 **Fire Stand**

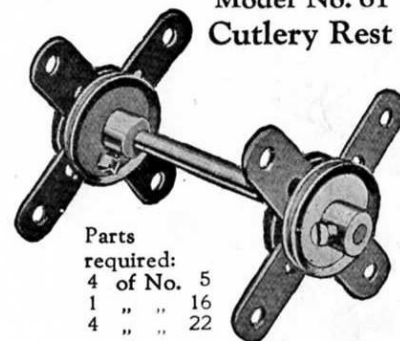


Parts

required:

4	of No.	2
4	"	5
12	"	37
2	"	48A
1	"	52

Model No. 61
Cutlery Rest

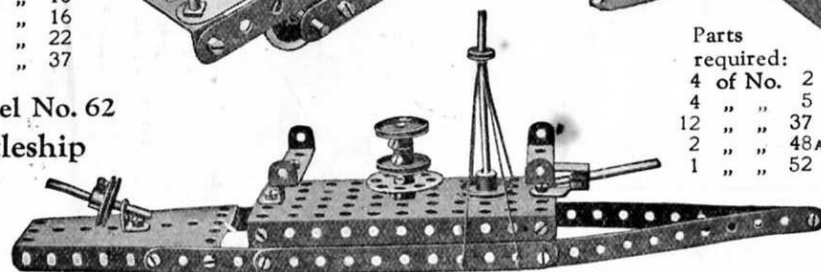


Parts

required:

4	of No.	5
1	"	16
4	"	22

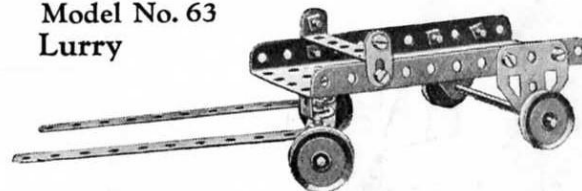
Model No. 62
Battleship



Parts required:

4	of No.	2	1	of No.	16	1	of No.	24	2	of No.	48A
3	"	5	2	"	17	3	"	35	1	"	52
4	"	10	4	"	22	19	"	37	1	"	54
1	"	12	1	"	23	1	"	44	1	"	125

Model No. 63
Lurry



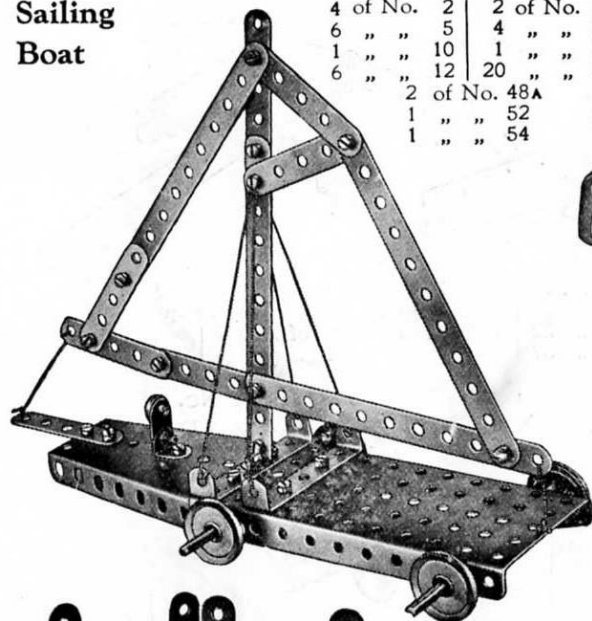
Parts required:

2	of No.	2	2	of No.	16	2	of No.	48A
2	"	10	4	"	22	1	"	52
1	"	11	12	"	37	2	"	126A

14

Model No. 64

Sailing Boat

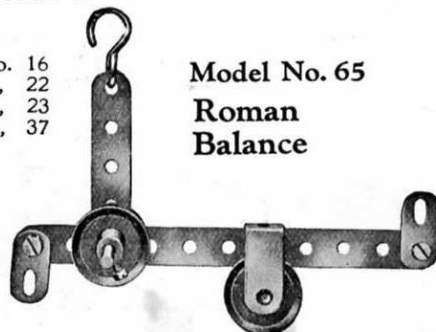


Parts required:

4 of No.	2	2 of No.	16
6 "	5	4 "	22
1 "	10	1 "	23
6 "	12	20 "	37
	2 of No.	48A	
1 "	"	52	
1 "	"	54	

Model No. 65

Roman Balance



Parts required:

1 of No.	2	3 of No.	22
1 "	5	3 "	37
2 "	10	1 "	44
1 "	17	1 "	57

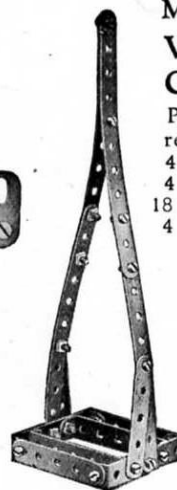
Model No. 66

Vegetable Chopper

Parts

required:

4 of No.	2
4 "	5
18 "	37
4 "	48A



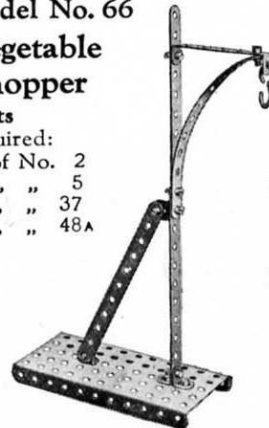
Model No. 67

Mail-Bag Hanger

Parts

required:

4 of No.	2
4 "	12
10 "	37
1 "	48A
1 "	52
1 "	57

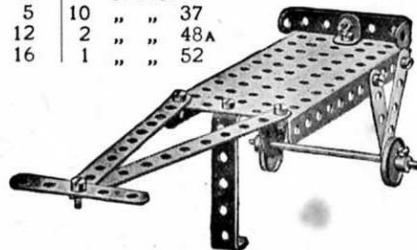


Model No. 68

Shipyards Bogie

Parts required:

2 of No.	2	2 of No.	22
5 "	5	10 "	37
1 "	12	2 "	48A
1 "	16	1 "	52



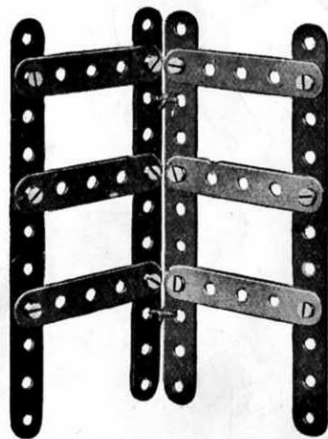
Model No. 69

Clothes Horse

Parts

required:

4 of No.	2
6 "	5
12 "	37



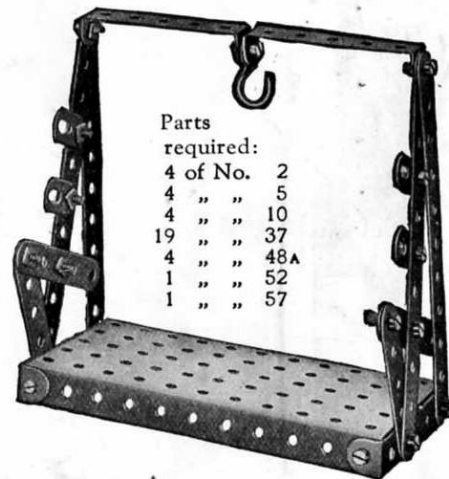
Model No. 70

Pen Rack

Parts

required:

4 of No.	2
4 "	5
4 "	10
19 "	37
4 "	48A
1 "	52
1 "	57

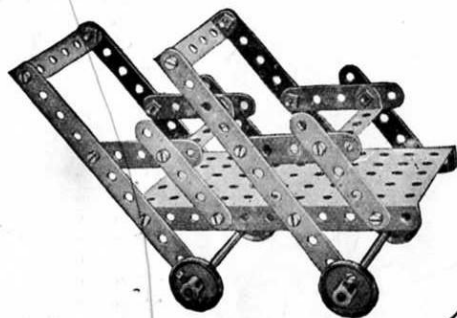


HOW TO CONTINUE

This completes the Models which may be made with MECCANO Outfit No. 0. The next Models are a little more advanced, requiring a number of extra parts to construct them. The necessary parts are all contained in a No. 0A Accessory Outfit, the price of which will be found in the list at the end of the Manual.

These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 0A.

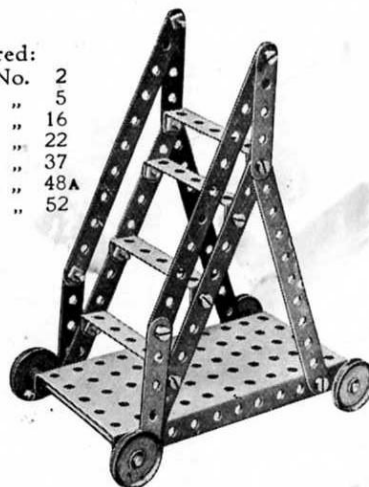
Model No. 101
Tandem Car



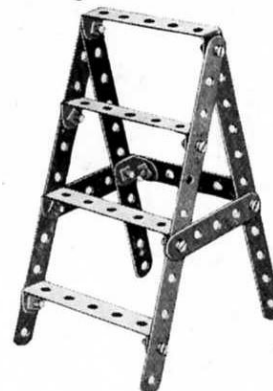
Parts required:
 4 of No. 2 20 of No. 37
 8 " " 5 4 " " 48A
 2 " " 16 1 " " 52
 4 " " 22

Model No. 102
Travelling Ladder

Parts required:
 6 of No. 2
 4 " " 5
 2 " " 16
 4 " " 22
 16 " " 37
 4 " " 48A
 1 " " 52

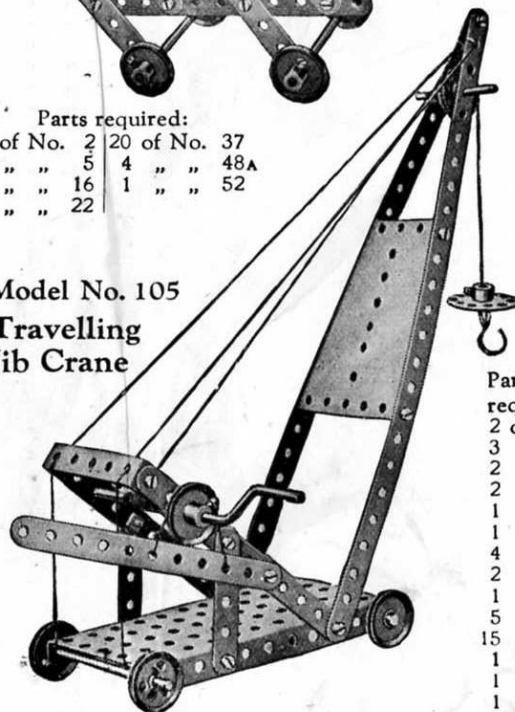


Model No. 103
Step Ladder



Parts required:
 4 of No. 2 10 of No. 37
 3 " " 5 4 " " 48A
 2 " " 12

Model No. 105
Travelling Jib Crane



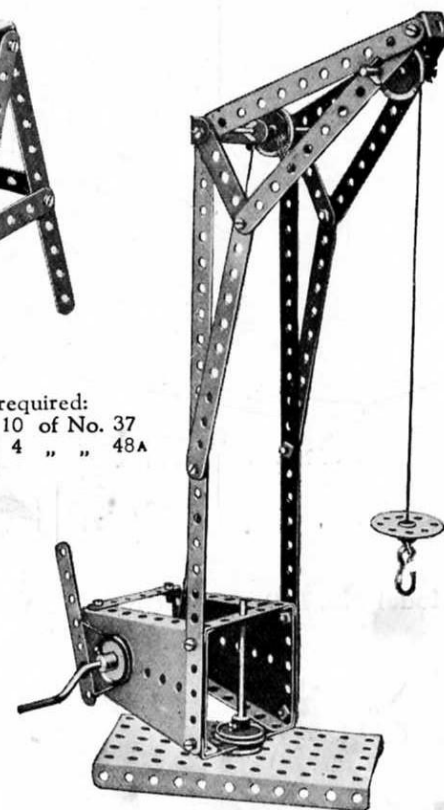
Parts required:
 2 of No. 1
 3 " " 2
 2 " " 5
 2 " " 16
 1 " " 17
 1 " " 19
 4 " " 22
 2 " " 24A
 1 " " 24
 5 " " 35
 15 " " 37
 1 " " 48A
 1 " " 52
 1 " " 54
 1 " " 57



Model No. 106
Swing

Parts required:
 4 of No. 1
 1 " " 2
 1 " " 5
 6 " " 12
 4 " " 37
 12 " " 48A
 3 " " 52
 1 " " 52

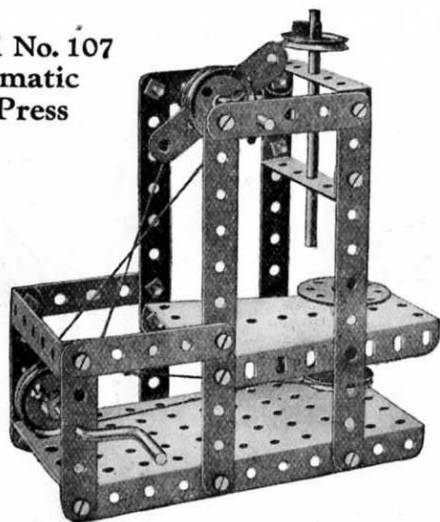
Model No. 104
Swivelling Crane



Parts required:
 2 of No. 1 1 of No. 11 2 of No. 22A 3 of No. 48A
 6 " " 2 1 " " 16 1 " " 24 1 " " 52
 1 " " 3 2 " " 17 4 " " 35 2 " " 54
 4 " " 5 1 " " 19 18 " " 37 1 " " 57
 4 " " 22 1 " " 44

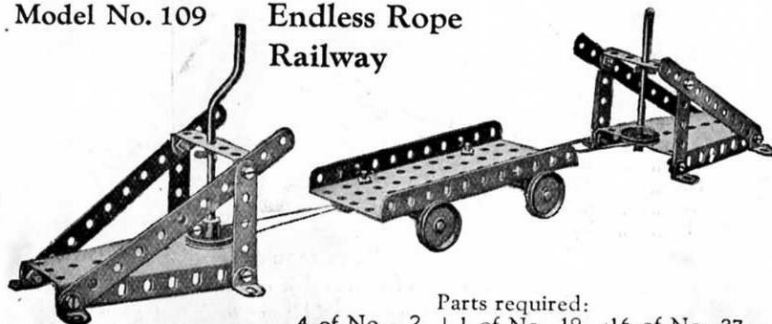
These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 0A.

Model No. 107
Automatic
Dial Press



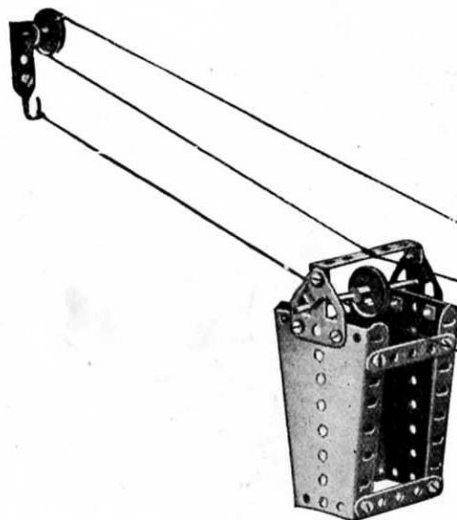
Parts required:		
4 of No. 2	1 of No. 19	18 of No. 37
7 " " 5	4 " " 22	3 " " 48A
2 " " 16	2 " " 22A	1 " " 52
1 " " 17	1 " " 24	1 " " 54
	7 " " 35	

Model No. 109 **Endless Rope**
Railway



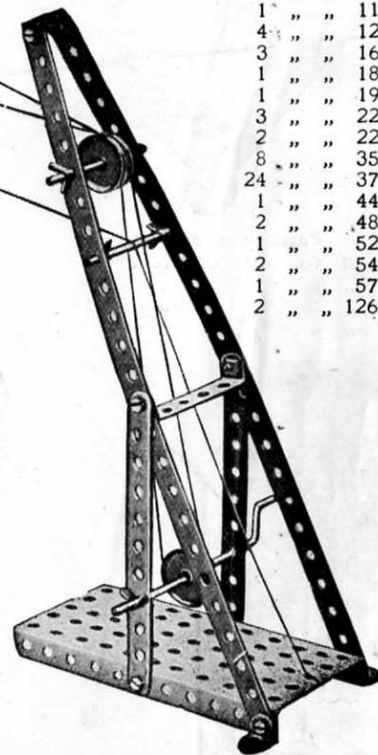
Parts required:		
4 of No. 2	1 of No. 19	16 of No. 37
4 " " 5	4 " " 22	4 " " 48A
8 " " 12	2 " " 22A	1 " " 52
3 " " 16	4 " " 35	2 " " 54

Model No. 108
Telpher Span



Parts required:		
2 of No. 1		
2 " " 2		
4 " " 5		
1 " " 11		
4 " " 12		
3 " " 16		
1 " " 18		
1 " " 19		
3 " " 22		
2 " " 22A		
8 " " 35		
24 " " 37		
1 " " 44		
2 " " 48A		
1 " " 52		
2 " " 54		
1 " " 57		
2 " " 126A		

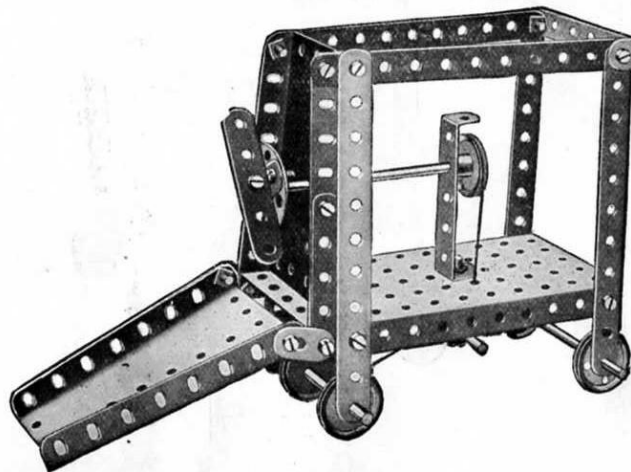
This model is an improvement on Model No. 36 and, as in the case of that model, it will provide many hours of enjoyment. The cords may be made to any length to allow the load to be carried from one side of the room to the other and, if necessary, a better grip may be obtained by winding the operating cord twice round the pulley on the crank handle. The open sides of the bucket may be closed with cardboard so that it may be loaded with marbles, beads, etc. The bed of the Telpher may be screwed on to a solid base with ordinary wood screws to give better support. The pulley bracket, and that securing the cord on which the bucket travels, should be screwed in a suitable position on the opposite side of the room.



These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 0A.

17

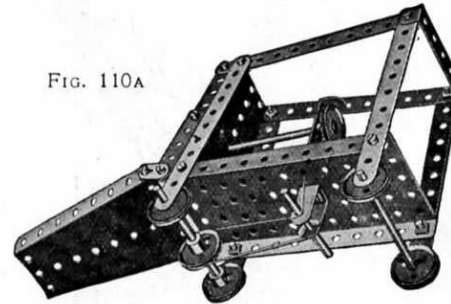
Model No. 110 Snow Plough



Parts required:

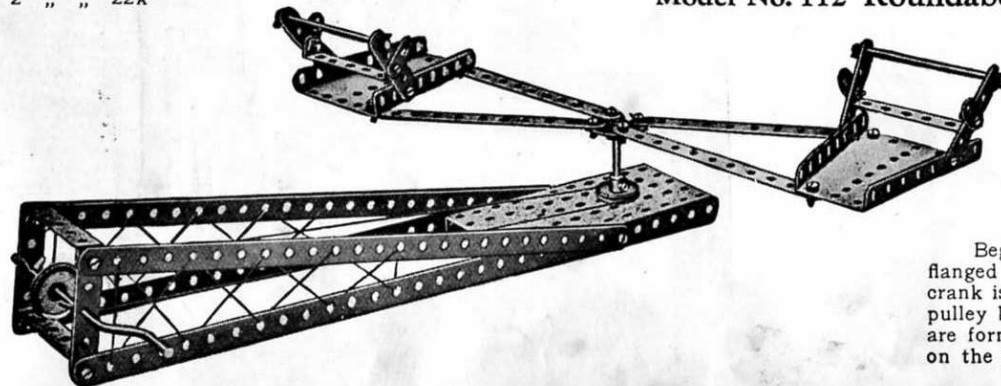
6 of No. 2	1 of No. 24
3 " " 5	4 " " 35
2 " " 10	19 " " 37
1 " " 12	1 " " 44
3 " " 16	2 " " 48A
1 " " 17	1 " " 52
4 " " 22	2 " " 54
2 " " 22A	

FIG. 110A

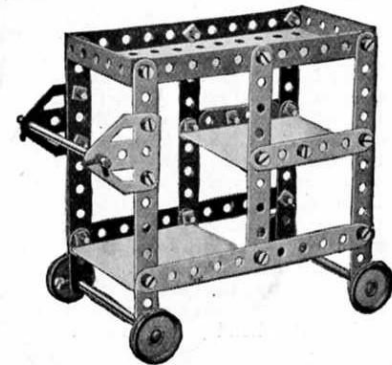


The construction of the framework of this model presents no difficulty. The sector plate forming the plough is loosely pivoted on the bolts 1. The axle 2 is mounted in the front sector plate and the $2\frac{1}{2}$ " double angle strip 3. A $2\frac{1}{2}$ " strip 4 is bolted by angle brackets to a bush wheel on the front of the axle and forms a dispersing propeller for the snow after it has risen up the inclined sector plate. A continuous cord 5 is passed round a 1" pulley 6 and round the short axle 7 and a 1" pulley on the propeller axle. In this way, as the plough is moved along the ground, the propeller is revolved.

Model No. 112 Roundabout



Model No. 111 Dinner Wagon



Parts required:

6 of No. 2	2 of No. 35
8 " " 5	22 " " 37
4 " " 12	4 " " 48A
3 " " 16	1 " " 52
4 " " 22	2 " " 126A

The two lower platforms are constructed out of pieces of ordinary cardboard, their outer edges resting on $2\frac{1}{2}$ " bent strips and their inner edges on angle brackets.

Parts required:

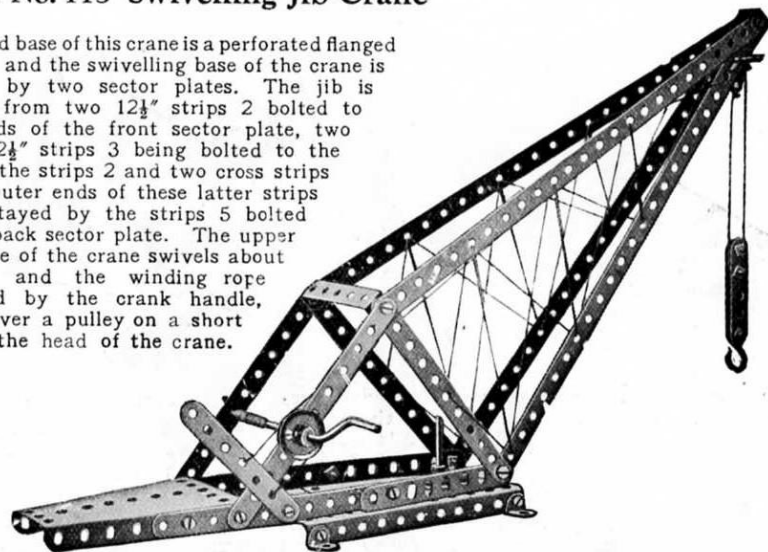
4 of No. 1	1 of No. 17	22 of No. 37
4 " " 2	1 " " 19	4 " " 48A
6 " " 5	3 " " 22	1 " " 52
4 " " 10	1 " " 24	2 " " 54
2 " " 16	6 " " 35	

Begin to build this model by making the platform from a flanged plate and $12\frac{1}{2}$ " strips. The drive from the pulley on the crank is taken to a 1" pulley fast on a spindle 2, another similar pulley being secured to the spindle beneath the plate. The arms are formed of four $5\frac{1}{2}$ " strips and bolted to a bush wheel 1 fast on the spindle.

These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 0A.

Model No. 113 Swivelling Jib Crane

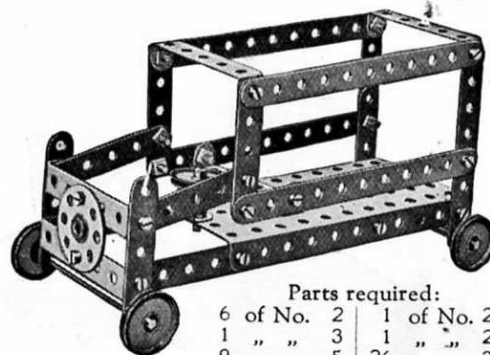
The fixed base of this crane is a perforated flanged plate 1 and the swivelling base of the crane is formed by two sector plates. The jib is formed from two $12\frac{1}{2}$ " strips 2 bolted to the ends of the front sector plate, two other $12\frac{1}{2}$ " strips 3 being bolted to the tops of the strips 2 and two cross strips 4, the outer ends of these latter strips being stayed by the strips 5 bolted to the back sector plate. The upper structure of the crane swivels about a rod, and the winding rope operated by the crank handle, passes over a pulley on a short rod in the head of the crane.



Parts required:

4	of No.	1
6	" "	2
1	" "	3
2	" "	5
1	" "	10
1	" "	11
4	" "	12
2	" "	17
1	" "	19
3	" "	22
1	" "	22A
1	" "	23
3	" "	35
5	" "	37
3	" "	38
1	" "	48A
1	" "	52
2	" "	54
1	" "	57

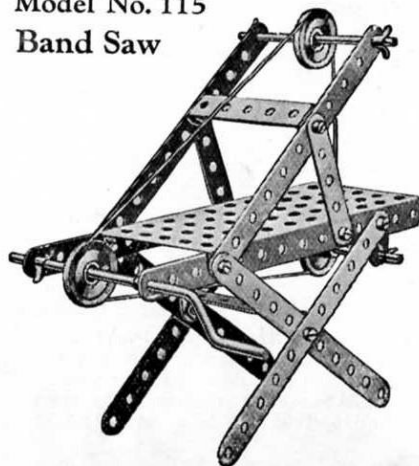
Model No. 114 Motor Van



Parts required:

6	of No.	2	1	of No.	22A
1	" "	3	1	" "	24
9	" "	5	26	" "	37
1	" "	11	5	" "	48A
2	" "	16	1	" "	52
4	" "	22			

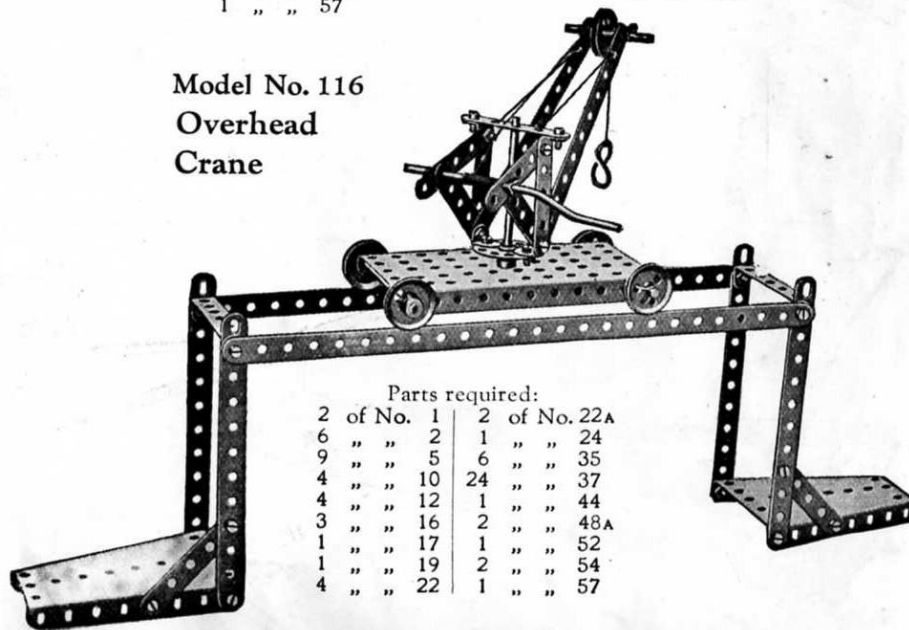
Model No. 115 Band Saw



Parts required:

6	of No.	2
4	" "	5
2	" "	10
2	" "	16
1	" "	19
3	" "	22
6	" "	35
10	" "	37
2	" "	48A
1	" "	52

Model No. 116 Overhead Crane



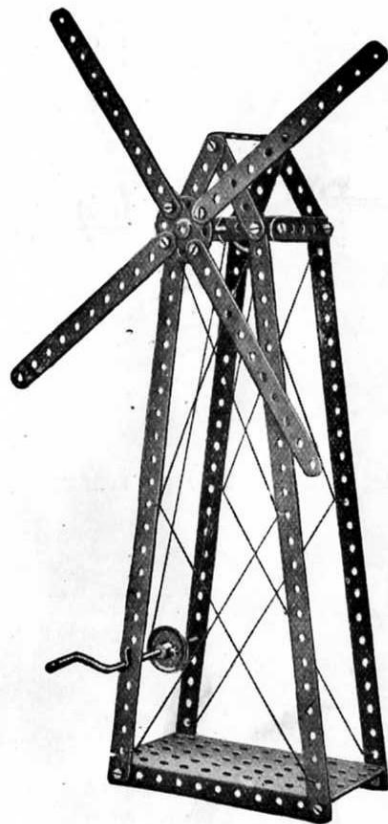
Parts required:

2	of No.	1	2	of No.	22A
6	" "	2	1	" "	24
9	" "	5	6	" "	35
4	" "	10	24	" "	37
4	" "	12	1	" "	44
3	" "	16	2	" "	48A
1	" "	17	1	" "	52
1	" "	19	2	" "	54
4	" "	22	1	" "	57

These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 0A.

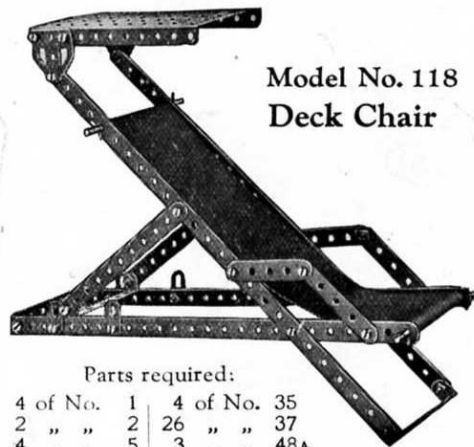
19

Model No. 117 Windmill



Parts required:			
4 of No.	1	2 of No.	22
4 "	2	1 "	24
7 "	5	4 "	35
2 "	12	20 "	37
1 "	16	3 "	48A
1 "	19	1 "	52

Model No. 118
Deck Chair



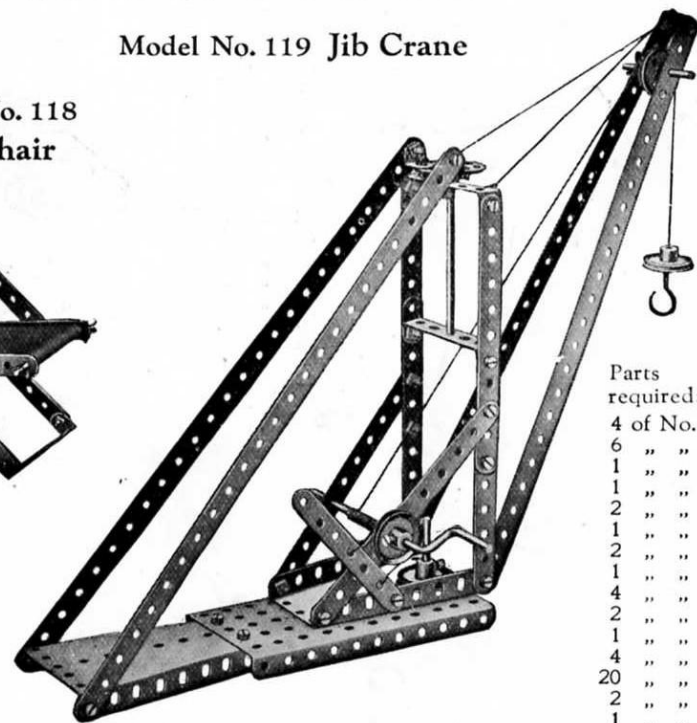
Parts required:			
4 of No.	1	4 of No.	35
2 "	2	26 "	37
4 "	5	3 "	48A
4 "	10	1 "	52
2 "	16	2 "	126A

Model No. 120
Bed Table



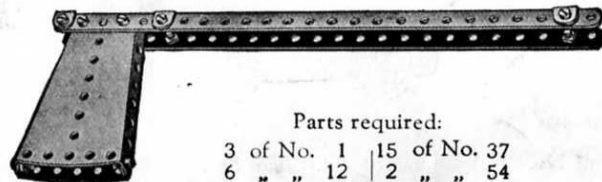
Parts required:			
3 of No.	2		
1 "	3		
1 "	5		
1 "	11		
5 "	12		
2 "	16		
1 "	17		
4 "	22		
1 "	24		
21 "	37		
4 "	48A		
1 "	52		
1 "	126A		

Model No. 119 Jib Crane



Parts required:			
4 of No.	1		
6 "	2		
1 "	3		
1 "	11		
2 "	12		
1 "	16		
2 "	17		
1 "	19		
4 "	22		
2 "	22A		
1 "	24		
4 "	35		
20 "	37		
2 "	48A		
1 "	52		
2 "	54		
1 "	57		

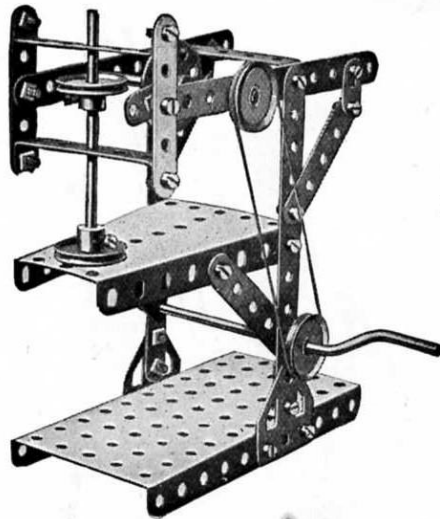
Model No. 121 Hatchet



Parts required:			
3 of No.	1	15 of No.	37
6 "	12	2 "	54

These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 0A.

Model No. 122 Drop Stamp



Parts required	
4 of No.	2
6 " "	5
3 " "	10
2 " "	16
1 " "	19
4 " "	22
1 " "	24
2 " "	35
27 " "	37
3 " "	48A
1 " "	52
1 " "	54
2 " "	126A

Model No. 123 Lathe



Parts required:

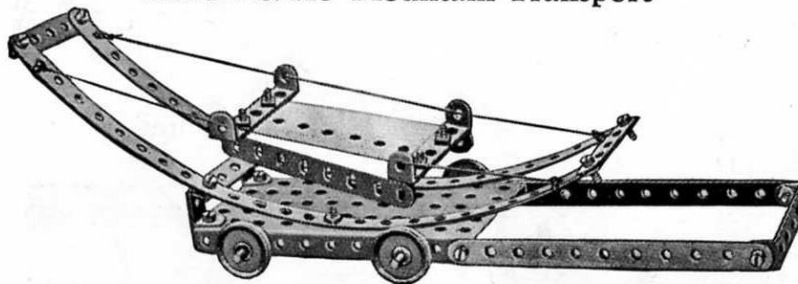
6 of No.	2	1 of No.	24
4 " "	12	17 " "	37
1 " "	17	1 " "	44
1 " "	19	2 " "	48A
3 " "	22	1 " "	52

Model No. 124 Tip Wagon



Parts required:	
1 of No.	2
4 " "	5
5 " "	12
3 " "	16
4 " "	22
2 " "	35
14 " "	37
2 " "	48A
1 " "	52
2 " "	54

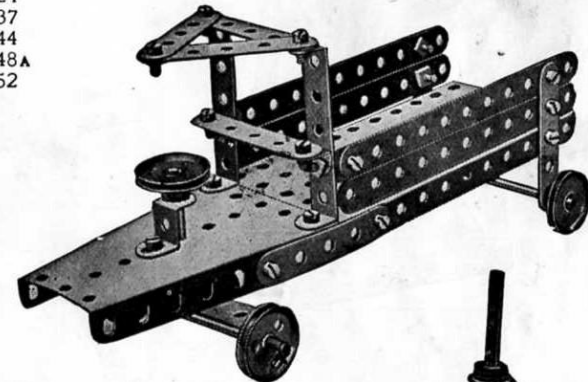
Model No. 125 Mountain Transport



Parts required:

2 of No.	1	3 of No.	5	2 of No.	16	18 of No.	37	1 of No.	52
2 " "	2	4 " "	12	4 " "	22	2 " "	48A	1 " "	54

Model No. 126 Motor Lorry



Parts required:

4 of No.	2	3 of No.	22	3 of No.	38
8 " "	5	2 " "	22A	3 " "	48A
4 " "	12	1 " "	24	1 " "	52
2 " "	16	2 " "	35	1 " "	54
1 " "	17	25 " "	37	2 " "	125

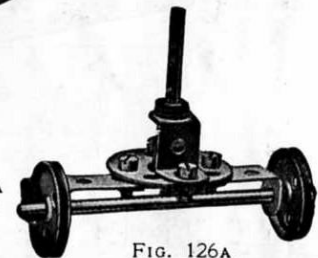


FIG. 126A

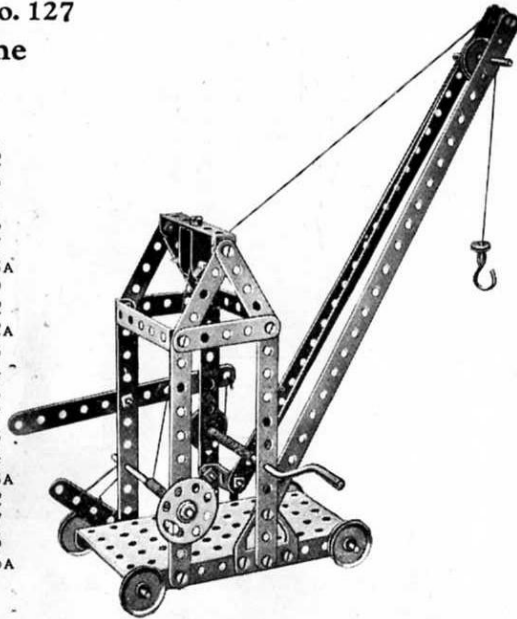
These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 0A.

21

Model No. 127 Jib Crane

Parts required:

2	of No.	1
5	" "	2
7	" "	5
1	" "	11
3	" "	16
1	" "	17
1	" "	18A
1	" "	19
4	" "	22
2	" "	22A
1	" "	23
1	" "	24
6	" "	35
22	" "	37
2	" "	38
1	" "	44
3	" "	48A
1	" "	52
1	" "	57
2	" "	125
2	" "	126A

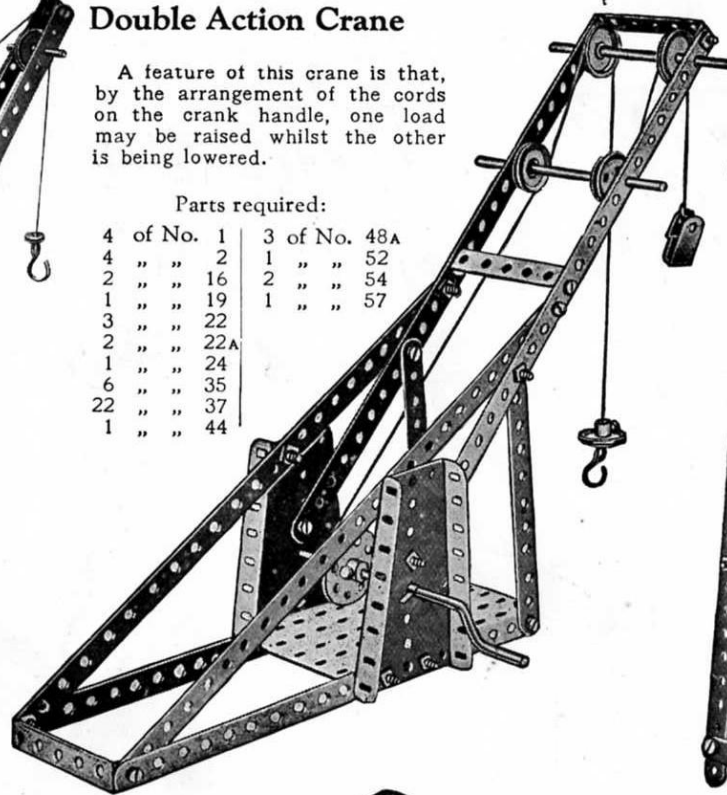


Model No. 128 Double Action Crane

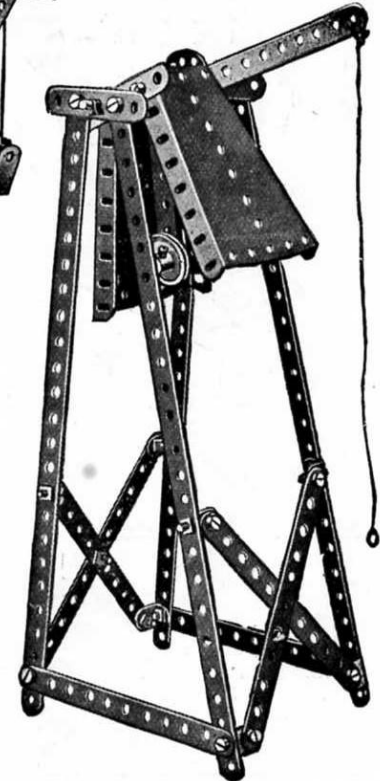
A feature of this crane is that, by the arrangement of the cords on the crank handle, one load may be raised whilst the other is being lowered.

Parts required:

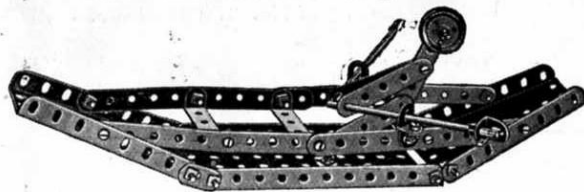
4	of No.	1	3	of No.	48A
4	" "	2	1	" "	52
2	" "	16	2	" "	54
1	" "	19	1	" "	57
3	" "	22			
2	" "	22A			
1	" "	24			
6	" "	35			
22	" "	37			
1	" "	44			



Model No. 129 Fire Alarm

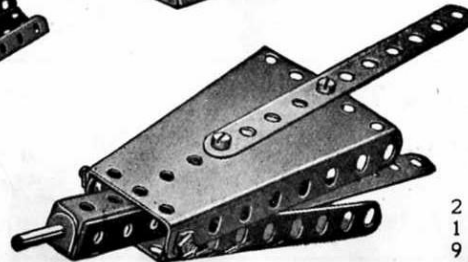


Model No. 130 Rowing Boat



Parts required:

4	of No.	2	2	of No.	16	4	of No.	38
5	" "	5	1	" "	18A	3	" "	48A
4	" "	10	2	" "	22A	1	" "	52
7	" "	12	4	" "	35	2	" "	54
			24	" "	37			



Model No. 131 Bellows

Parts required:

2	of No.	2	4	of No.	48A
1	" "	17	2	" "	54
9	" "	37			

Parts required:

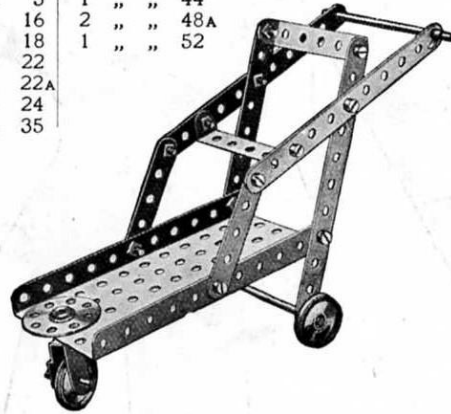
4	of No.	1	1	of No.	22
7	" "	2	1	" "	24
1	" "	3	4	" "	35
3	" "	5	27	" "	37
8	" "	12	2	" "	54
1	" "	16			

These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 0A.

Model No. 132 Invalid Chair

Parts required:

4 of No. 2	13 of No. 37
2 " " 5	1 " " 44
2 " " 16	2 " " 48A
1 " " 18	1 " " 52
2 " " 22	
1 " " 22A	
1 " " 24	
4 " " 35	



Model No. 133 Scooter

Parts required:

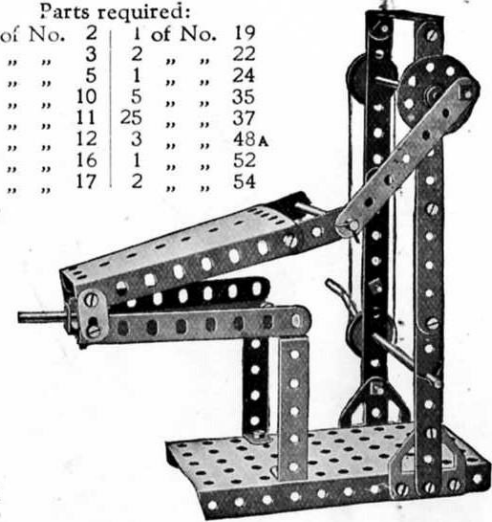
5 of No. 2	1 of No. 24
1 " " 10	14 " " 37
1 " " 11	2 " " 38
3 " " 12	1 " " 44
1 " " 17	1 " " 48A
1 " " 18	2 " " 126A
1 " " 22	



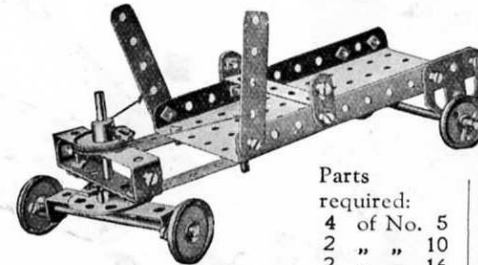
Model No. 134 Forge Bellows

Parts required:

4 of No. 2	1 of No. 19
1 " " 3	2 " " 22
2 " " 5	1 " " 24
2 " " 10	5 " " 35
1 " " 11	25 " " 37
2 " " 12	3 " " 48A
2 " " 16	1 " " 52
1 " " 17	2 " " 54



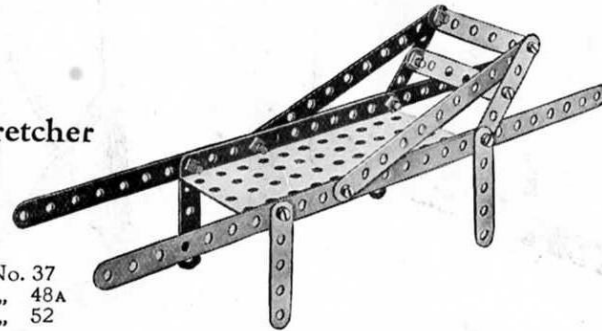
Model No. 136 Steering Truck



Model No. 135 Stretcher

Parts required:

2 of No. 1	10 of No. 37
2 " " 2	2 " " 48A
6 " " 5	1 " " 52



Parts required:	1 of No. 17	18 of No. 37
4 of No. 5	3 " " 22	2 " " 38
2 " " 10	2 " " 22A	4 " " 48A
2 " " 16	1 " " 24	1 " " 52
	2 " " 35	2 " " 126A

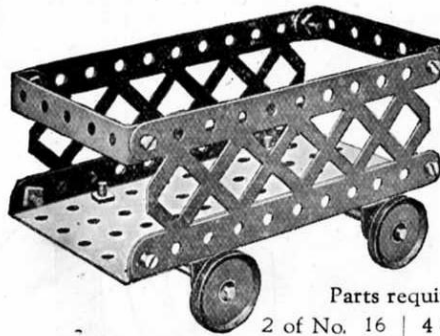
HOW TO CONTINUE

This completes the Models which may be made with MECCANO Outfit No. 1. The next Models are a little more advanced, requiring a number of extra parts to construct them. The necessary parts are all contained in a No. 1A Accessory Outfit, the price of which will be found in the List at the end of the Manual.

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

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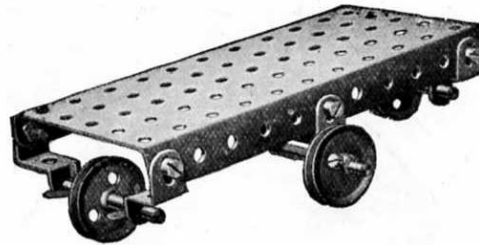
Model No. 201 Truck



Parts required:

2 of No. 16	4 of No. 48A
4 " " 22	1 " " 52
12 " " 37	2 " " 100

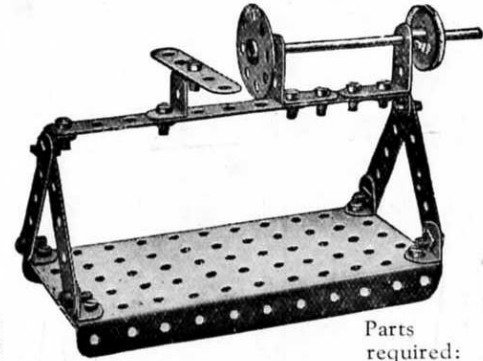
Model No. 202 Revolving Truck



Parts required:

2 of No. 10	2 of No. 22	6 of No. 37
1 " " 16	2 " " 22A	1 " " 52
2 " " 17	4 " " 35	4 " " 125

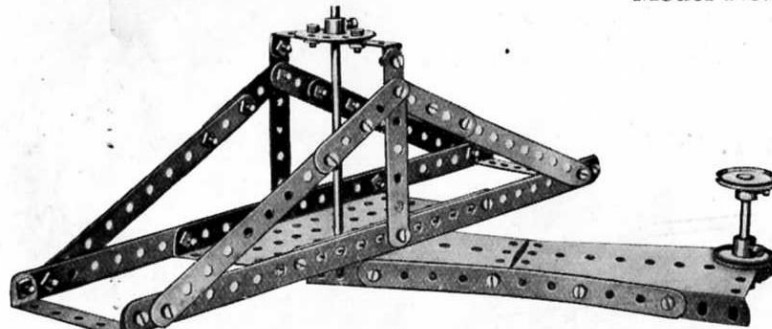
Model No. 203 Lathe



Parts required:

1 of No. 2
5 " " 5
6 " " 12
2 " " 12A
1 " " 16
1 " " 22
1 " " 24
17 " " 37
1 " " 52
1 " " 125

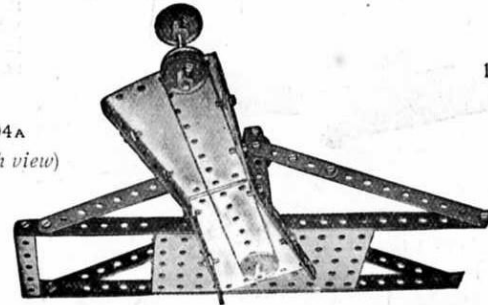
Model No. 204 Turntable Gangway



Parts required:

2 of No. 1	4 of No. 22
6 " " 2	1 " " 24
2 " " 3	34 " " 37
4 " " 5	3 " " 48A
1 " " 15A	1 " " 52
1 " " 17	2 " " 54

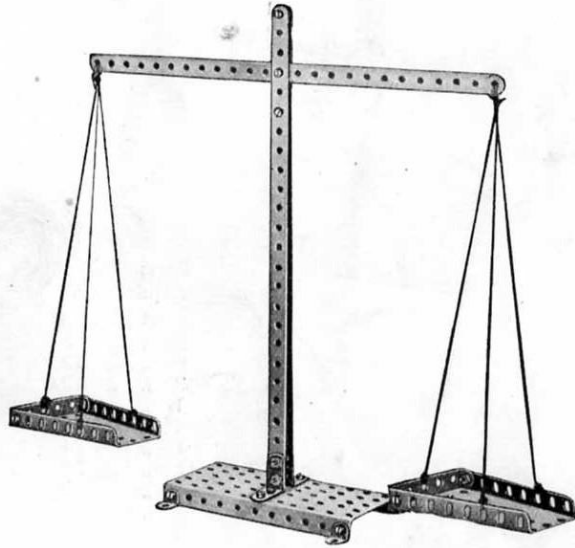
FIG. 204A
(underneath view)



The side frames of the gangway are made of 12½" strips bolted by means of 2½" bent strips to parallel strips below. The side frames are connected by a perforated flanged plate, to the underside of which is bolted a bush wheel fitted with a rod on which is mounted a 1" pulley (See Fig. 204A). The rod passes through one of the end holes of the sector plate which is connected by diagonal strips to another sector plate. Through the end hole of the latter a rod is threaded carrying two 1" pulleys from one of which an operating cord passes through the pulley mounted on the under side of the flanged plate. In this way the Gangway may be rotated by an operating spindle.

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 205 Scales

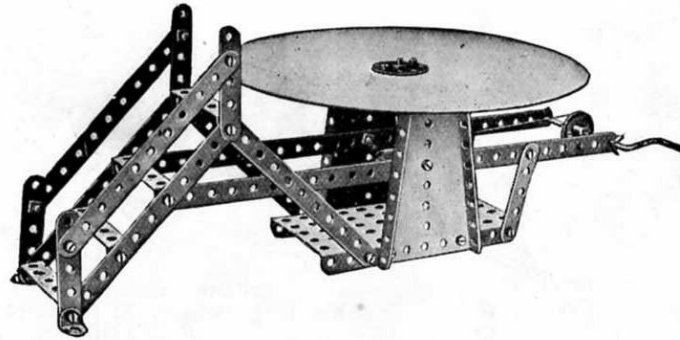


Parts required:

3 of No. 1	4 of No. 38
4 " " 12	2 " " 48A
2 " " 12A	1 " " 52
19 " " 37	2 " " 54

The slot is formed by inserting 2 washers on the bolts above and below the beam. These washers hold the strips composing the standard at the required distance apart to give the beam free play.

Model No. 206 Joy Wheel



The driving mechanism and construction of the framework of this model are clearly brought out in Fig. 206A. Cut out a circular piece of cardboard, 8" in diameter, and in the centre of the disc fix a bush wheel by nuts and bolts. The eye of the bush wheel is then threaded over the top of a vertical spindle, and secured by its set-screw.

Parts required:

2 of No. 1	1 of No. 22A
6 " " 2	1 " " 24
6 " " 5	2 " " 35
2 " " 12	28 " " 37
1 " " 15A	5 " " 48A
1 " " 19	1 " " 52
3 " " 22	2 " " 54

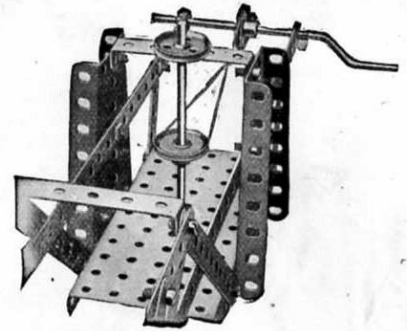
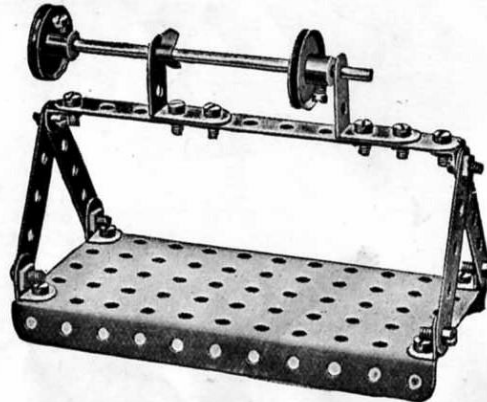


FIG. 206A

Model No. 207 Polishing Spindle



Parts required:

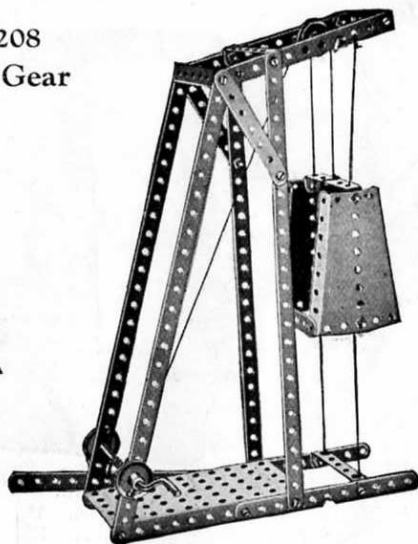
1 of No. 2	1 of No. 15A
4 " " 5	2 " " 22
6 " " 12	1 " " 35
2 " " 12A	16 " " 37
1 of No. 52	

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

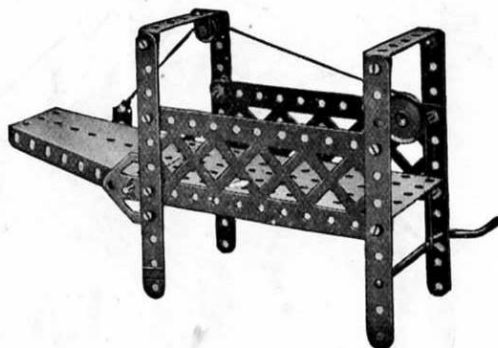
Model No. 208 Pit Head Gear

Parts
required:

4 of No.	1
5 " "	2
2 " "	3
2 " "	5
2 " "	12
1 " "	16
1 " "	19
3 " "	22
2 " "	35
25 " "	37
5 " "	48A
1 " "	52
2 " "	54



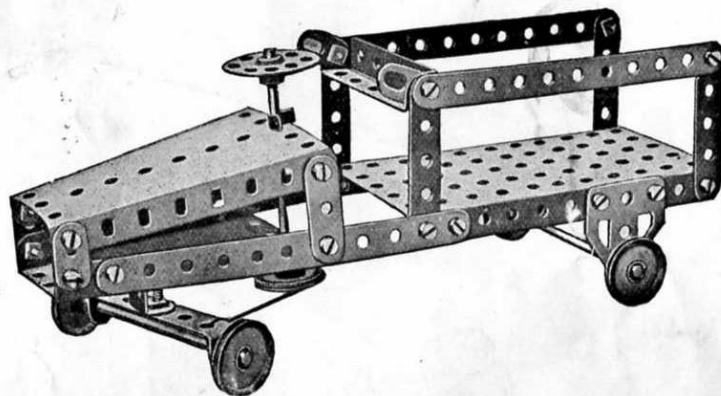
Model No. 209 Gangway



Parts required:

4 of No.	2	1 of No.	22	1 of No.	52
1 " "	10	1 " "	23	1 " "	54
1 " "	12	4 " "	35	2 " "	100
1 " "	16	17 " "	37	2 " "	126A
1 " "	19	2 " "	48A		

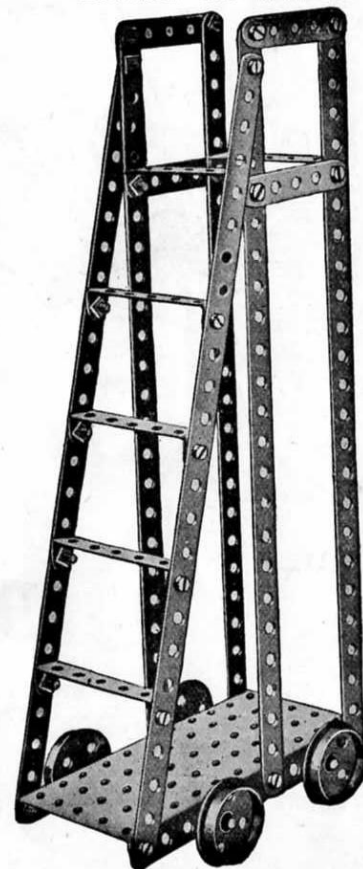
Model No. 211 Motor Truck



Parts
required:

4 of No.	2
4 " "	5
2 " "	6A
4 " "	10
1 " "	11
3 " "	16
3 " "	22
2 " "	22A
1 " "	24
3 " "	35
26 " "	37
3 " "	48A
1 " "	52
2 " "	54
2 " "	126A

Model No. 210 Ladder on Wheels



Parts required:

6 of No.	1	24 of No.	37
4 " "	5	6 " "	48A
2 " "	16	1 " "	52
4 " "	20		

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 212 Cot on Wheels

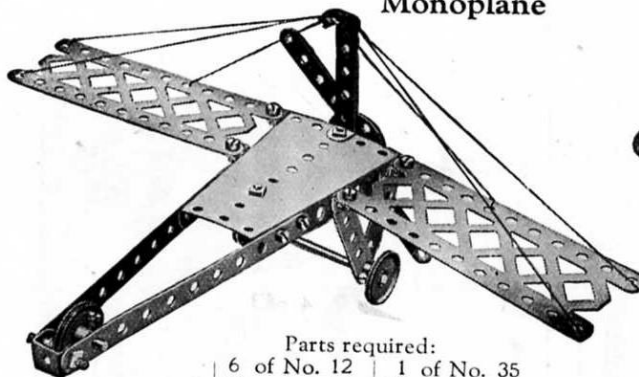
Parts
required:

2	of No.	2
7	" "	5
3	" "	12
4	" "	22
18	" "	37
2	" "	48A
2	" "	100



Model No. 213

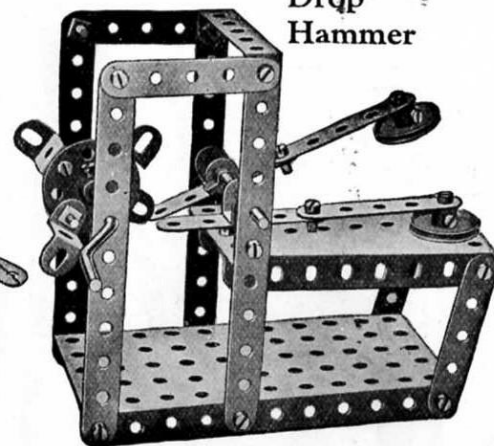
Monoplane



Parts required:

6	of No.	12	1	of No.	35
2	" "	16	18	" "	37
2	of No.	2	1	" "	48A
6	" "	5	1	" "	54
1	" "	11	2	" "	100
1	" "	18A			
3	" "	22			
1	" "	24			

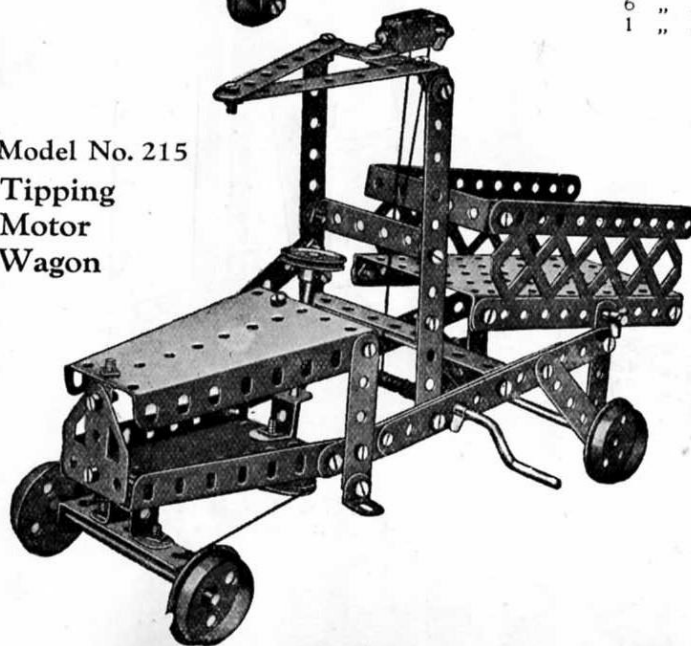
Model No. 214 Double Drop Hammer



Parts
required:

4	of No.	2	1	of No.	16	25	of No.	37
8	" "	5	1	" "	19	2	" "	48A
2	" "	11	1	" "	22	1	" "	52
			1	" "	24	1	" "	54
			6	" "	35	4	" "	125

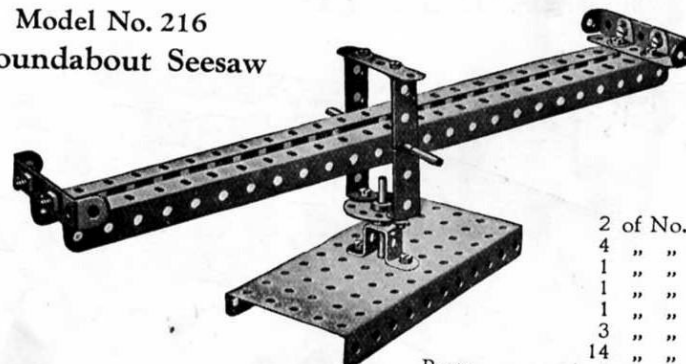
Model No. 215 Tipping Motor Wagon



Parts
required:

6	of No.	2
2	" "	3
7	" "	5
1	" "	10
4	" "	12
4	" "	16
1	" "	18A
1	" "	19
4	" "	20
2	" "	22
1	" "	23
7	" "	35
43	" "	37
2	" "	38
1	" "	44
1	" "	45
6	" "	48A
1	" "	52
2	" "	54
2	" "	100
2	" "	125
1	" "	126A

Model No. 216 Roundabout Seesaw



Parts
required:

3	of No.	5
8	" "	8
4	" "	12
1	" "	16
1	" "	17
1	" "	24
3	" "	35
14	" "	37
1	" "	45
4	" "	48A
1	" "	52

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 217 Monoplane

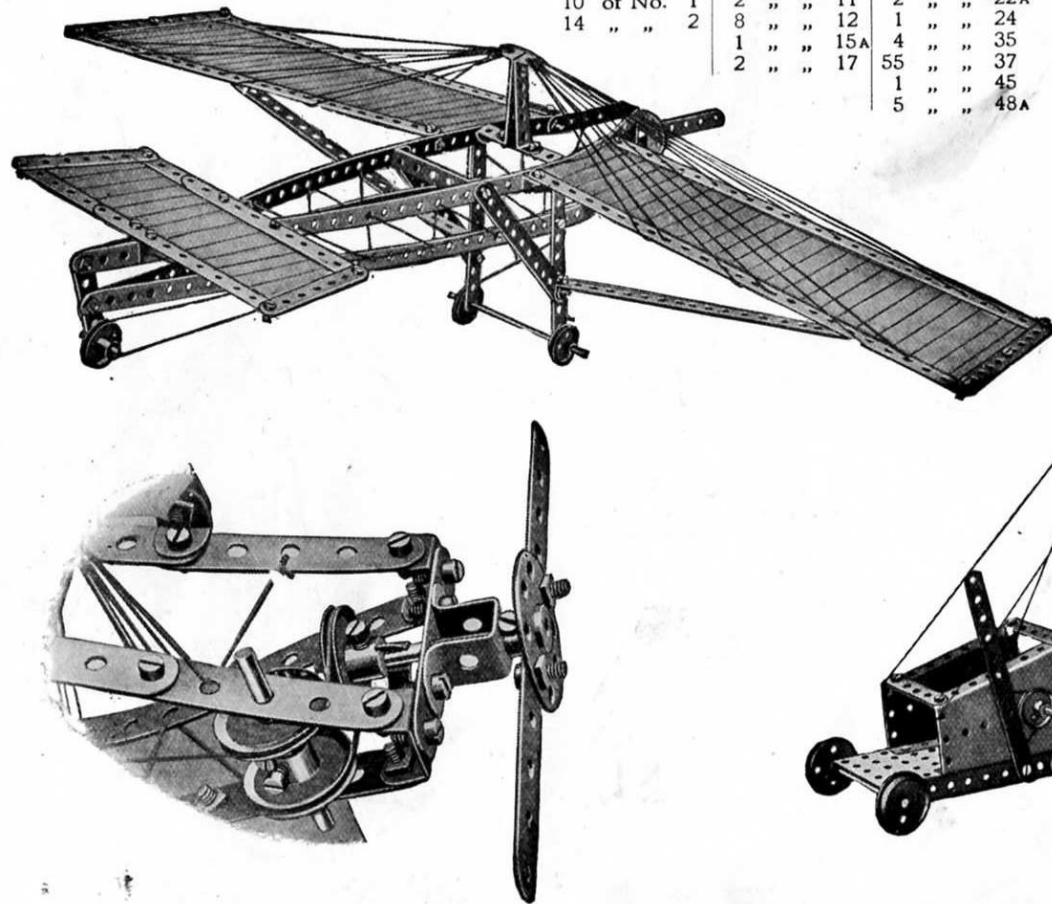
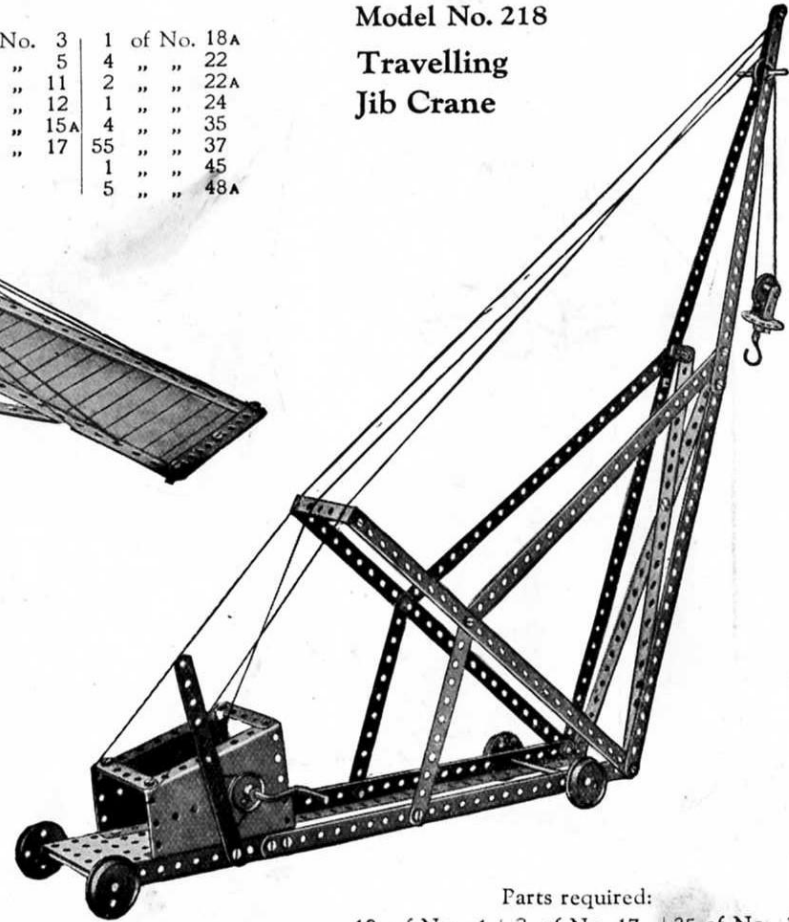


FIG. 217A

Parts required:	2 of No. 3	1 of No. 18A
10 of No. 1	8 " " 5	4 " " 22
14 " " 2	2 " " 11	2 " " 22A
	8 " " 12	1 " " 24
	1 " " 15A	4 " " 35
	2 " " 17	55 " " 37
		1 " " 45
		5 " " 48A

Model No. 218

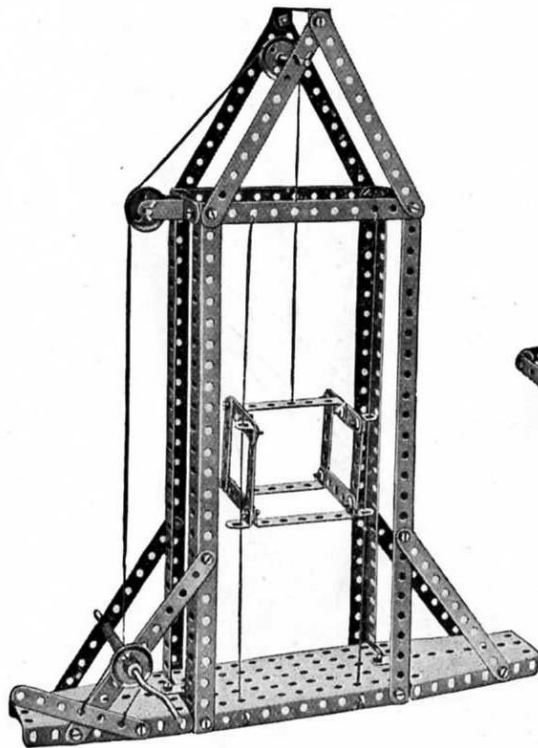
Travelling Jib Crane



Parts required:	10 of No. 1	2 of No. 17	35 of No. 37
	3 " " 2	1 " " 19	1 " " 44
	3 " " 5	4 " " 20	1 " " 48A
	2 " " 8	2 " " 22	1 " " 52
	4 " " 12	1 " " 22A	2 " " 54
	2 " " 16	1 " " 24	1 " " 57
		5 " " 35	

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

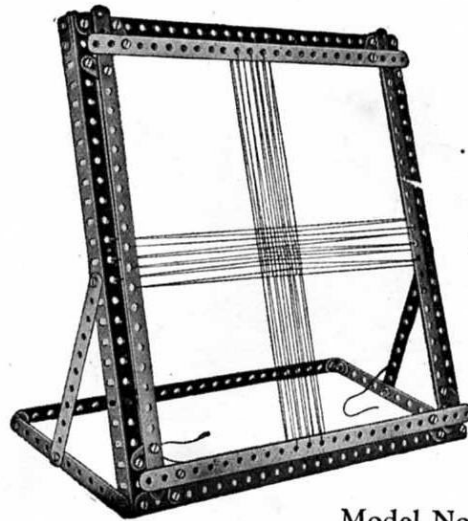
Model No. 219
Elevator



Parts required:

10 of No. 2	1 of No. 16	38 of No. 37
1 " " 3	1 " " 18A	1 " " 44
10 " " 5	1 " " 19	4 " " 48A
4 " " 8	1 " " 22	1 " " 52
2 " " 10	2 " " 22A	2 " " 54
4 " " 12	5 " " 35	

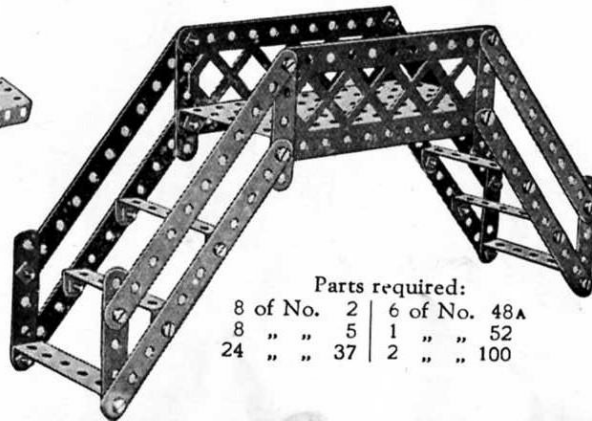
Model No. 220 Mat Frame



Parts required:

5 of No. 1	
4 " " 2	
4 " " 8	
8 " " 10	
2 " " 12	
2 " " 12A	
36 " " 37	

Model No. 222
High-Level Bridge



Parts required:

8 of No. 2	6 of No. 48A
8 " " 5	1 " " 52
24 " " 37	2 " " 100

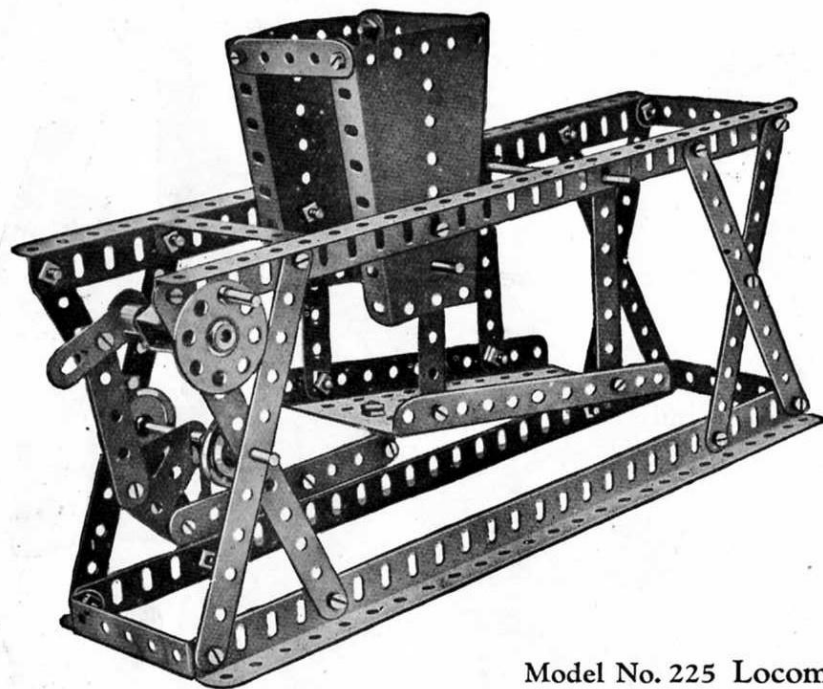
Model No. 221
Windmill



Parts required:

10 of No. 1	4 of No. 12	4 of No. 35
14 " " 2	1 " " 15	47 " " 37
2 " " 3	1 " " 19	1 " " 45
2 " " 5	2 " " 22	2 " " 54
4 " " 8	1 " " 24	

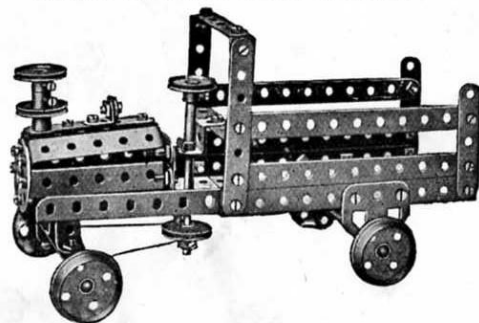
Model No. 223 Coal Sifter



Parts required:

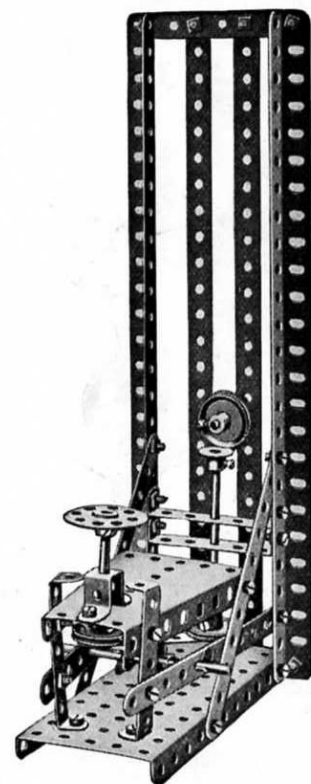
8	of No.	2
2	" "	3
7	" "	5
4	" "	8
1	" "	12
3	" "	16
1	" "	17
2	" "	22
1	" "	24
6	" "	35
38	" "	37
1	" "	45
4	" "	48A
1	" "	52
2	" "	54
1	" "	62
1	" "	115
1	" "	126A

Model No. 225 Locomotive



Parts required:

4	of No.	2	1	of No.	24
2	" "	3	2	" "	35
6	" "	5	47	" "	37
3	" "	10	1	" "	45
7	" "	12	6	" "	48A
3	" "	16	1	" "	52
1	" "	17	1	" "	54
4	" "	20	1	" "	62
4	" "	22	2	" "	125
1	" "	23	2	" "	126A

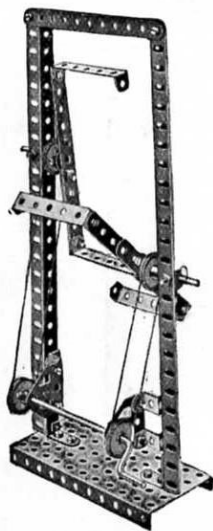
Model No. 224
Try-your-strength Machine

Parts required:

2	of No.	1	1	of No.	17	12	of No.	38
5	" "	2	1	" "	18A	1	" "	45
2	" "	3	4	" "	22	4	" "	48A
2	" "	8	1	" "	24	1	" "	52
1	" "	11	4	" "	35	1	" "	54
2	" "	16	30	" "	37	1	" "	126A

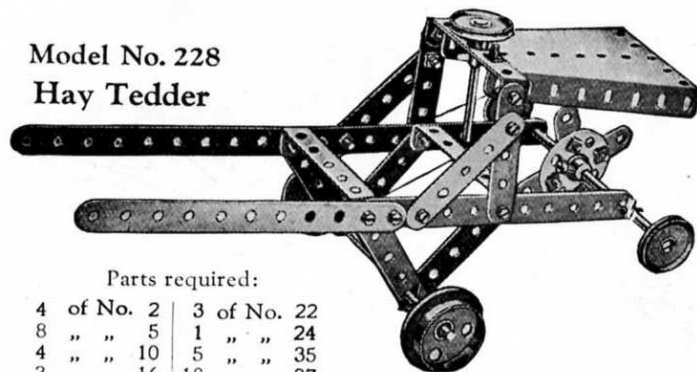
These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 226 Candy Puller



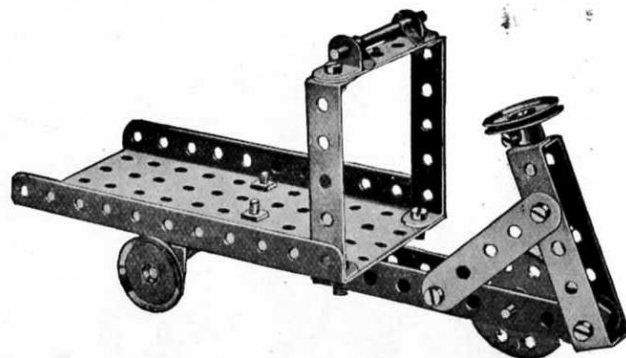
Parts required:		
3	of No.	2
2	" "	8
2	" "	12
2	" "	12A
2	" "	17
1	" "	19
4	" "	22
2	" "	35
26	" "	37
10	" "	38
4	" "	48A
1	" "	52
2	" "	62
4	" "	125
2	" "	126A

Model No. 228 Hay Tedder



Parts required:		
4	of No.	2
8	" "	5
4	" "	10
3	" "	16
1	" "	17
2	" "	20
3	of No.	22
1	" "	24
5	" "	35
18	" "	37
3	" "	48A
1	" "	54

Model No. 227 Carrier Tricycle



Parts required:		
2	of No.	2
3	" "	5
1	" "	11
2	" "	12
1	" "	16
1	" "	17
1	" "	18A
3	" "	22
1	" "	24
2	" "	35
15	" "	37
5	" "	48A
1	" "	52

Model No. 229 Baby Chair

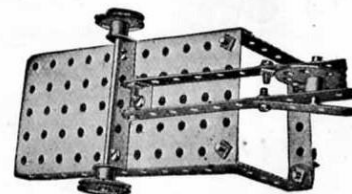
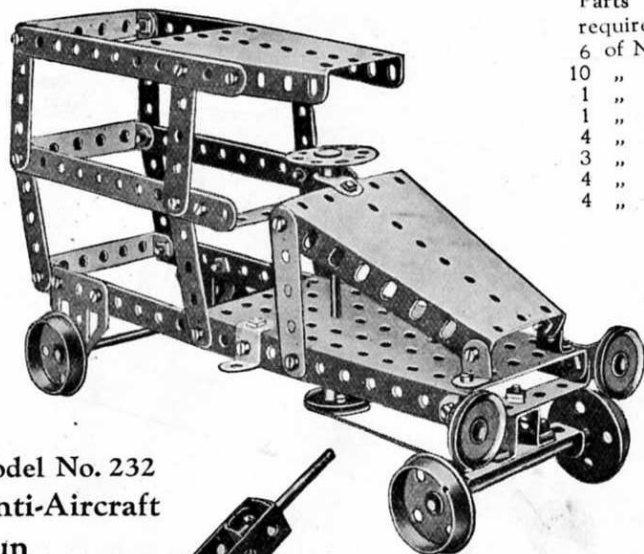


FIG. 227A
(underneath view)

Parts required:		
8	of No.	2
2	" "	3
12	" "	5
6	" "	12
2	" "	17
4	" "	22
31	" "	37
6	" "	48A

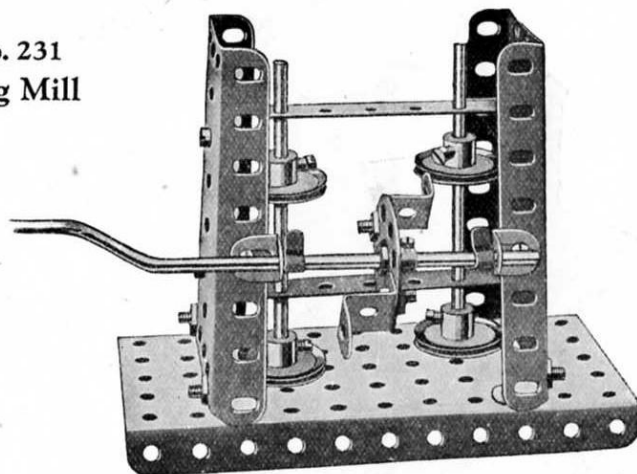
These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 230 Motor Van



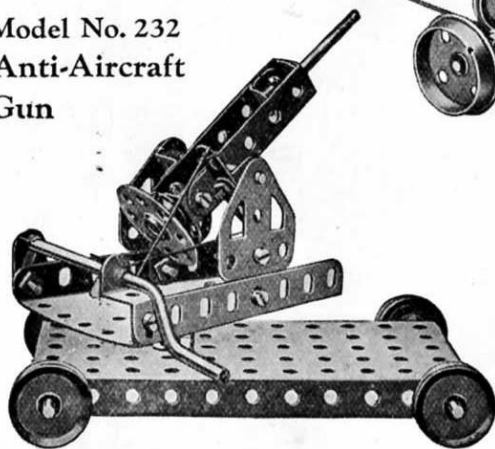
Parts required:			
6	of No.	2	
10	" "	5	
1	" "	10	
1	" "	11	
4	" "	12	
3	" "	16	
4	" "	20	
4	" "	22	
1 of No. 24			
38	" "	37	
1	" "	44	
6	" "	48A	
1	" "	52	
2	" "	54	
2	" "	125	
2	" "	126A	

Model No. 231
Stamping Mill



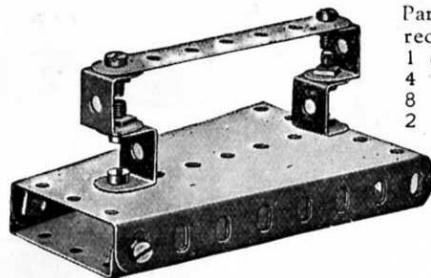
Parts required:			
2	of No.	3	4 of No. 22
10	" "	12	1 " " 24
2	" "	16	2 " " 35
1	" "	19	16 " " 37
1 of No. 52			
2	" "	54	
2	" "	125	

Model No. 232
Anti-Aircraft
Gun



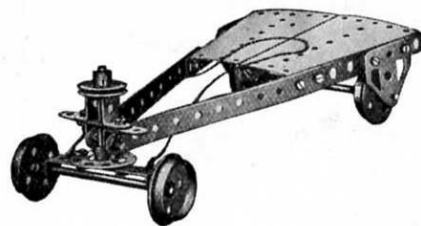
Parts required:			
5	of No.	10	4 of No. 22
2	" "	11	1 " " 24
2	" "	16	4 " " 35
2	" "	17	12 " " 37
1	" "	19	2 " " 48A
1 of No. 52			
1	" "	54	
4	" "	125	
2	" "	126A	

Model No. 233 Smoothing Iron



Parts required:			
1	of No.	3	
4	" "	11	
8	" "	37	
2	" "	54	

Model No. 234 Coaster



Parts required:			
2	of No.	2	1 of No. 17
1	" "	5	4 " " 20
2	" "	12	1 " " 22
1	" "	15	1 " " 24
1	" "	16	16 " " 37
6 of No. 38			
1	" "	45	
1	" "	48A	
2	" "	54	
2	" "	126A	

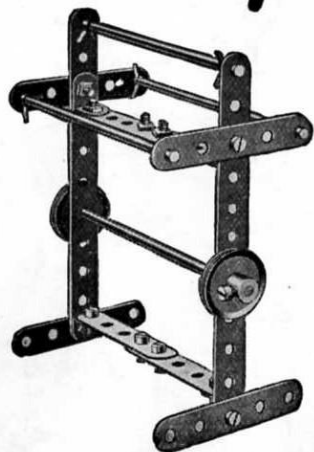
These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 235 Needlework Basket



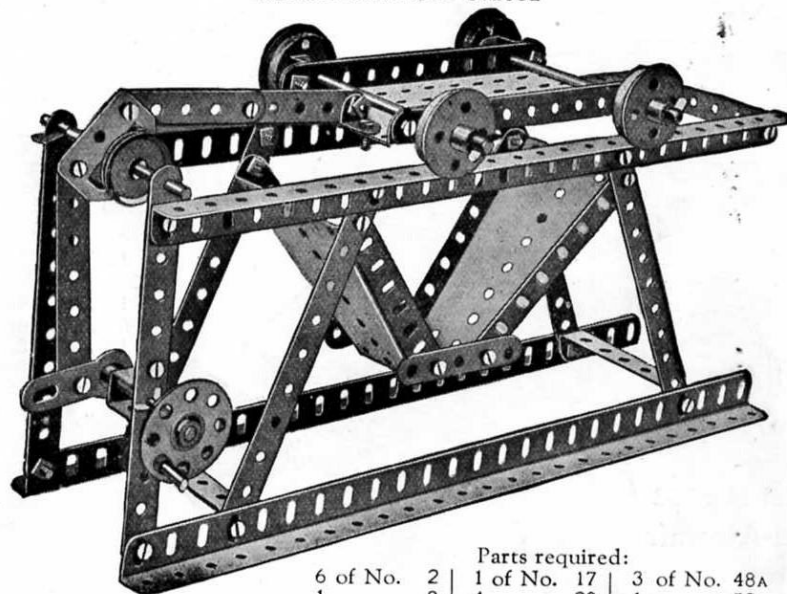
Parts required:		
6 of No.	1	
6 " "	2	
2 " "	3	
6 " "	5	
12 " "	12	
45 " "	37	
3 " "	48A	
1 " "	52	

Model No. 237 Towel Rail



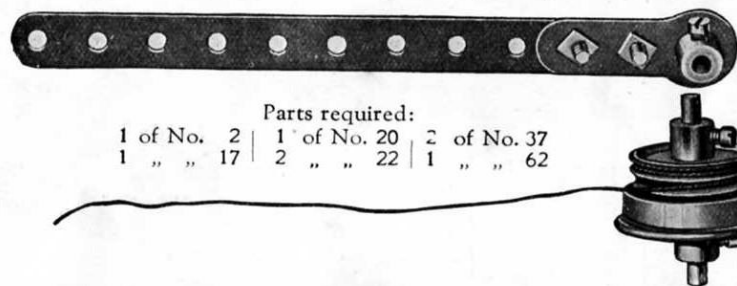
Parts required:		
2 of No.	2	
8 " "	5	
4 " "	12	
1 " "	15	
4 " "	16	
2 " "	22	
6 " "	35	
12 " "	37	

Model No. 236 Sifter



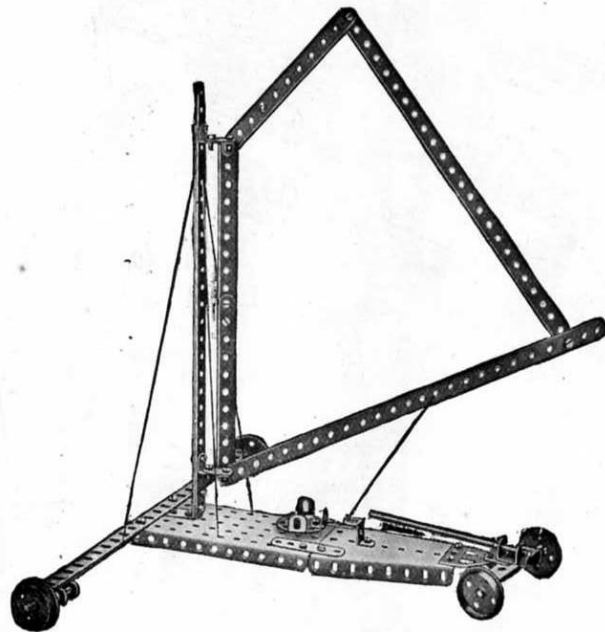
Parts required:		
6 of No.	2	
1 " "	3	
4 " "	5	
4 " "	8	
1 " "	12	
2 " "	15	
1 " "	16	
1 of No.	17	
4 " "	20	
2 " "	22	
1 " "	24	
7 " "	35	
34 " "	37	
1 " "	45	
3 of No.	48A	
1 " "	52	
2 " "	54	
1 " "	62	
1 " "	115	
4 " "	125	
1 " "	126A	

Model No. 238 Spinning Top



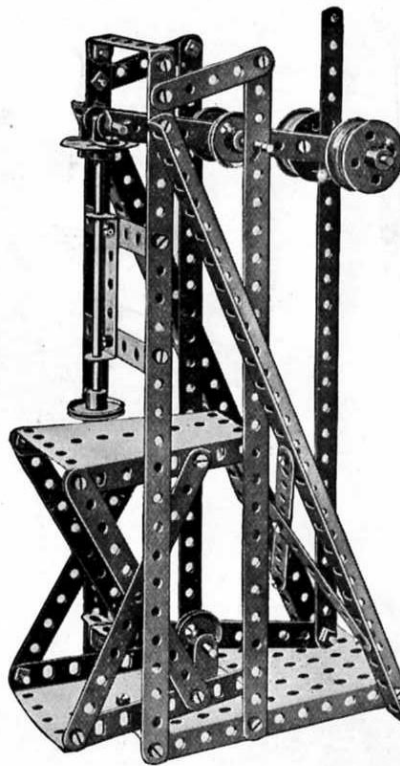
Parts required:		
1 of No.	2	
1 " "	17	
1 of No.	20	
2 " "	22	
2 of No.	37	
1 " "	62	

Model No. 239 Seashore Aeroplane



Parts required:

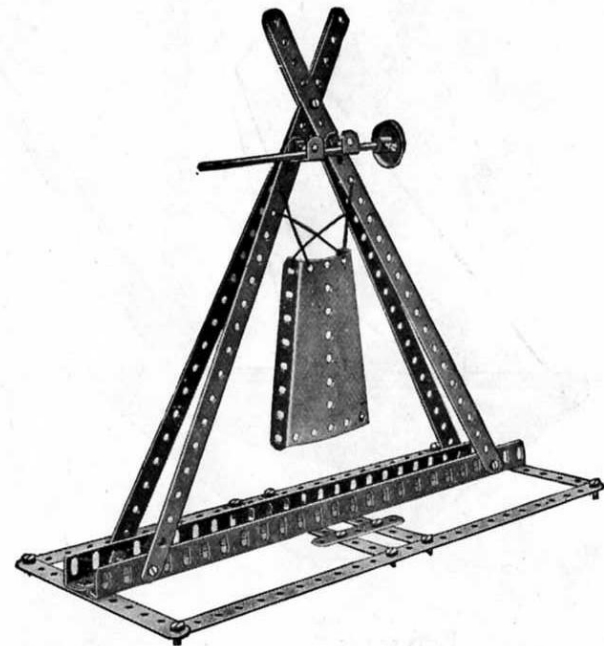
4 of No. 1	1 of No. 12A	33 of No. 37
3 " " 2	1 " " 15	1 " " 38
2 " " 5	1 " " 16	1 " " 48A
1 " " 8	2 " " 17	1 " " 52
3 " " 10	4 " " 20	1 " " 54
3 " " 11	1 " " 24	1 " " 125
7 " " 12	6 " " 35	1 " " 126A

Model No. 240
Embossing Machine

Parts required:

5 of No. 1	2 of No. 16	44 of No. 37
9 " " 2	1 " " 17	1 " " 44
2 " " 5	1 " " 18A	4 " " 48A
2 " " 8	4 " " 20	1 " " 52
2 " " 11	4 " " 22	2 " " 54
4 " " 12	1 " " 24	
1 " " 15	4 " " 35	

Model No. 241 Dinner Gong

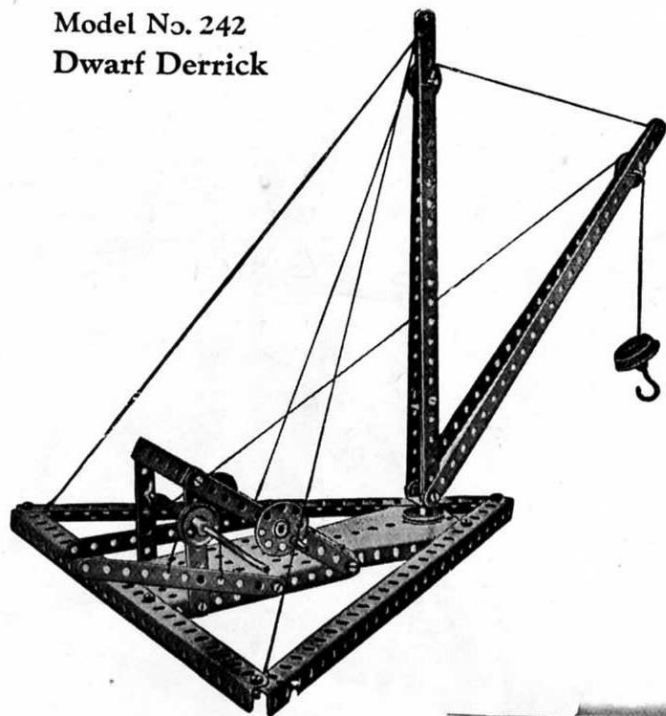


Parts required:

6 of No. 1	1 of No. 15
4 " " 2	1 " " 22
2 " " 5	27 " " 37
2 " " 8	1 " " 54
2 " " 11	

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 242
Dwarf Derrick



Parts required:

4 of No. 1	2 of No. 22A
4 " " 2	1 " " 24
2 " " 3	6 " " 35
3 " " 8	23 " " 37
2 " " 11	4 " " 38
2 " " 16	1 " " 48A
2 " " 18A	1 " " 52
1 " " 19	1 " " 54
1 " " 20	1 " " 57
4 " " 22	1 " " 115

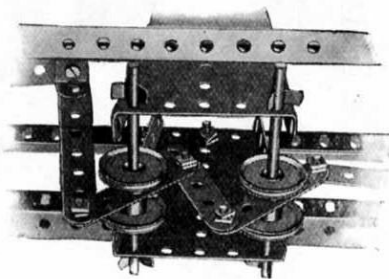
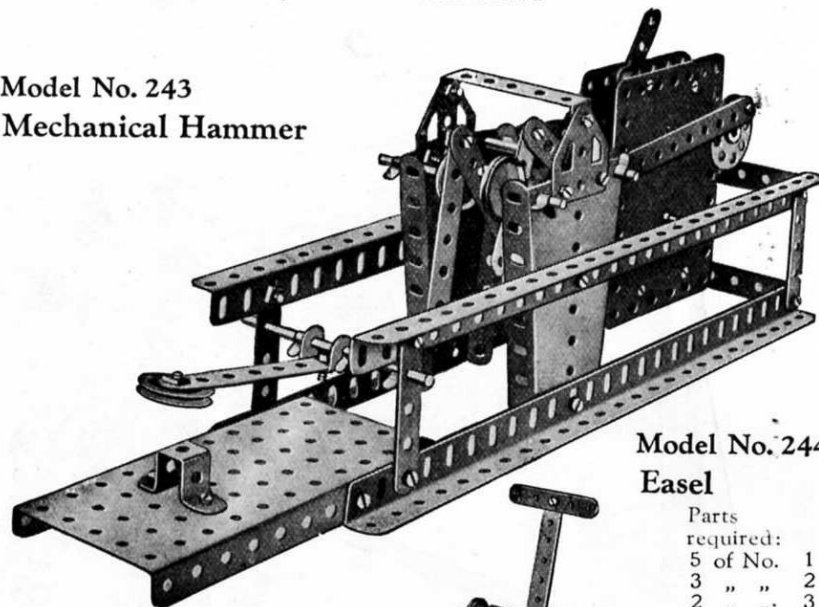


FIG. 243A

Model No. 243
Mechanical Hammer



Parts required:

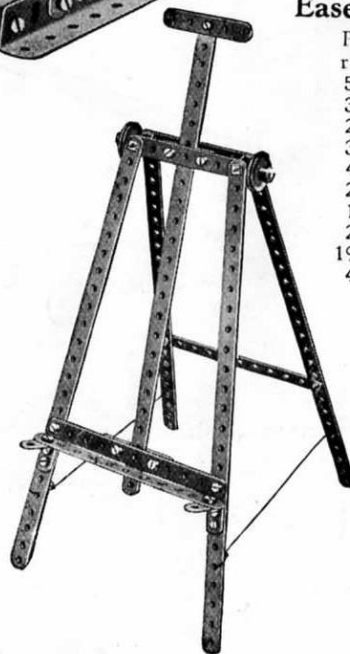
2 of No. 2	
1 " " 3	
6 " " 5	
4 " " 8	
1 " " 11	
1 " " 12	
3 " " 16	
4 " " 22	
1 " " 22A	
1 " " 24	
8 " " 35	
32 " " 37	
1 " " 45	
3 " " 48A	
1 " " 52	
2 " " 54	
2 " " 126A	

Clockwork Motor
(not included in Outfit)

Model No. 244
Easel

Parts required:

5 of No. 1	
3 " " 2	
2 " " 3	
3 " " 5	
4 " " 12	
2 " " 12A	
1 " " 15A	
2 " " 22	
19 " " 37	
4 " " 38	



Model No. 245 Extending Ladder on Running Carriage

Parts
required:

2	of No.	1
8	" "	2
1	" "	3
7	" "	5
4	" "	8
5	" "	12
4	" "	16
1	" "	18A
1	" "	19
4	" "	20
4	" "	22
1	" "	22A
1	" "	24
6	" "	35
47	" "	37
2	" "	38
1	" "	44
1	" "	45
7	" "	48A
1	" "	52
2	" "	54
1	" "	115
2	" "	125
2	" "	126A

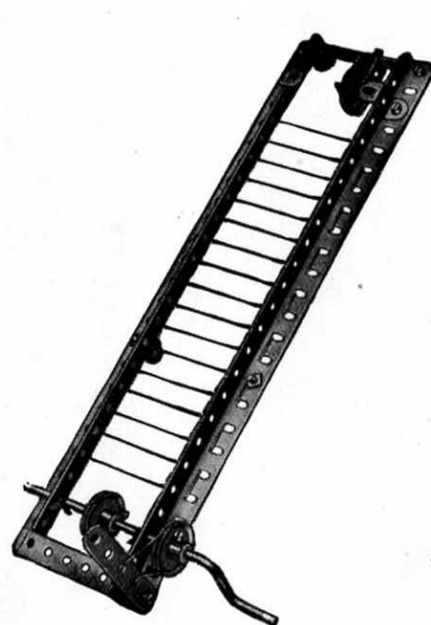
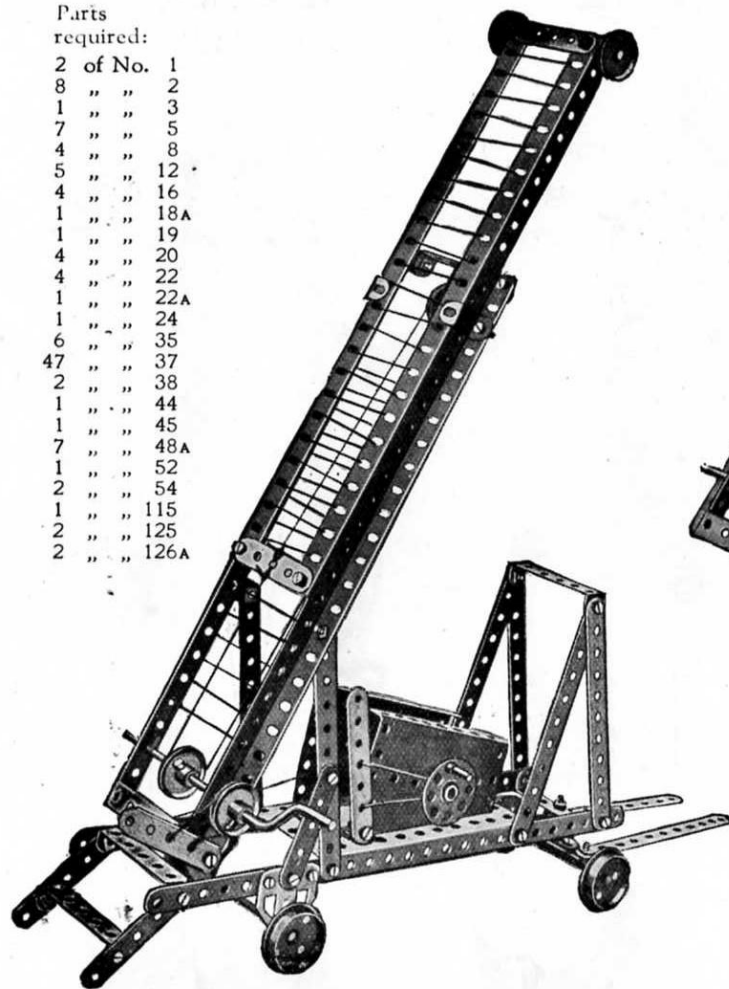


FIG. 245A

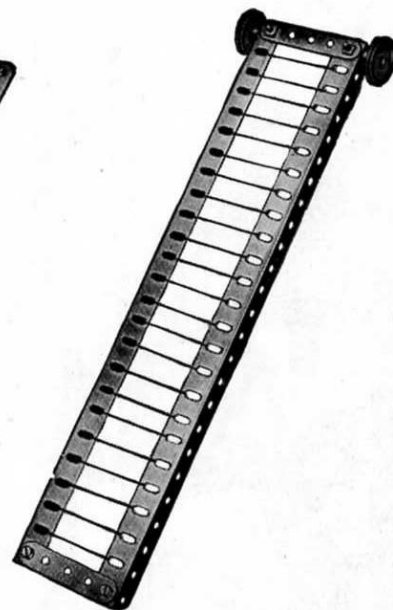


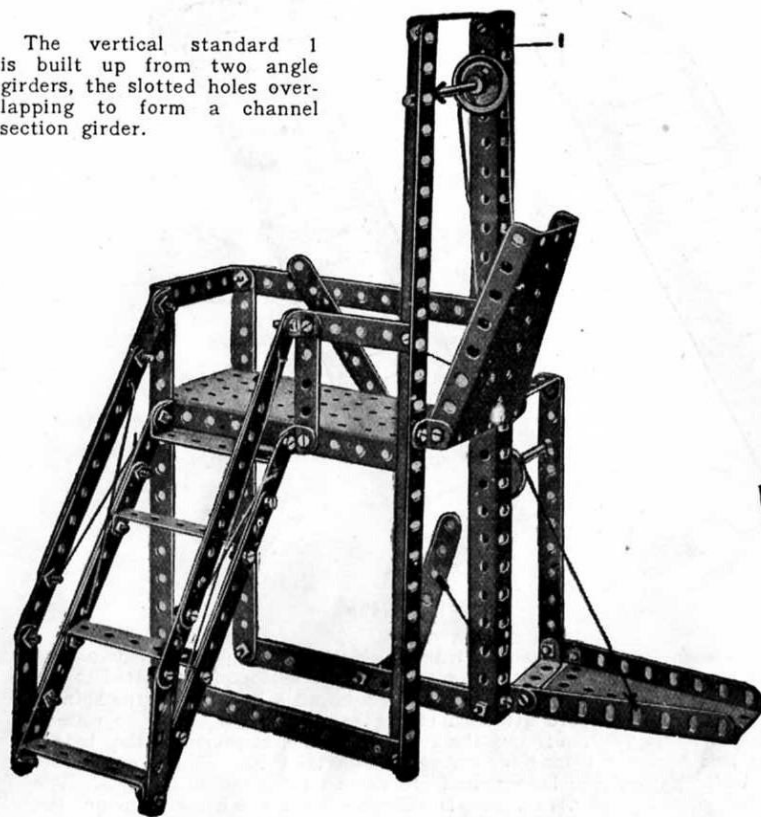
FIG. 245B

The bed of the lower carriage framework is formed by bolting two 12½" strips to the sides of a large flanged plate, and two sector plates bolted to the flanged plate by their flanges to form the sides, and a bearing for the spindle carrying the operating cord attached to the bottom of the ladder to raise it from a horizontal position; and the strips 1 form a support for the ladder when in this horizontal position. Angle brackets 2, Fig. 245A, form pivots for the lower part of the ladder, and are carried from the supports 3. The upper part of the ladder, Fig. 245, is slideably guided and retained on the lower ladder by reversed brackets 4. The extension of the ladder is effected by the cranked spindle round a pulley on which (and another pulley at the top of the framework) the cord is passed, the ends being secured to the lower part of the slideable ladder.

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

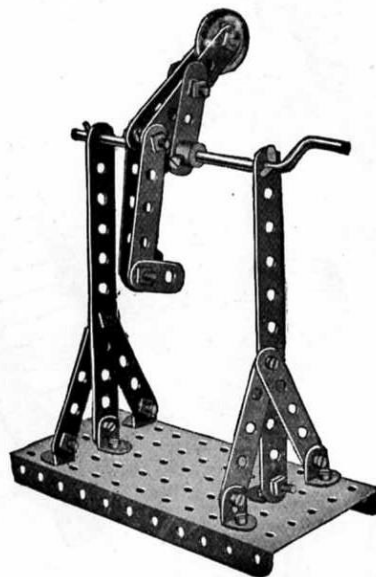
Model No. 246 Ferry Gangway

The vertical standard 1 is built up from two angle girders, the slotted holes overlapping to form a channel section girder.



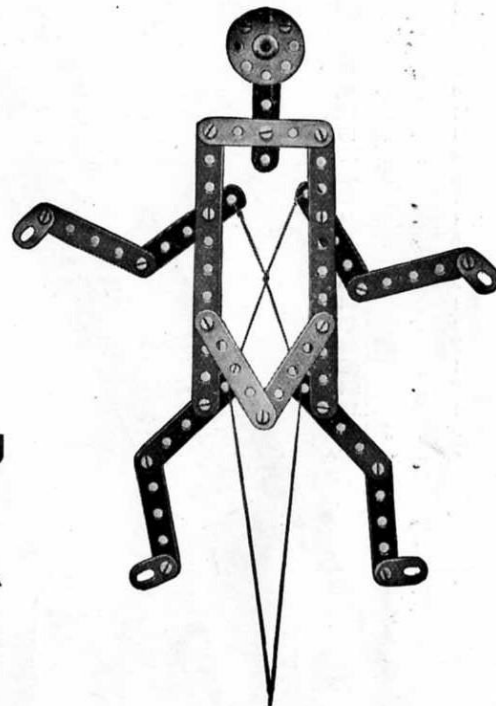
Parts required:					
14	of No.	2	6	of No.	12
2	"	3	2	"	16
6	"	5	2	"	22
3	"	8	2	"	35
2	"	10	54	"	37
			1	of No.	45
			8	"	48A
			1	"	52
			2	"	54

Model No. 247 The Acrobat



Parts required:					
2	of No.	2	1	of No.	22A
8	"	5	2	"	35
2	"	10	21	"	37
6	"	12	1	"	52
1	"	19	2	"	62

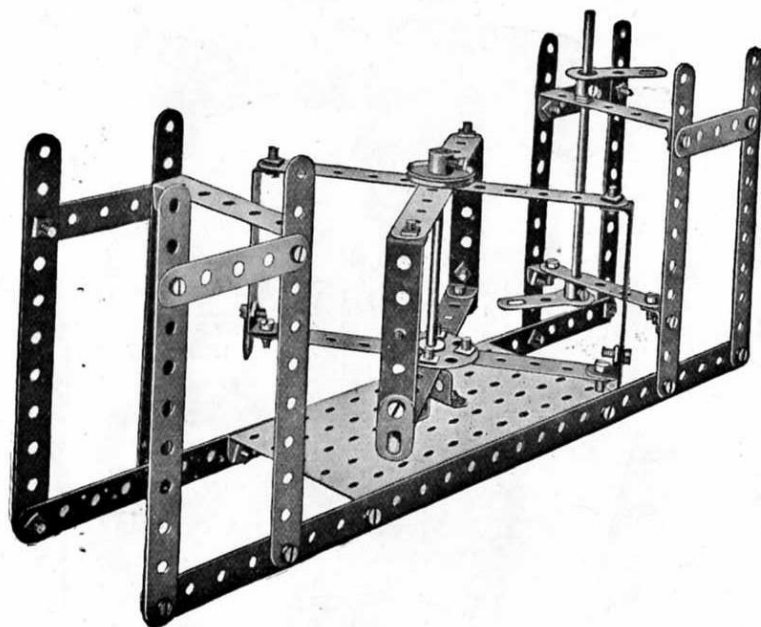
Model No. 248 Jumping Jack



Parts required:			
2	of No.	2	
12	"	5	
4	"	10	
1	"	24	
18	"	37	

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 249 Turnstile



Parts required:			
2 of No.	1	1 of No.	24
10 "	2	42 "	37
9 "	5	2 "	38
4 "	10	1 "	45
2 "	12	6 "	48A
1 "	15	1 "	52
1 "	15A	2 "	62
2 "	22		

Model No. 251
Cutting
Machine

Parts required:	
7 of No.	2
1 "	3
1 "	5
4 "	12
14 "	37
1 "	48A
1 "	52



Model No. 250
Chair for Wounded

Parts required:	
6 of No.	2
2 "	3
10 "	5
2 "	11
2 "	16
4 "	22
21 "	37
2 "	48A
1 "	52



Model No. 252
Magic Sector Plates

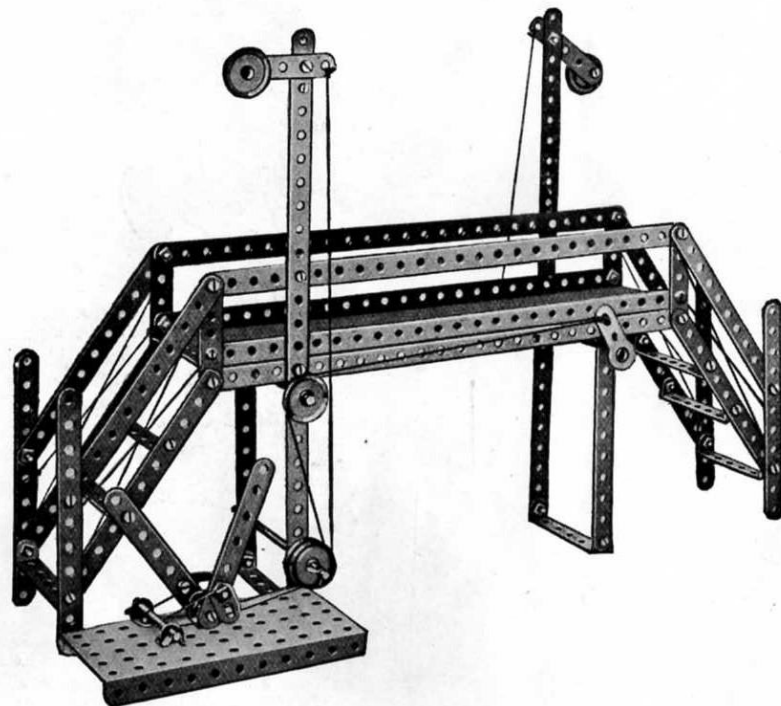
Parts required:	
2 of No.	11
1 "	17
2 "	35
6 "	37
2 "	54



When the cord is held vertically the magic sector plates will fall or stop at the bidding of the owner. If the cord is held without tension the plates will fall, but the instant the cord is tightened they will stop dead. The cord is wrapped once around the rod which passes through the centre holes of the sector plates.

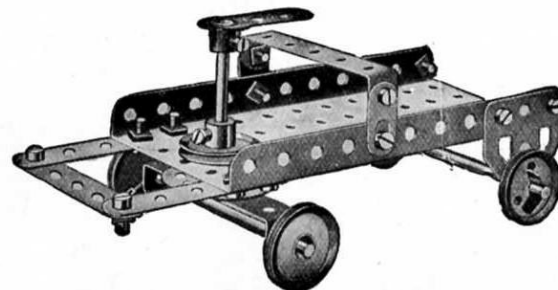
These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

Model No. 253
Railway Foot Bridge and Signals



Parts required:					
4 of No	1	1 of No.	11	2 of No.	22A
14 " "	2	2 " "	12	6 " "	35
2 " "	3	1 " "	15A	50 " "	37
8 " "	5	2 " "	16	8 " "	48A
2 " "	8	1 " "	17	1 " "	52
2 " "	10	3 " "	22	1 " "	62

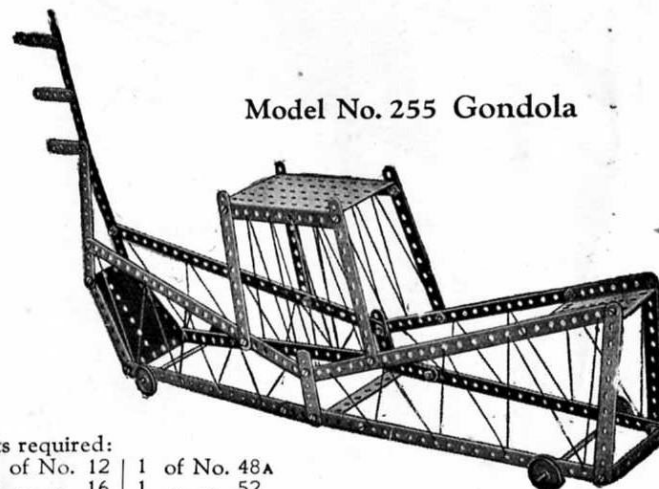
Model No. 254 Motor Van



Parts required:

3 of No.	5	2 of No.	22A	2 of No.	48A
2 " "	10	1 " "	24	1 " "	52
2 " "	16	2 " "	35	1 " "	62
1 " "	17	16 " "	37	2 " "	126A
3 " "	22	2 " "	38		

Model No. 255 Gondola

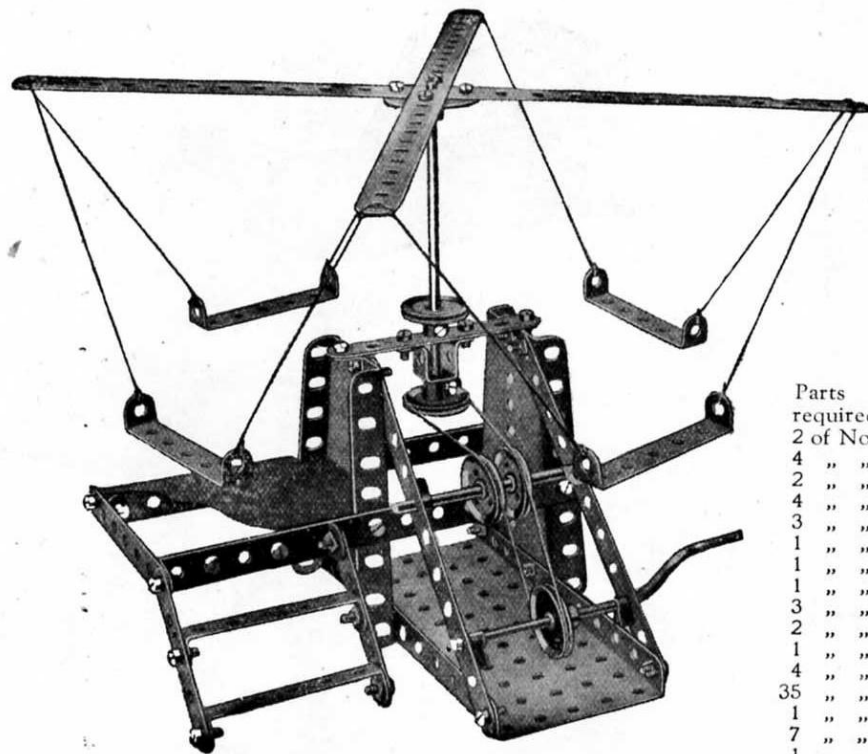


Parts required:					
8 of No.	1	2 of No.	12	1 of No.	48A
9 " "	2	2 " "	16	1 " "	52
1 " "	3	4 " "	22	2 " "	54
5 " "	5	29 " "	37		

These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A.

39

Model No. 256 Roundabout



Parts required:	
2 of No.	1
4 " "	2
2 " "	3
4 " "	5
3 " "	12
1 " "	15
1 " "	16
1 " "	19
3 " "	22
2 " "	22A
1 " "	24
4 " "	35
35 " "	37
1 " "	45
7 " "	48A
1 " "	52
2 " "	54

Model No. 257 Beam Scales



Parts required:	
5 of No.	1
6 " "	2
7 " "	5
4 " "	8
6 of No.	12
2 " "	17
2 " "	22A
6 " "	35
48 " "	37
5 of No.	48A
1 " "	52
2 " "	54
2 " "	126A

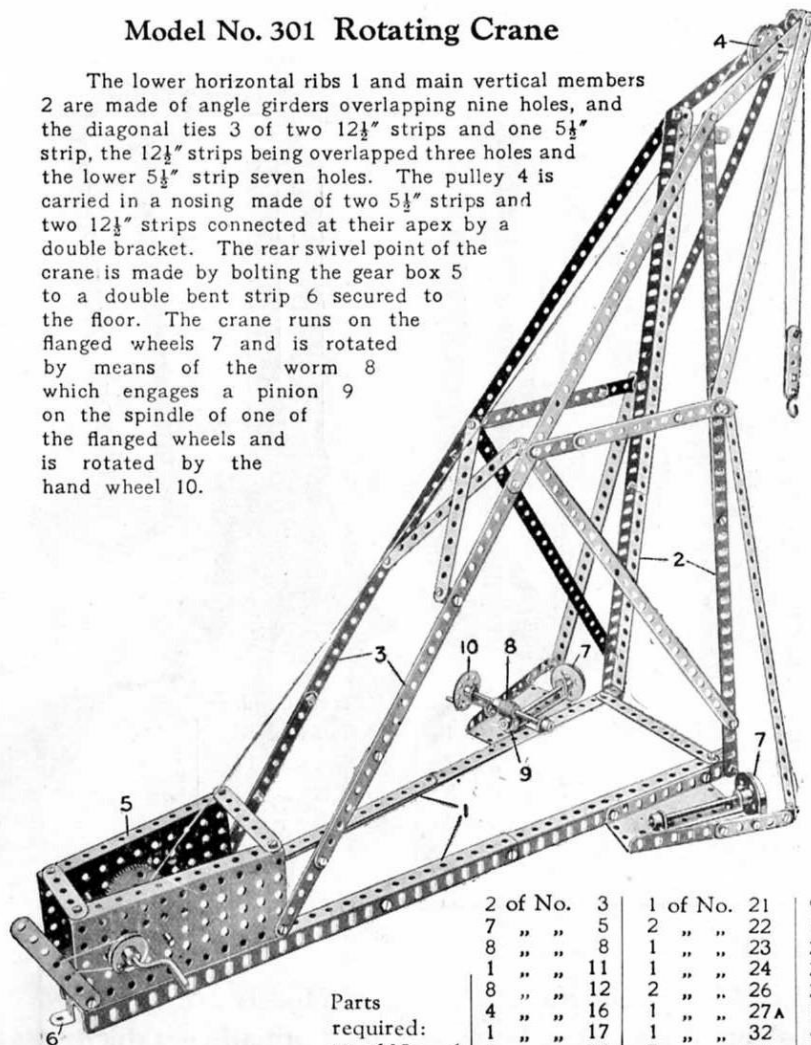
HOW TO CONTINUE

This completes the Models which may be made with MECCANO Outfit No. 2. The next Models are a little more advanced, requiring a number of extra parts to construct them. The necessary parts are all contained in a No. 2A Accessory Outfit, the price of which will be found in the List at the end of the Manual.

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

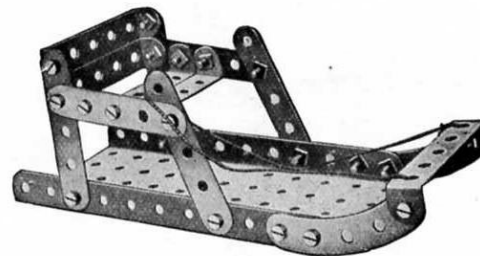
Model No. 301 Rotating Crane

The lower horizontal ribs 1 and main vertical members 2 are made of angle girders overlapping nine holes, and the diagonal ties 3 of two $12\frac{1}{2}$ " strips and one $5\frac{1}{2}$ " strip, the $12\frac{1}{2}$ " strips being overlapped three holes and the lower $5\frac{1}{2}$ " strip seven holes. The pulley 4 is carried in a nosing made of two $5\frac{1}{2}$ " strips and two $12\frac{1}{2}$ " strips connected at their apex by a double bracket. The rear swivel point of the crane is made by bolting the gear box 5 to a double bent strip 6 secured to the floor. The crane runs on the flanged wheels 7 and is rotated by means of the worm 8 which engages a pinion 9 on the spindle of one of the flanged wheels and is rotated by the hand wheel 10.



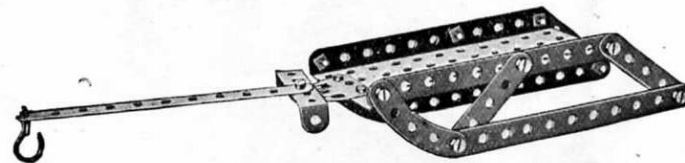
Parts required:	2 of No. 3		1 of No. 21		9 of No. 38	
	10 of No.	1	7 " "	5	1 " "	45
	11 " "	2	8 " "	8	2 " "	48A
			1 " "	11	2 " "	52
			1 " "	12	2 " "	54
			4 " "	16	1 " "	57
			1 " "	17	4 " "	59
			1 " "	19	1 " "	115
			2 " "	20	2 " "	125
			70 " "	37		

Model No. 302 Toboggan



Parts required:	
6 of No.	5
20 " "	37
5 " "	48A
1 " "	52
2 " "	90

Model No. 303 Horse Sleigh



Parts required:

3 of No. 2	13 of No. 37	1 of No. 57
4 " " 5	1 " " 48A	2 " " 90
1 " " 23	1 " " 52	1 " " 126A

Model No. 304 Sleigh



Parts required:

2 of No. 2	
4 of No. 5	1 of No. 52
10 " " 37	2 " " 90

This Model can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

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Model No. 305 Tower Wagon

Parts required:		
6 of No.		
1		1
2		4
10		5
8		8
2		12
2		15A
4		16
4		20
1		22A
1		24
1		26
1		32
4		35
72		37
8		38
10		48A
2		52
3		59
1		98
2		100
1		115
2		126A

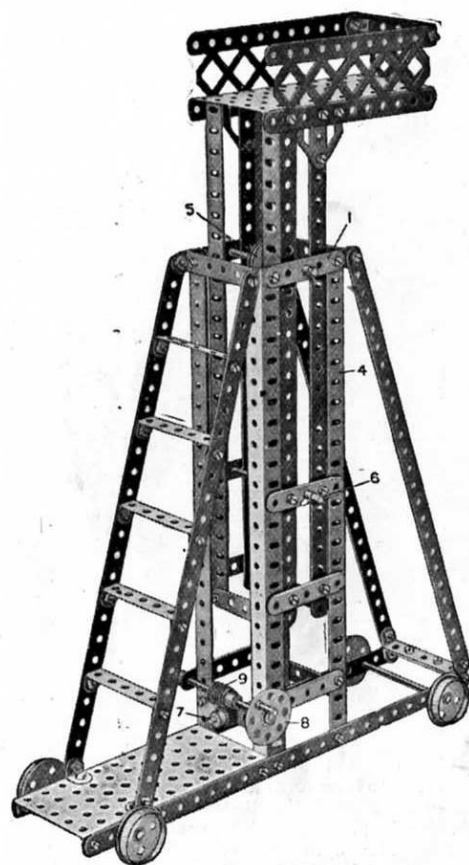


FIG. 305

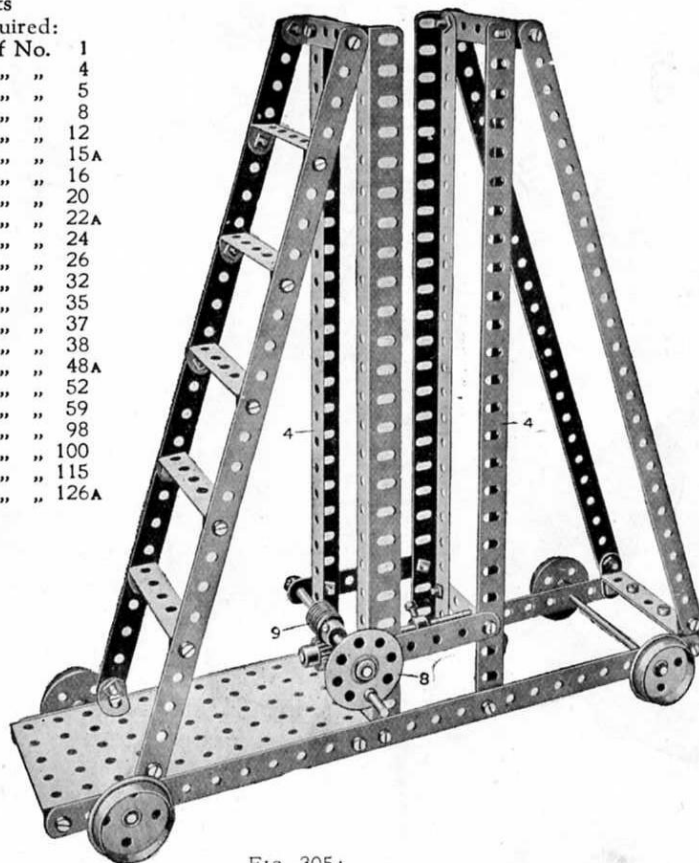


FIG. 305A

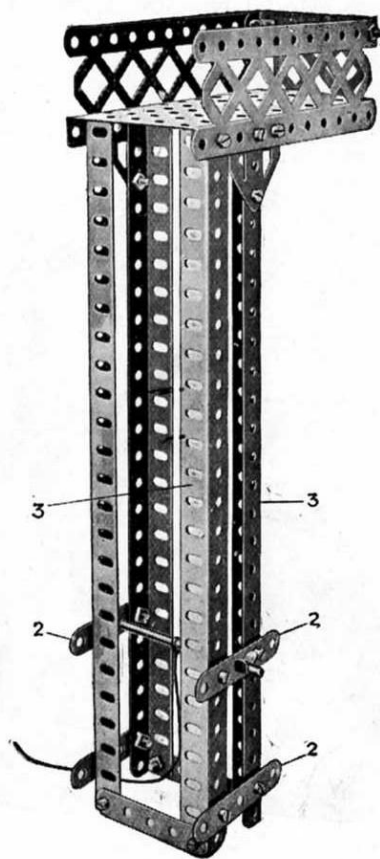
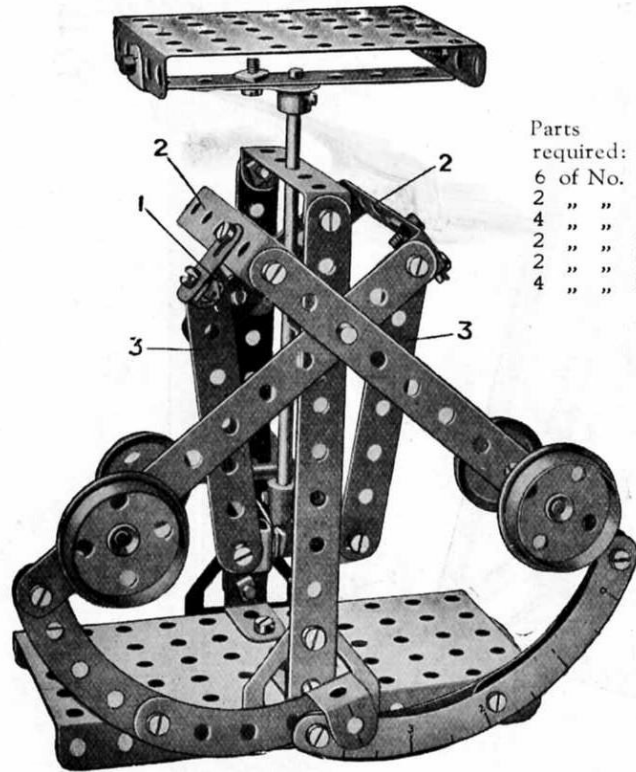


FIG. 305B

Begin the construction of this model by building up the platform, Fig. A, the tie strips 1 being left off as shown in order to be able to insert the rising and falling tower, Fig. B. The strips are then bolted on. The guide strips 2 are bolted to the girder 3 of the tower with washers beneath the strips. This gives the necessary clearance and enables the strips to rise easily up the faces of the girders 4 of the fixed lower part of the tower. The tower is raised by means of a cord which passes over a pulley 5 and is fastened to a rod 6, the other end of the cord winding on a rod 7 rotated by a hand wheel 8 on the spindle of the worm 9.

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 306 Letter Balance



Parts
required:

6 of No.	2
2 "	3
4 "	5
2 "	10
2 "	11
4 "	12

The connection at 1 of the rocking arms 2 to the thrust strips 3 is locknuttied to give a free pivotal action, and similarly the pivotal connections 5 of the strips 3 to the lever strips 4 are locknuttied to give free play.

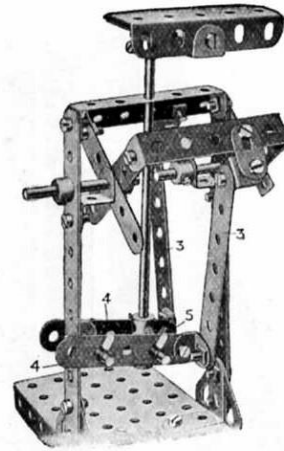
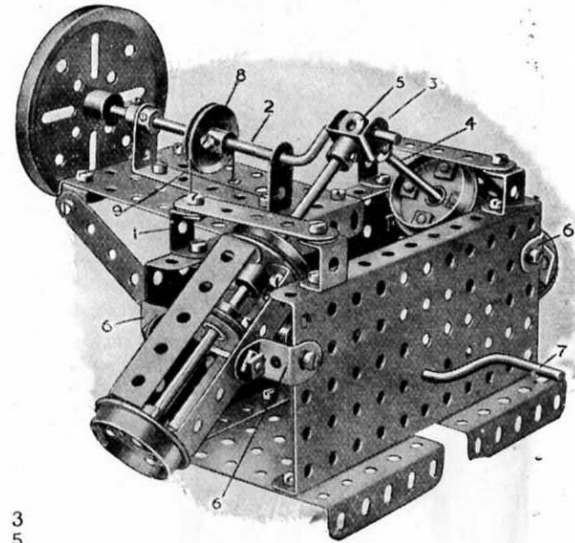


FIG. 306A

2 of No.	12A
1 "	15
2 "	17
2 "	18A
2 "	20
2 "	22
4 "	35
40 "	37
6 "	38
3 "	48A
1 "	48B
1 "	52
1 "	53
4 "	59
1 "	62
1 "	63
4 "	90
2 "	125
2 "	126A

Model No. 307 Oscillating Steam Engine



Parts
required:

2 of No.	3
2 "	5
4 "	11
4 "	12
2 "	12A
2 "	15
2 "	19
1 "	19B
4 "	20
4 "	22
3 "	35
50 "	37
6 "	48A
2 "	52
3 "	53
2 "	59
1 "	63
1 "	102
1 "	116
4 "	125

The piston rod 1 of one cylinder is pivotally connected to the crank rod 2 by means of a fork piece 3, and the piston rod 4 of the other cylinder is pivoted to the crank rod by a coupling 5. The cylinders consisting of four strips are enclosed by flanged wheels at the ends, and are pivoted on $\frac{1}{2}$ " reversed brackets 6. The model is operated from the handle rod 7, a pulley on the rear end of which is coupled to the pulley 8 by a cord 9.

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 308 Railway Wagon Swivel Crane

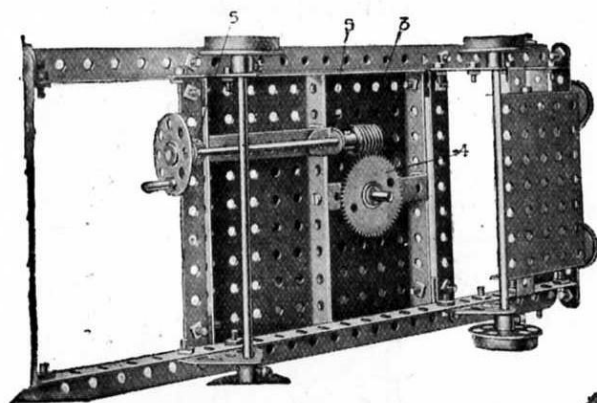
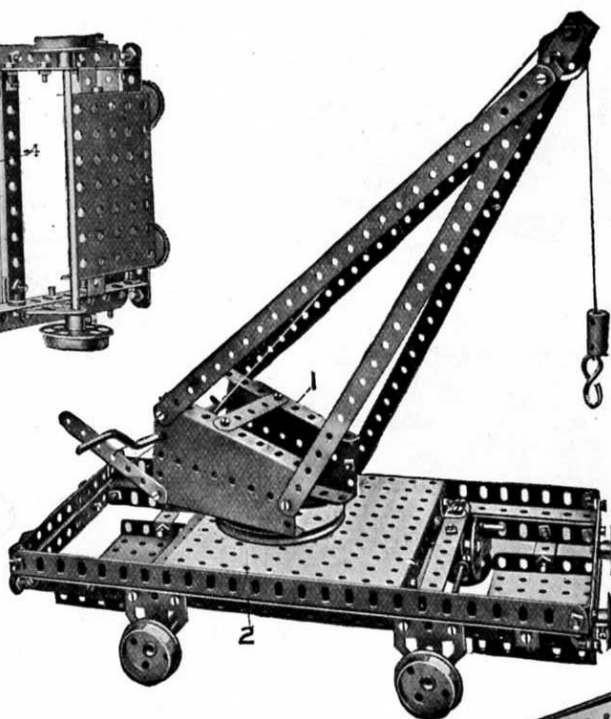


FIG. 308A

The construction of the base in this model may be followed from the illustration. It will be seen that each side consists of two angle girders bolted together and connected at the end to $5\frac{1}{2}$ " strips, while two $3\frac{1}{2}$ " \times $2\frac{1}{2}$ " flanged plates are secured between the lower angle girders by means of $\frac{1}{2}$ " reversed angle brackets. The main platform is built up from $5\frac{1}{2}$ " \times $2\frac{1}{2}$ " flanged plates resting upon the upper girders.

The flanges of the sector plates 1 are bolted to the 3" pulley wheel 2 upon which the crane swivels, and the spindle of the pulley wheel is rotated by the worm 3 engaging the gear wheel 4 (Fig. 308A). In order to bring the worm centrally over the teeth of the gear wheel 4, washers are placed beneath the angle brackets 5 in which the spindle of the worm is journaled.

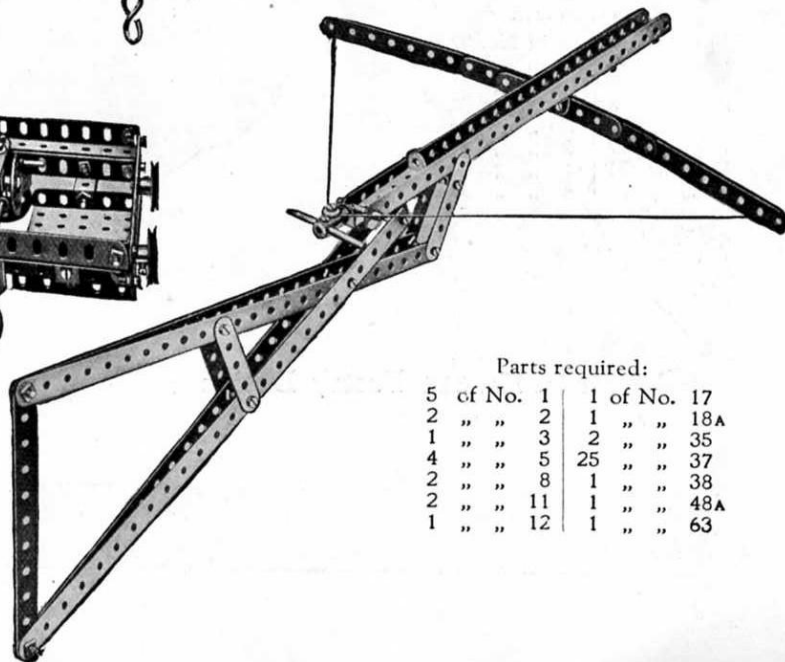
Several improvements will probably suggest themselves in connection with this model, such as the addition of ball-bearings in the swivel base of the crane (see Standard Mechanism Nos. 104 and 105), train couplings, and Meccano spring buffers in place of the 1" pulleys shown.



Parts required:

4	of No.	1	1	of No.	19	2	of No.	38
6	"	2	1	"	19B	2	"	48A
1	"	3	4	"	20	2	"	52
2	"	5	4	"	22	2	"	53
4	"	8	1	"	22A	2	"	54
1	"	11	1	"	24	1	"	57
14	"	12	1	"	27A	3	"	59
2	"	15	1	"	32	1	"	63
1	"	15A	3	"	35	1	"	115
2	"	17	70	"	37	4	"	125
						4	"	126A

Model No. 309 Crossbow

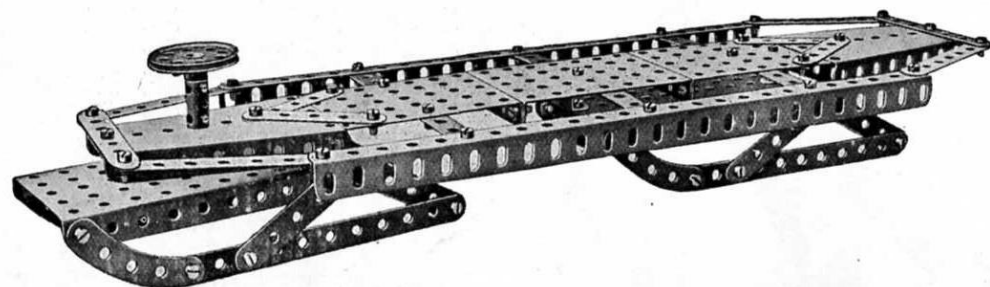


Parts required:

5	of No.	1	1	of No.	17
2	"	2	1	"	18A
1	"	3	2	"	35
4	"	5	25	"	37
2	"	8	1	"	38
2	"	11	1	"	48A
1	"	12	1	"	63

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 310 Bob Sleigh



Parts required:

7 of No.	2	55 of No.	37
6 " "	3	2 " "	38
12 " "	5	1 " "	45
2 " "	8	2 " "	52
2 " "	11	3 " "	53
1 " "	17	2 " "	54
1 " "	21	1 " "	63
1 " "	24	4 " "	90

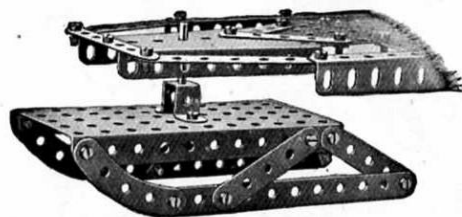
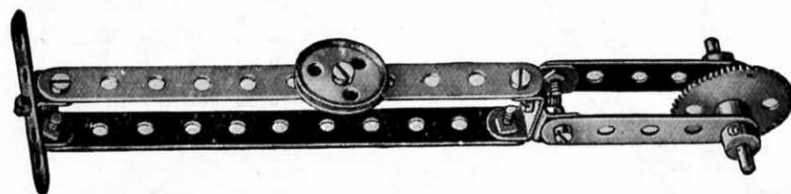


Fig. 310A

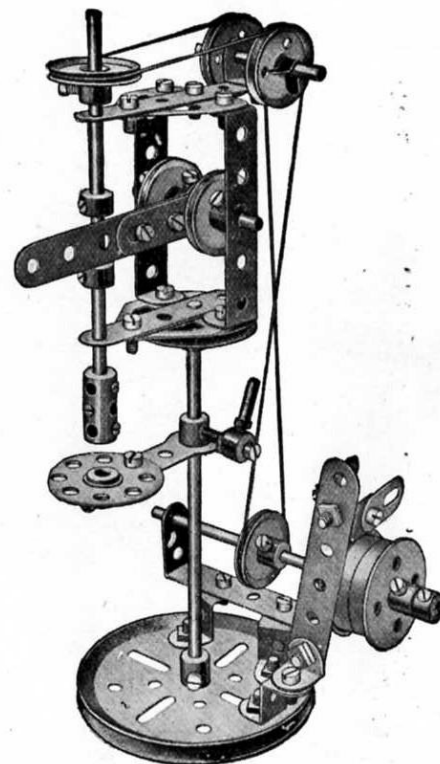
Model No. 311 Pastry Designer



Parts required:

2 of No.	2
3 " "	5
3 " "	11
1 " "	17
1 " "	22A
1 " "	27A
9 " "	37
2 " "	59

Model No. 312 Drilling Machine

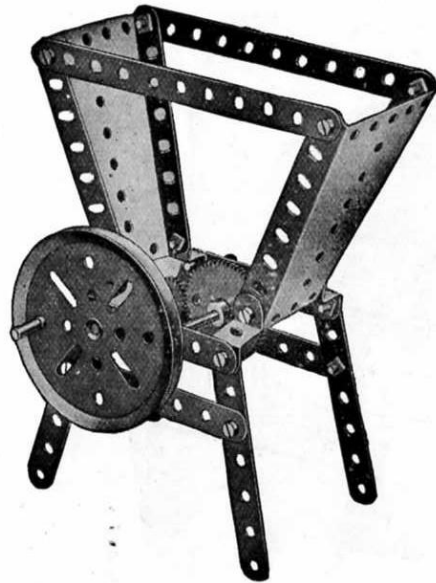


Parts required:

2 of No.	4	2 of No.	20	2 of No.	48A
2 " "	5	1 " "	21	5 " "	59
2 " "	10	4 " "	22	2 " "	62
2 " "	11	2 " "	22A	1 " "	63
1 " "	12	1 " "	24	1 " "	111
1 " "	15	2 " "	35	1 " "	115
2 " "	15A	21 " "	37	3 " "	125
2 " "	17	1 " "	44	2 " "	126A
1 " "	19B	1 " "	46		

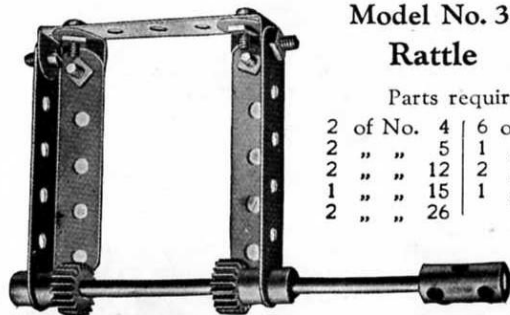
These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 313 Coffee Grinder



Parts
required:

2 of No. 2	
6	3
2	4
2	16
1	19B
1	26
1	27A
16	37
2	54
3	59
1	115
4	125



Model No. 315 Rattle

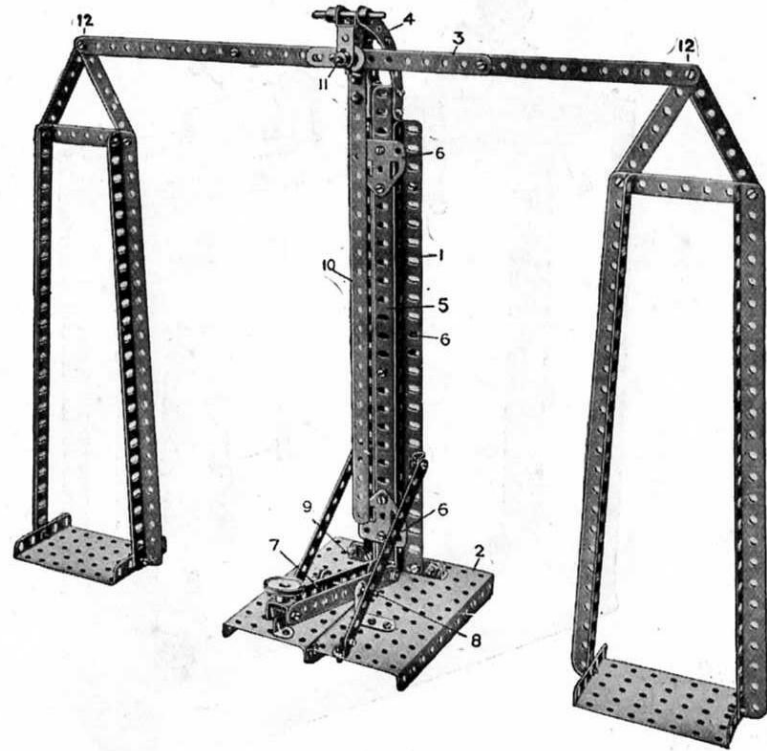
Parts required:

2 of No. 4		6 of No. 37	
2	5	1	48A
2	12	2	59
1	15	1	63
2	26		

Model No. 314 Demonstration Scales

Parts
required:

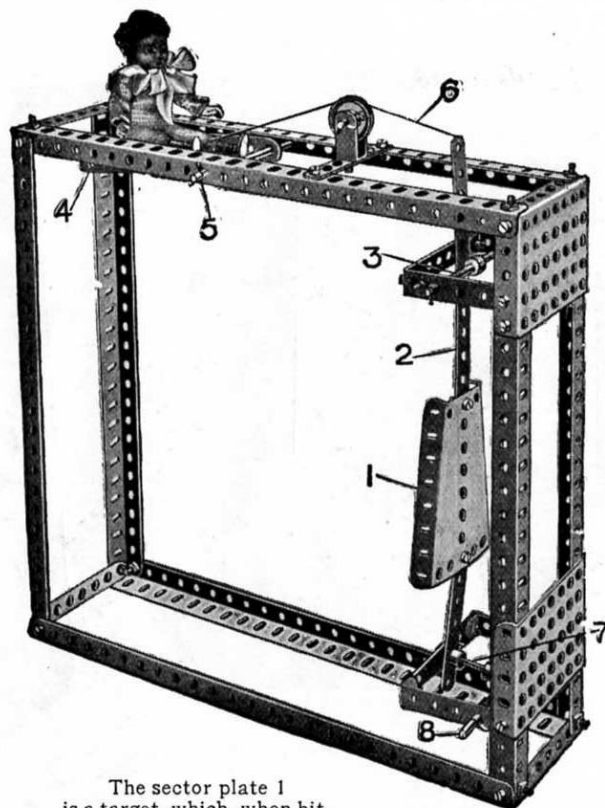
3 of No. 1	
4	2
6	3
1	4
2	5
8	8
4	11
6	12
2	12A
2	17
1	18A
1	22
2	35
58	37
1	44
2	52
2	53
2	59
2	62
4	90
1	125
3	126A



The only feature of this model which needs description is the standard, which is built up of two angle girders 1 bolted to the base 2 by angle brackets and spaced apart at the top by a $2\frac{1}{2}$ " strip obliquely disposed. The balance lever 3 is pivotally carried in curved strips 4 bolted to the top of two angle girders 5 sliding between the girders 1. The girders 5 are themselves bolted together and in order to guide them as they slide vertically flat trunnions 6 are bolted at the front and rear. The balance is raised by depressing the lever 8 pivoted at 9 and pivotally connected at 11 to the vertically sliding girders 5. The indicator 10 is bolted to a crank at the rear, the boss of which is fitted on the pivot rod 11. The connections at 12 are lock-nutted to allow free action.

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 316 Drop the Nigger



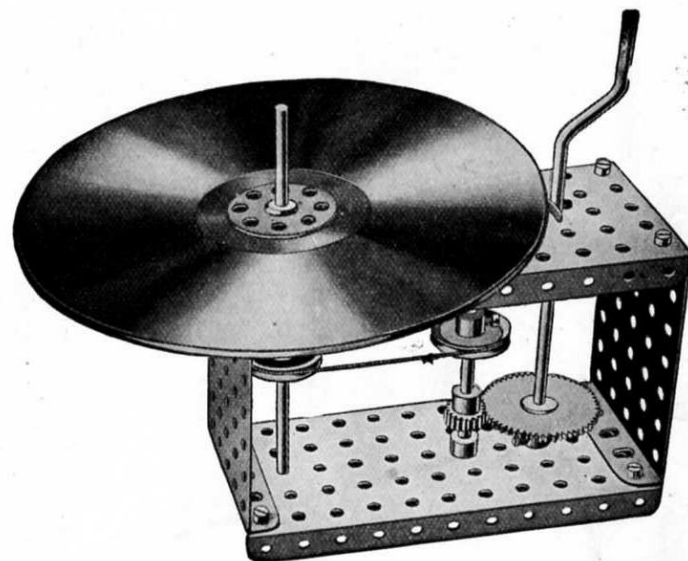
Parts required:

1	of No.	1
6	" "	3
8	" "	8
1	" "	12
3	" "	15A
1	" "	17
1	" "	22
6	" "	35
33	" "	37
1	" "	44
4	" "	48A
2	" "	53
2	" "	54
3	" "	59
4	" "	63

The sector plate 1 is a target, which, when hit, allows the nigger to be dropped.

The plate 1 is carried on the strip 2 pivoted at 3, and the weight of the nigger supported on another sector plate 4 pivoted at 5 by means of the cord 6 keeps the lower end of the strip 2 hard against a short rod 7 pivoted at 8. When the target is hit and knocked back the rod 7 is released and falls about its pivot, allowing the sector plate 4 with the nigger to drop.

Model No. 317 Newton's Disc



Parts required:

1 of No. 15	1 of No. 24	8 of No. 37
1 " " 15A	1 " " 26	2 " " 52
1 " " 19	1 " " 27A	2 " " 53
2 " " 22	2 " " 35	4 " " 59

This is a model to show that white light is made up of the three primary colours—red, yellow, blue. Sectors of these three colours are mounted or painted on the disc, which, if then quickly rotated, shows as white.

This Model can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

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Model No. 318 Railway Breakdown Crane

Parts required:

2 of No. 1	1 of No. 23	1 of No. 54
4 " " 2	1 " " 24	1 " " 57
4 " " 11	1 " " 26	2 " " 59
1 " " 12	1 " " 32	1 " " 63
3 " " 15A	4 " " 35	1 " " 115
1 " " 16	36 " " 37	4 " " 126A
2 " " 17	5 " " 38	1 " " 147A
1 " " 19	2 " " 48A	1 " " 147B
4 " " 19B	2 " " 48B	1 " " 148
1 " " 20	2 " " 52	
1 " " 22A	3 " " 53	

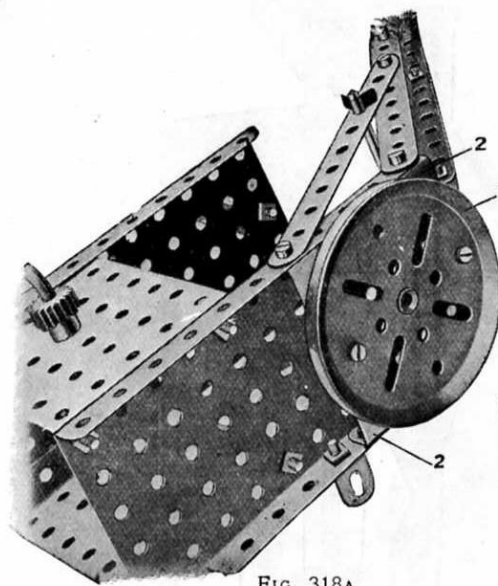
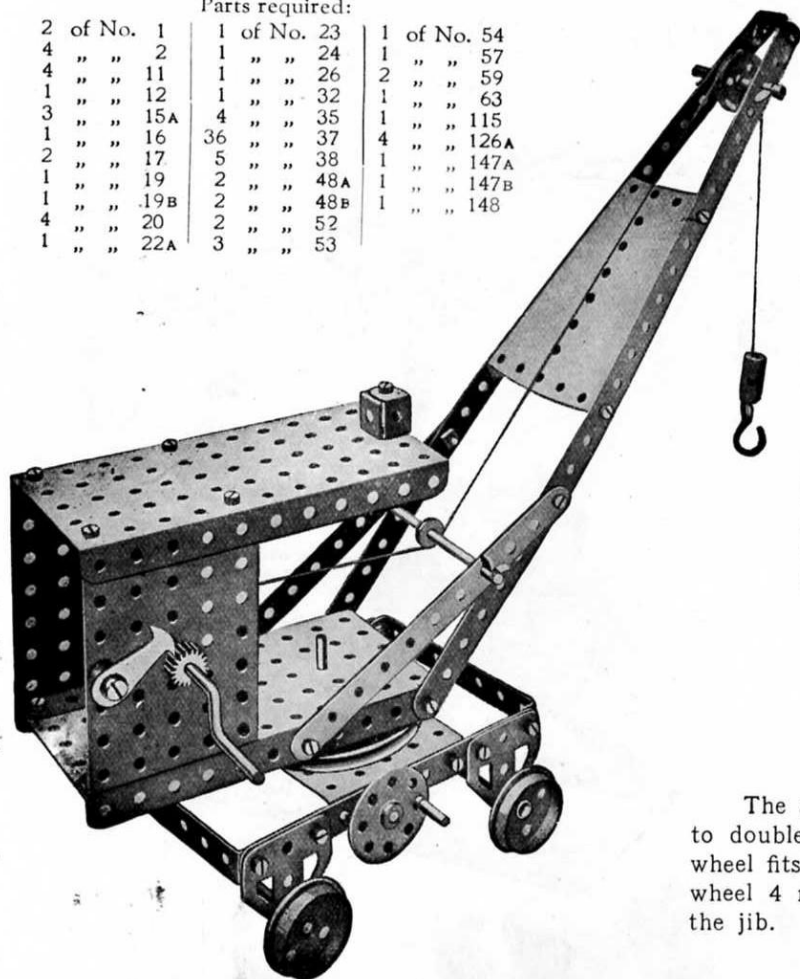


FIG. 318A

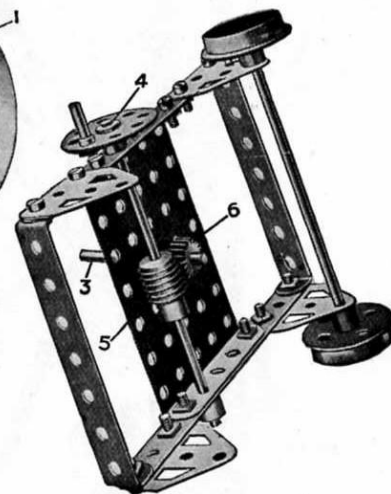


FIG. 318B

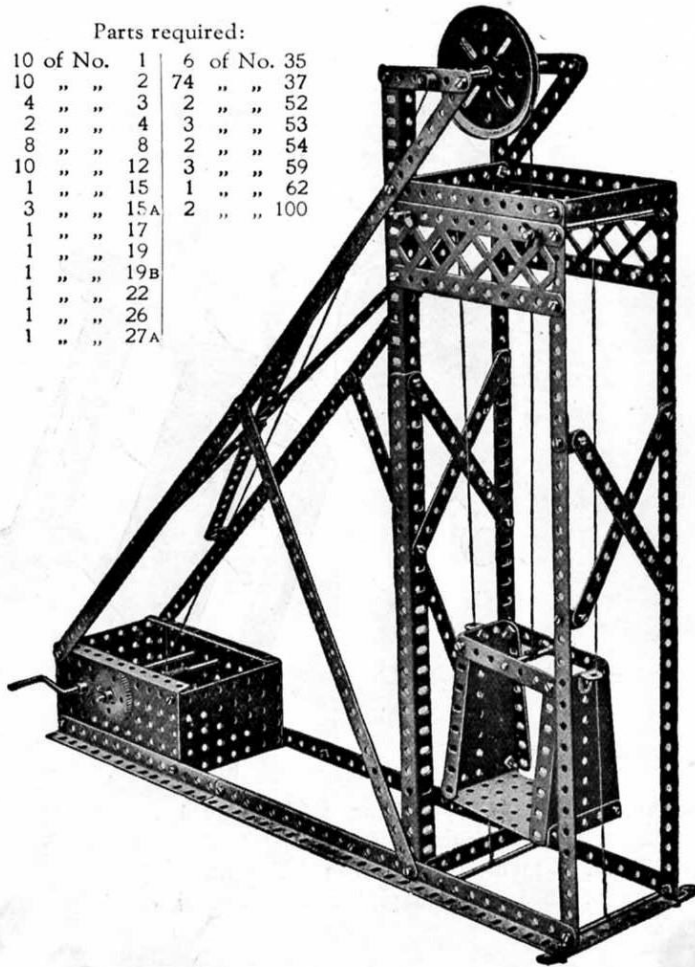
The swivelling action is obtained by bolting a 3" pulley 1 to double angle strips 2 on the jib frame. The boss of this wheel fits over the rod 3 and is secured to the rod. The hand wheel 4 rotates the worm 5, engaging the pinion 6 to swivel the jib.

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 319 Pit Head Gear

Parts required:

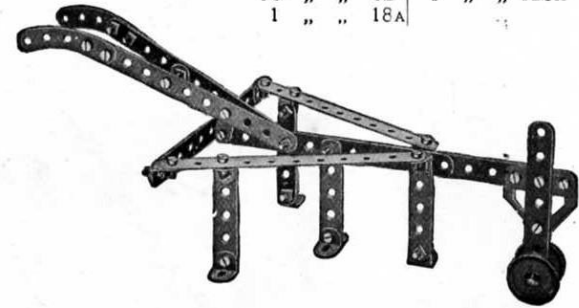
10 of No. 1	6 of No. 35
10 " " 2	74 " " 37
4 " " 3	2 " " 52
2 " " 4	3 " " 53
8 " " 8	2 " " 54
10 " " 12	3 " " 59
1 " " 15	1 " " 62
3 " " 15A	2 " " 100
1 " " 17	
1 " " 19	
1 " " 19B	
1 " " 22	
1 " " 26	
1 " " 27A	



Model No. 320 Scarifier

Parts required:

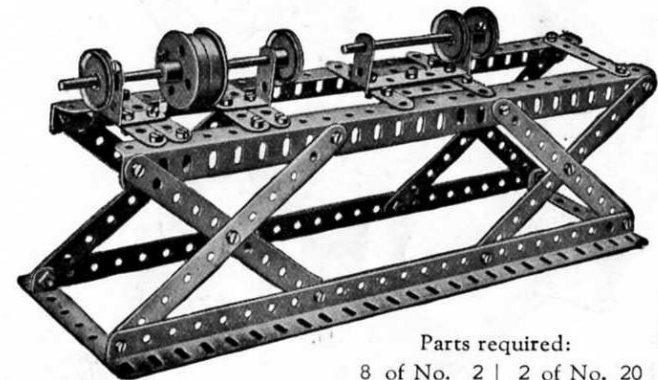
7 of No. 2	2 of No. 22
1 " " 3	31 " " 37
4 " " 5	2 " " 38
1 " " 10	2 " " 90
14 " " 12	1 " " 126A
1 " " 18A	



Model No. 321 Lathe

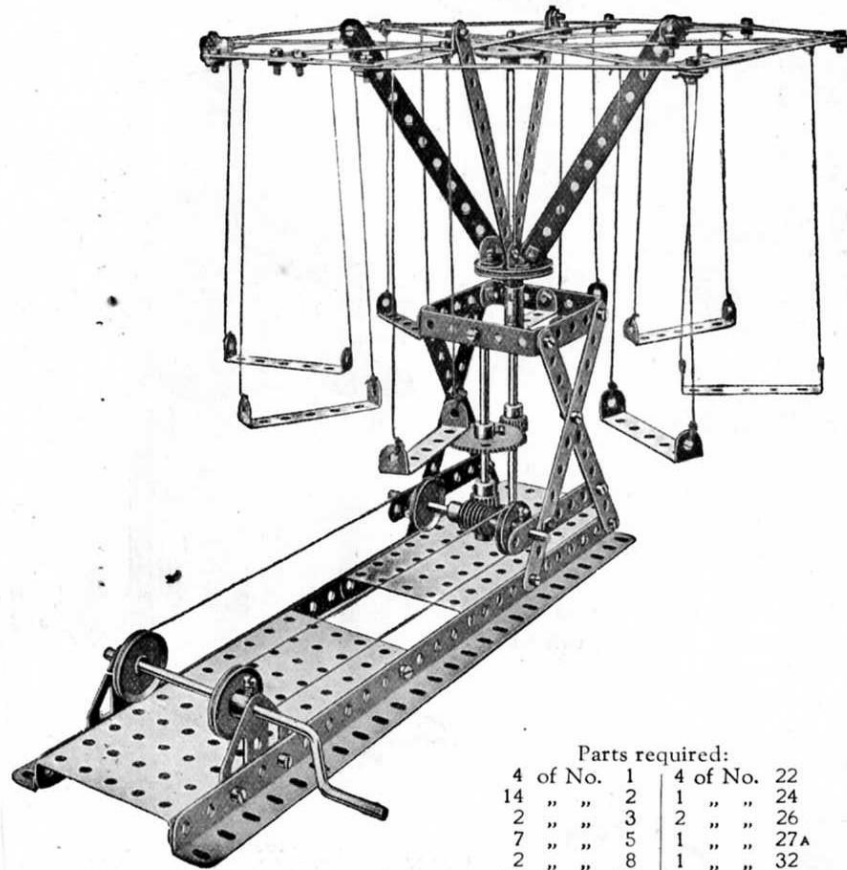
Parts required:

8 of No. 2	2 of No. 20
10 " " 5	1 " " 22
4 " " 8	41 " " 37
2 " " 12A	1 " " 46
1 " " 15A	2 " " 48A
1 " " 16	



These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

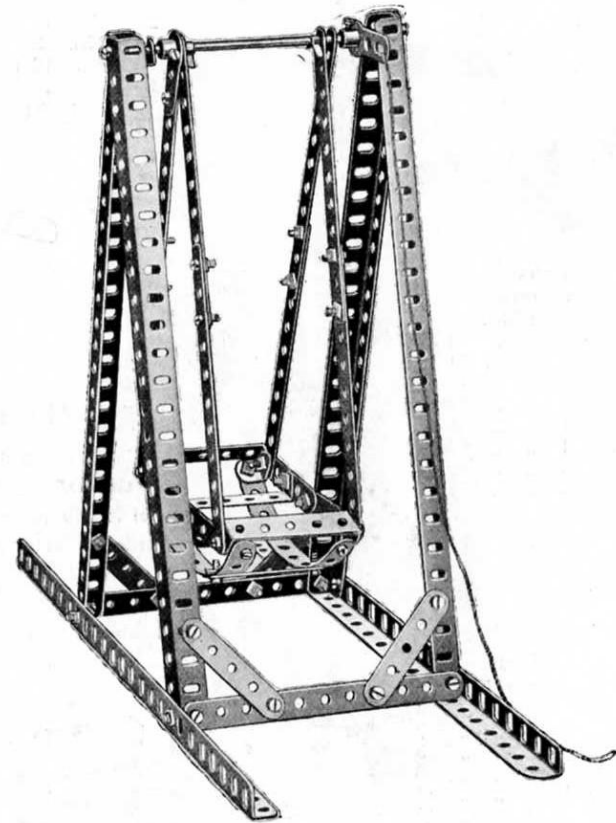
Model No. 322 Roundabout



Parts required:

4 of No.	1	4 of No.	22
14 "	2	1 "	24
2 "	3	2 "	26
7 "	5	1 "	27A
2 "	8	1 "	32
10 "	12	54 "	37
2 "	15	10 "	48A
1 "	15A	2 "	52
1 "	16	3 "	59
1 "	19	1 "	63
1 "	21	2 "	126A

Model No. 323 Swing

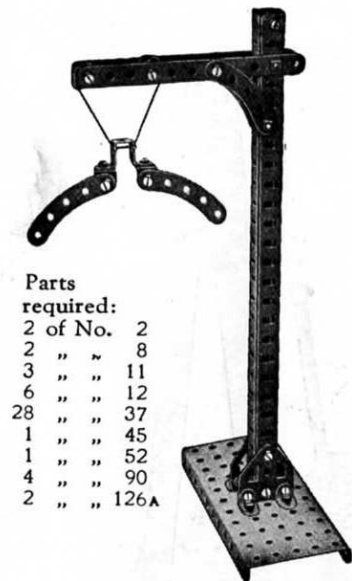


Parts required:

12 of No.	2	1 of No.	15
9 "	5	2 "	35
6 "	8	43 "	37
2 "	11	4 "	48A
4 "	12	2 "	62

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 324 Railway Gauge



Parts
required:

2 of No.	2
2 "	8
3 "	11
6 "	12
28 "	37
1 "	45
1 "	52
4 "	90
2 "	126A

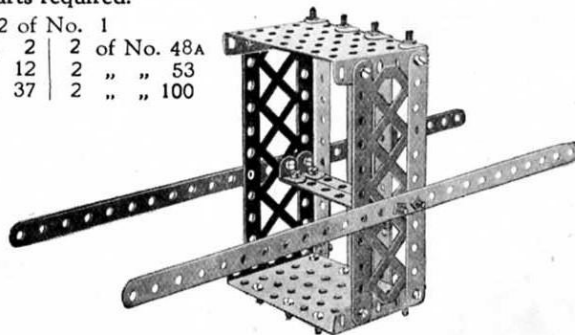
Parts
required:

6 of No.	2
1 "	3
2 "	5
2 "	8
3 "	11
12 "	12
2 "	15
3 "	15A
2 "	19
4 "	20
1 "	24
2 "	26
1 "	27A
3 "	35
50 of No.	37
1 "	45
2 "	48A
2 "	52
3 "	53
4 "	59
2 "	62
4 "	126A

Model No. 325 Chinese Palanquin

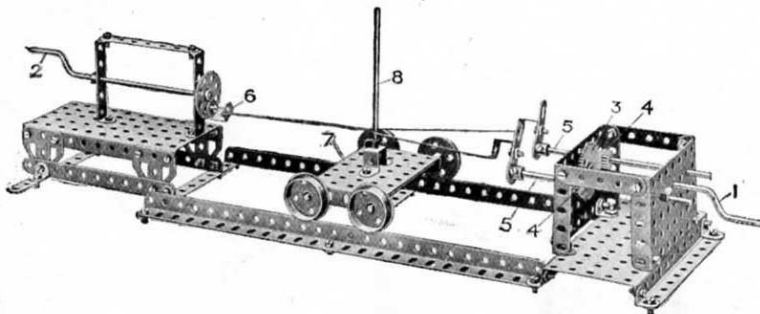
Parts required:

2 of No.	1
4 of No.	2
8 "	12
30 "	37
2 of No.	48A
2 "	53
2 "	100

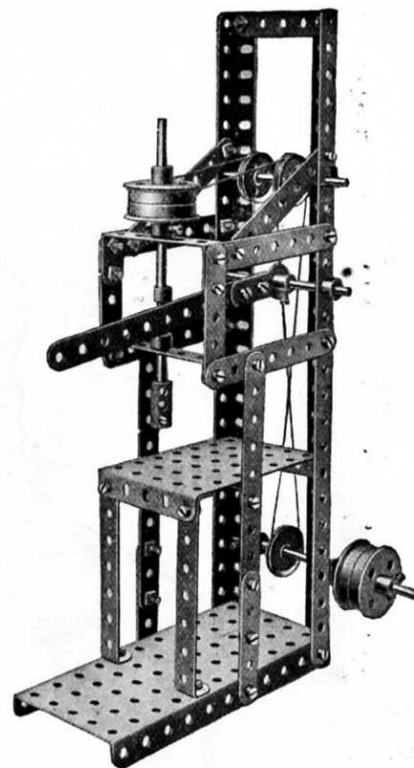


Model No. 327 Wire Rope Maker

The strands are twisted from both ends by the handles 1 and 2 of the fixed parts. The handle 1 rotates through a large gear wheel 3 two pinions 4 on the rods 5 carrying cranks to which the strands are attached. The other ends of the strands are connected to a double bent strip 6 on a bush wheel which is rotated in the opposite direction by a crank handle 2. The carriage 7 runs on rails and the vertical rod 8 is kept just at the formation of the twisted rope and so controls the tightness of the twist.



Model No. 326 Boring Machine



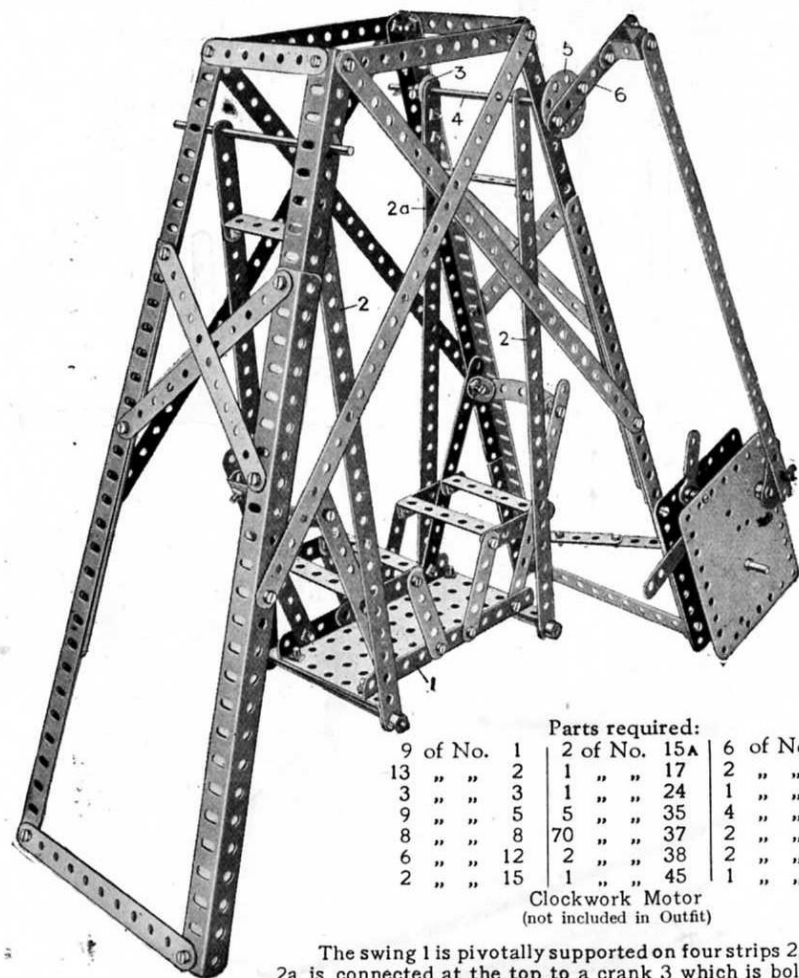
Parts required:

3 of No.	2	4 of No.	20	2 of No.	48B
6 "	3	1 "	22	1 "	52
5 "	5	2 "	22A	1 "	53
2 "	8	3 "	35	4 "	59
2 "	11	38 "	37	1 "	62
2 "	15	1 "	46	1 "	63
2 "	16	2 "	48A		

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

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Model No. 328 Lawn Swing



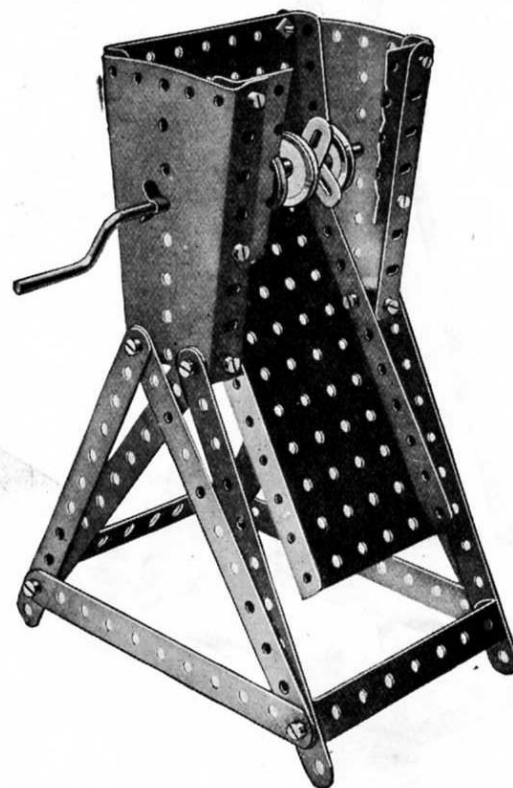
Parts required:

9 of No. 1	2 of No. 15A	6 of No. 48A
13 " " 2	1 " " 17	2 " " 48B
3 " " 3	1 " " 24	1 " " 52
9 " " 5	5 " " 35	4 " " 59
8 " " 8	70 " " 37	2 " " 62
6 " " 12	2 " " 38	2 " " 90
2 " " 15	1 " " 45	1 " " 115

Clockwork Motor
(not included in Outfit)

The swing 1 is pivotally supported on four strips 2, the far strip 2a is connected at the top to a crank 3 which is bolted to a rod 4 and at the front end of this rod is a wheel 5 to which is bolted a strip 6 to the motor spindle.

Model No. 329 Oil Cake Chopper

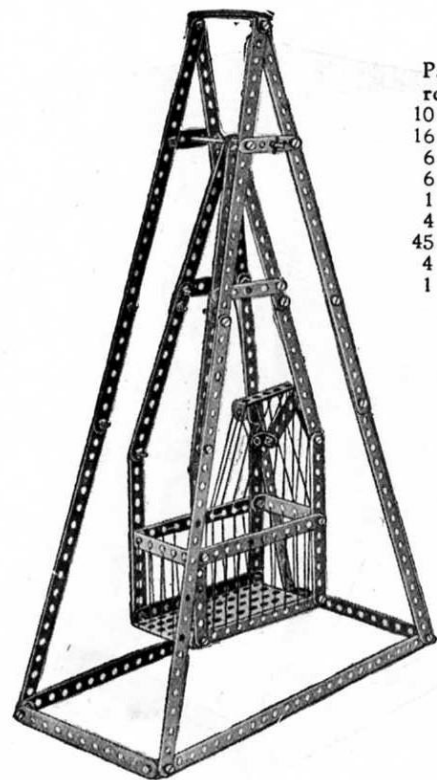


Parts required:

10 of No. 2	2 of No. 35
4 " " 10	20 " " 37
2 " " 12	2 " " 48B
1 " " 19	1 " " 52
4 " " 22	2 " " 53
2 of No. 54	

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 330 Swinging Cot

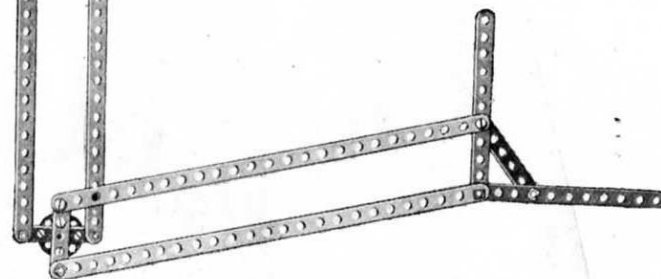


Parts required:		
10	of No.	1
16	" "	2
6	" "	5
6	" "	12
1	" "	15A
4	" "	35
45	" "	37
4	" "	48A
1	" "	52

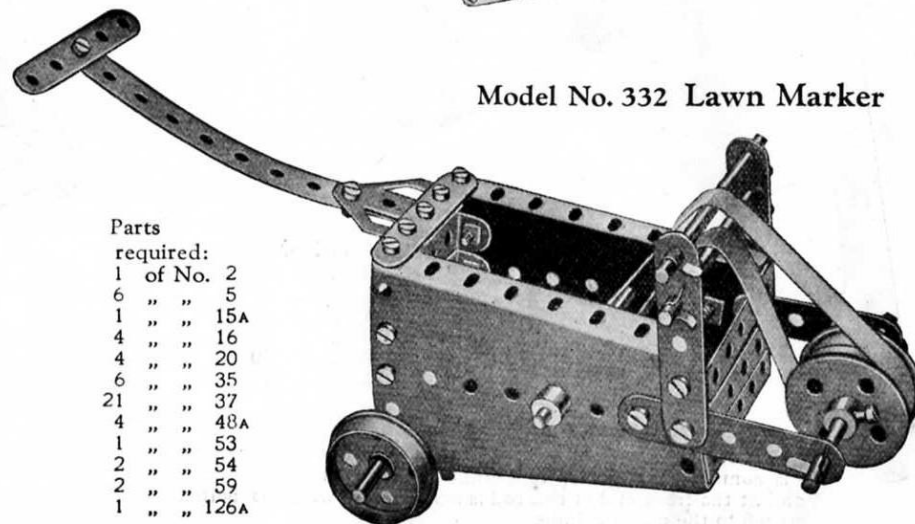
**Model No. 331
Drafting Machine**



Parts required:		
4	of No.	1
3	" "	2
1	" "	4
2	" "	5
1	of No.	24
15	" "	37
1	" "	52



Model No. 332 Lawn Marker



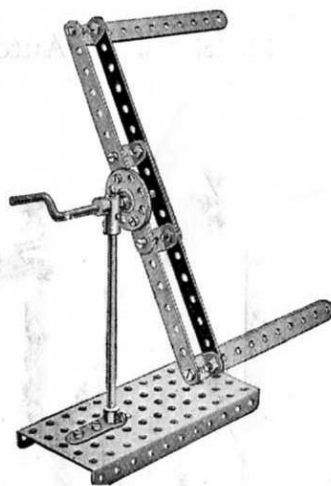
Parts required:		
1	of No.	2
6	" "	5
1	" "	15A
4	" "	16
4	" "	20
6	" "	35
21	" "	37
4	" "	48A
1	" "	53
2	" "	54
2	" "	59
1	" "	126A

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

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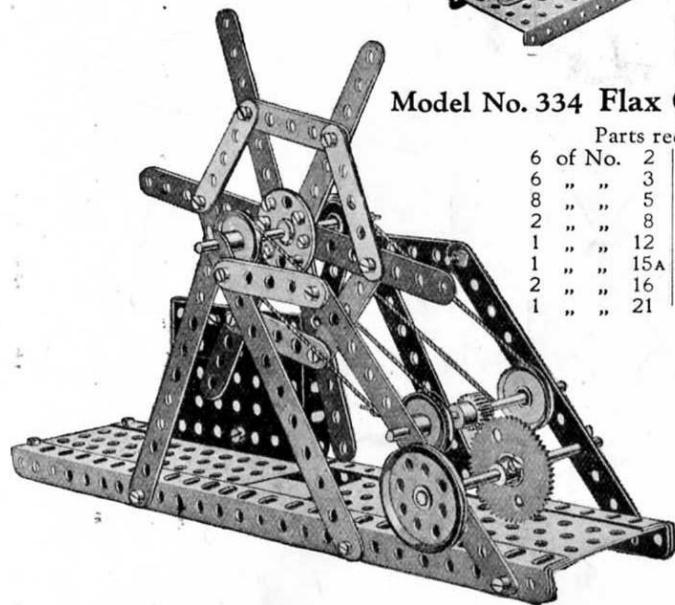
Model No. 333 Lace Jennier

Parts required:		
8	of No.	2
4	"	11
1	"	15
1	"	19
1	"	24
14	"	37
1	"	52
1	"	59
1	"	62
1	"	63

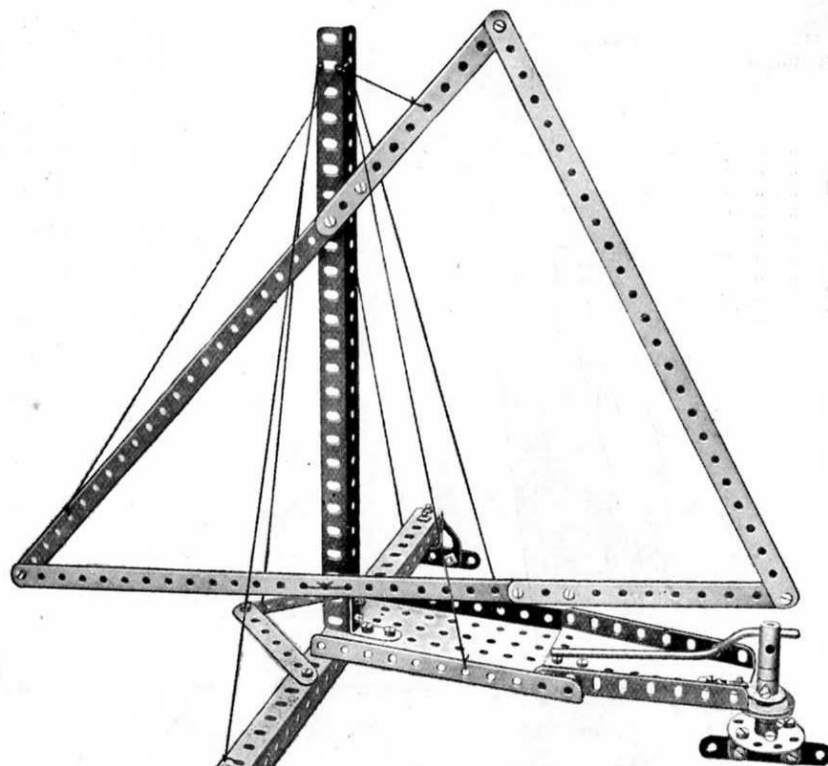


Model No. 334 Flax Cleaner

Parts required:			
6	of No.	2	4 of No. 22
6	"	3	1 " " 24
8	"	5	1 " " 26
2	"	8	1 " " 27A
1	"	12	4 " " 35
1	"	15A	26 " " 37
2	"	16	2 " " 52
1	"	21	1 " " 53



Model No. 335 Ice Boat

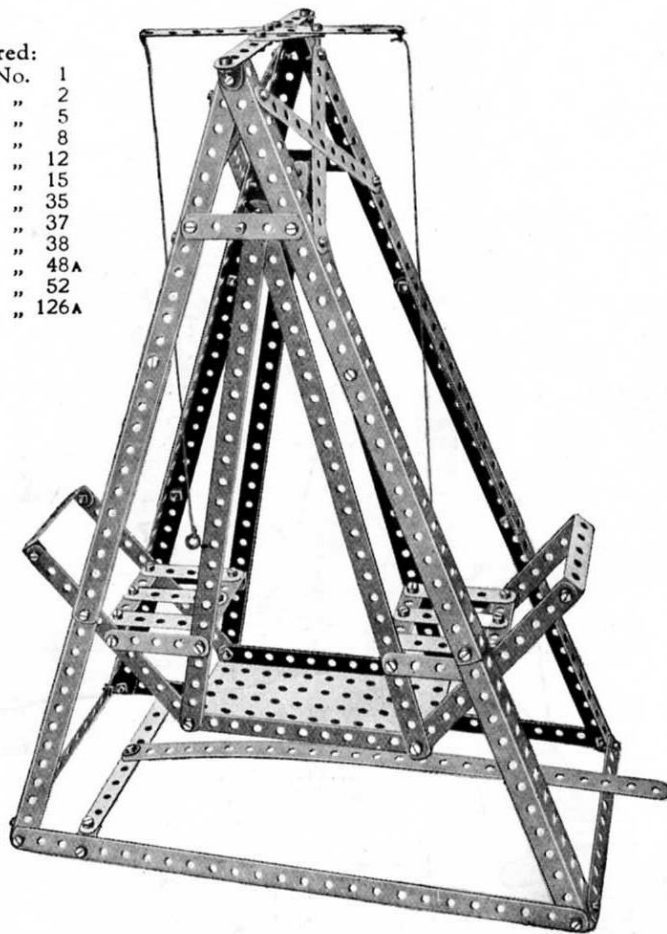


Parts required:			
3	of No.	1	1 of No. 22
2	"	2	1 " " 24
2	"	3	36 " " 37
3	"	5	1 " " 52
2	"	8	1 " " 54
2	"	12	1 " " 59
3	"	12A	1 " " 62
1	"	17	1 " " 63
1	"	19	2 " " 126A

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 336 Swing

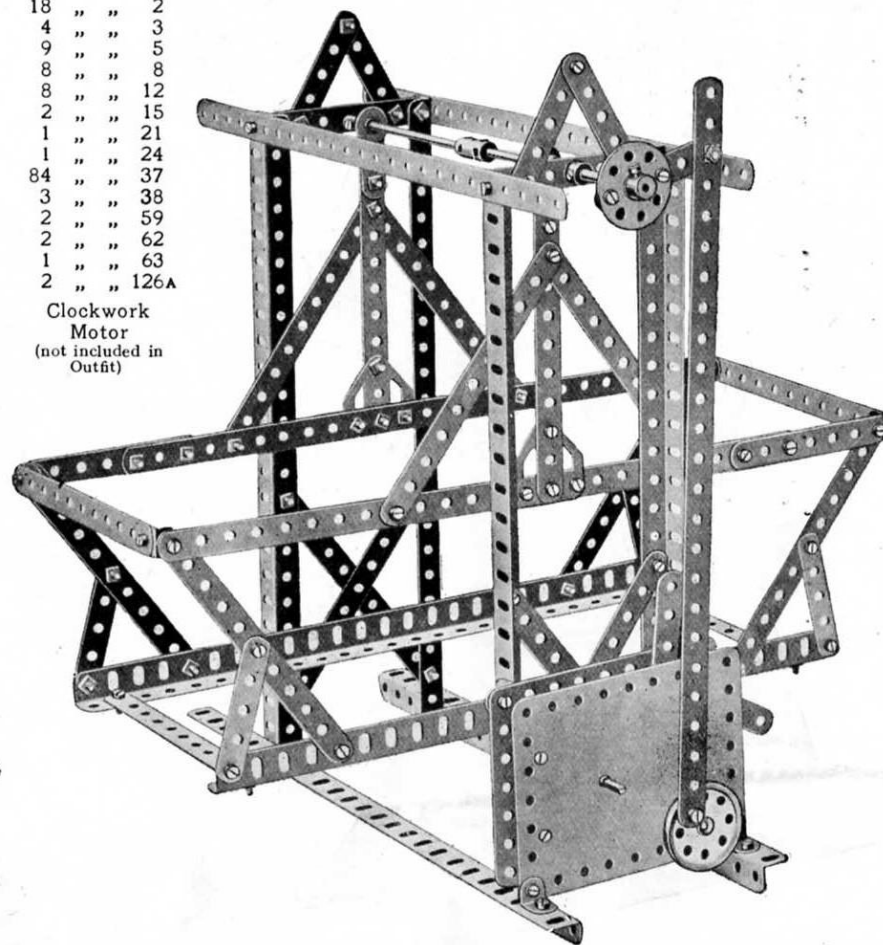
Parts required:	
7 of No.	1
13 " "	2
12 " "	5
8 " "	8
4 " "	12
1 " "	15
6 " "	35
69 " "	37
4 " "	38
6 " "	48A
1 " "	52
1 " "	126A



Parts required:	
5 of No.	1
18 " "	2
4 " "	3
9 " "	5
8 " "	8
8 " "	12
2 " "	15
1 " "	21
1 " "	24
84 " "	37
3 " "	38
2 " "	59
2 " "	62
1 " "	63
2 " "	126A

Clockwork
Motor
(not included in
Outfit)

Model No. 337 Automatic Swing Boat

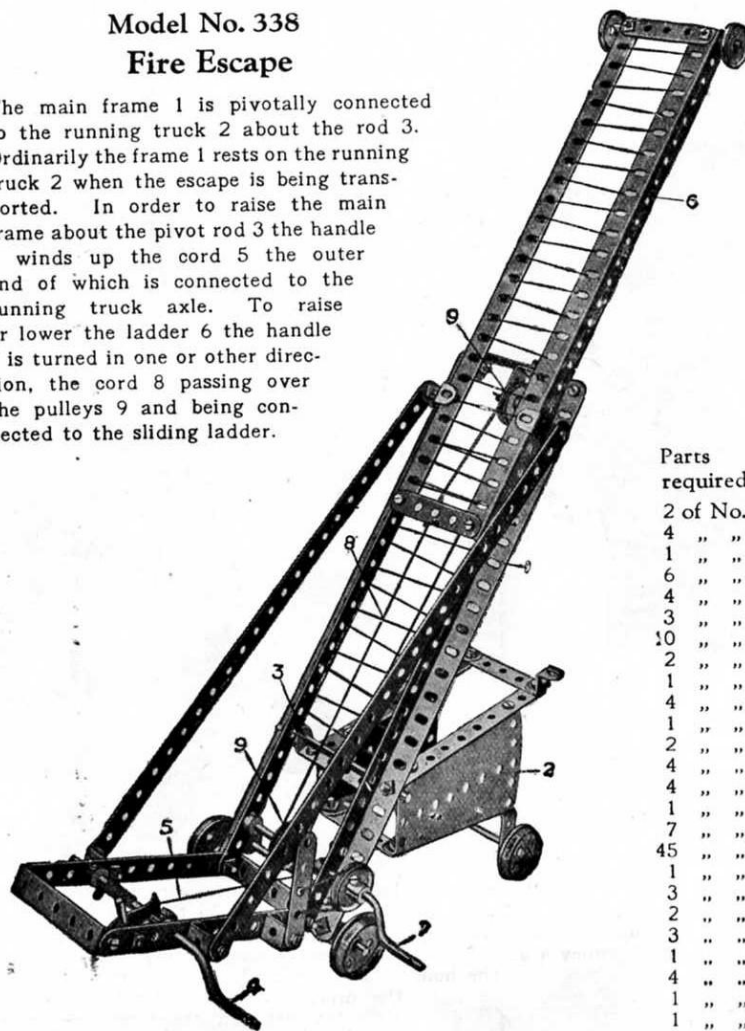


These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

Model No. 338

Fire Escape

The main frame 1 is pivotally connected to the running truck 2 about the rod 3. Ordinarily the frame 1 rests on the running truck 2 when the escape is being transported. In order to raise the main frame about the pivot rod 3 the handle 4 winds up the cord 5 the outer end of which is connected to the running truck axle. To raise or lower the ladder 6 the handle 7 is turned in one or other direction, the cord 8 passing over the pulleys 9 and being connected to the sliding ladder.

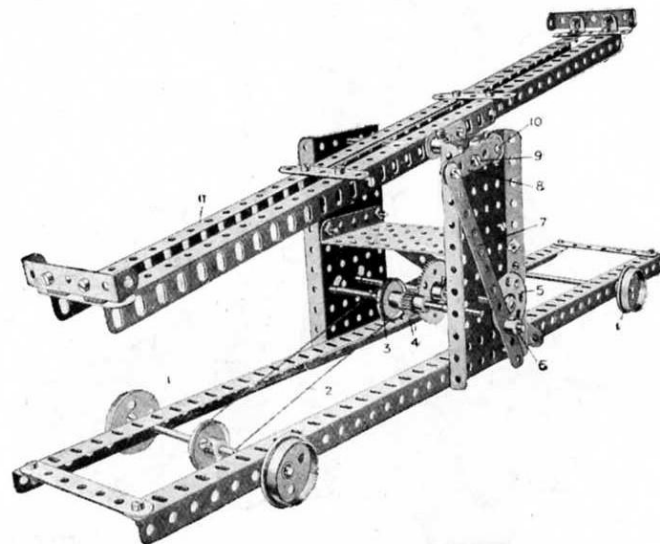


Parts required:

2 of No.	1
4 " "	2
1 " "	3
6 " "	5
4 " "	8
3 " "	11
10 " "	12
2 " "	12A
1 " "	15A
4 " "	16
1 " "	18A
2 " "	19
4 " "	20
4 " "	22
1 " "	22A
7 " "	35
45 " "	37
1 " "	44
3 " "	48A
2 " "	54
3 " "	59
1 " "	115
4 " "	125
1 " "	147A
1 " "	147B
1 " "	148

Model No. 339 Actuated See-Saw

The see-sawing is actuated by the travelling action of the wheels 1. The spindle of the wheels is connected by the cord 2 to the pulley 3 on the spindle of the pinion 4 which drives a gear wheel on the spindle of the bush wheel 5. A threaded pin 6 on this wheel engages the strip 7 coupled to a lever strip 8 pivoted at 9 which rocks the pivot rod 10 of the see-saw 11.

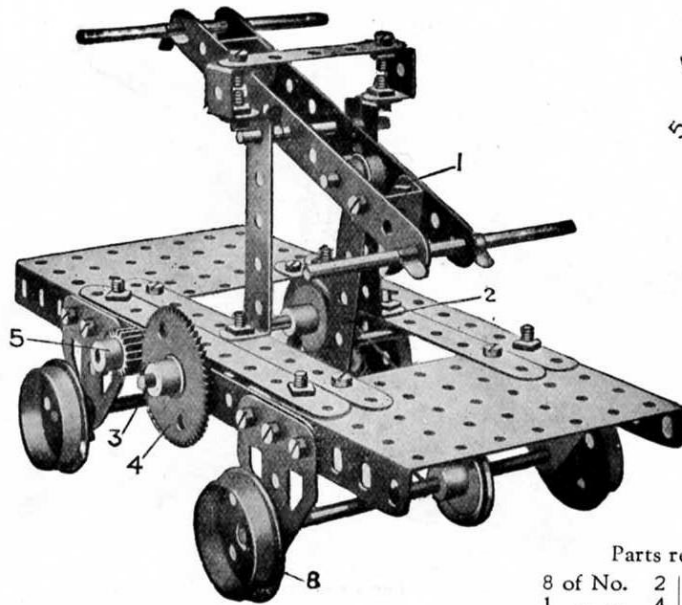


Parts required:

3 of No.	2	4 of No.	20	2 of No.	48A
2 " "	3	2 " "	22	2 " "	52
5 " "	5	1 " "	24	1 " "	53
8 " "	8	1 " "	26	3 " "	59
4 " "	12	1 " "	27A	2 " "	62
2 " "	15	4 " "	35	1 " "	115
3 " "	15A	36 " "	37		

Model No. 340 Hand Trolley

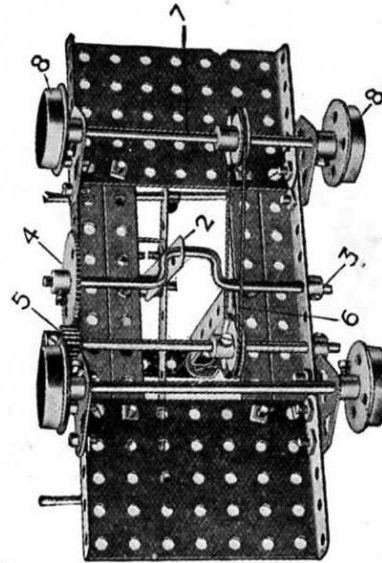
The trolley is caused to travel by working the rocking lever 1 which is connected by a strip 2 to a crank shaft 3 a gear wheel 4 which meshes a pinion 5 on a rod coupled by a cord 6 to an axle rod 7 of the travelling wheels 8.



Parts required:

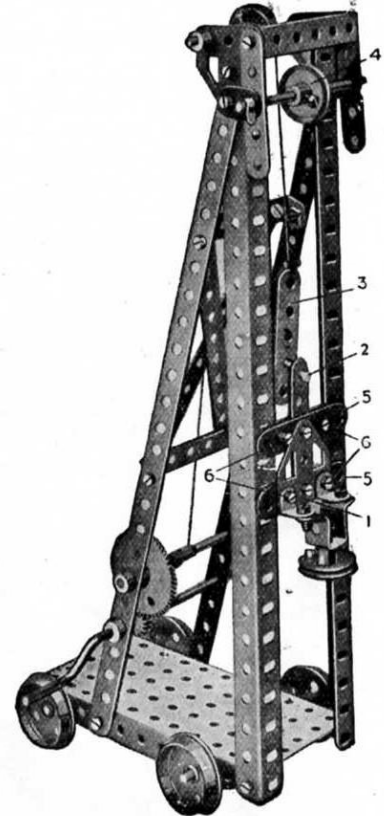
8 of No.	2	2 of No.	22
1 "	4	1 "	26
1 "	5	1 "	27A
4 "	11	6 "	35
3 "	15A	30 "	37
2 "	16	2 "	48A
1 "	17	2 "	53
1 "	18A	4 "	59
4 "	20	4 "	126A
1 of No. 134			

Model No. 341 Pile Driver



Parts required:

2 of No.	1
2 "	2
10 "	5
2 "	8
2 "	10
2 "	12
2 "	15A
3 "	16
1 "	19
4 "	20
3 "	22
1 "	26
1 "	27A
2 "	35
26 "	37
4 "	38
1 "	45
3 "	48A
1 "	52
4 "	59
1 "	115
3 "	126A



The driving head 1 is raised by means of a threaded pin 2 on two 2½" strips 3, the pin engaging in the first hole of the driving head. As the head is raised, the strip 3 makes contact with a pulley 4 and the latter pushes the strip rearwardly, disengaging the pin from the hole on the driving head, permitting it to fall. The cross strips 5 of the driving head are duplicated behind, spacing washers being inserted between them on the bolts 6 to allow free movement up and down the guide girders.

These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A.

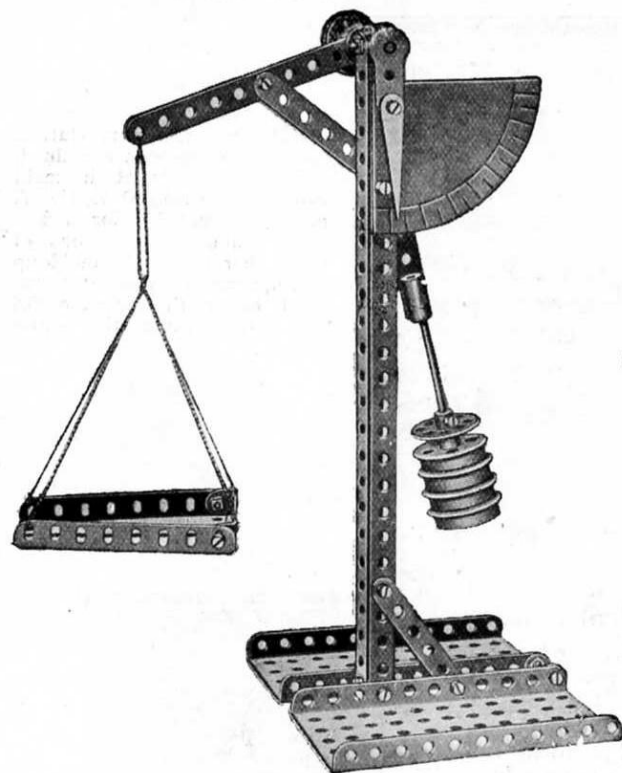
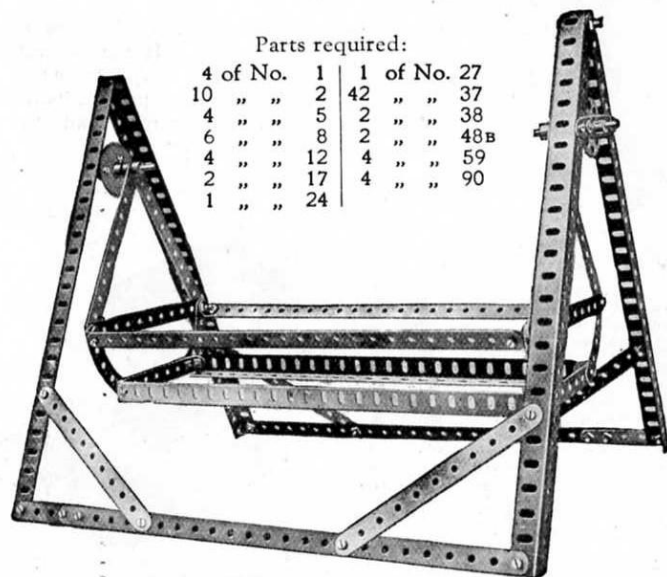
57

Model No. 343 Scales

Model No. 342 Swing Cot

Parts required:

4 of No.	1	1 of No.	27
10 " "	2	42 " "	37
4 " "	5	2 " "	38
6 " "	8	2 " "	48 ^B
4 " "	12	4 " "	59
2 " "	17	4 " "	90
1 " "	24		



Parts required:	
2 of No.	2
1 " "	3
2 " "	4
1 " "	5
2 " "	8
1 " "	11
1 " "	15
1 " "	17
4 " "	20
1 " "	22
1 " "	24
15 " "	37
1 " "	48 ^A
2 " "	52
1 " "	54
2 " "	62
1 " "	63
1 " "	90

HOW TO CONTINUE

This completes the Models which may be made with MECCANO Outfit No. 3. The next Models are a little more advanced, requiring a number of extra parts to construct them. The necessary parts are all contained in a No. 3A Accessory Outfit, the price of which will be found in the List at the end of the Manual.

MECCANO ACCESSORY OUTFITS AND MOTORS



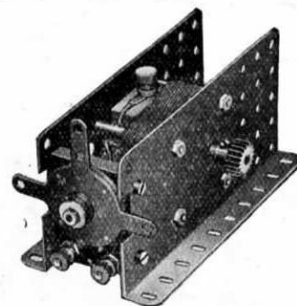
Meccano Accessory Outfits

Our illustration shows one of the Meccano Accessory Outfits. As has already been explained, these Outfits connect the main Outfits from No. 00 to No. 7, making it possible for a boy who commences with one of the earlier Outfits to build up his equipment by easy stages, until he is the possessor of parts that cover the entire system.

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.



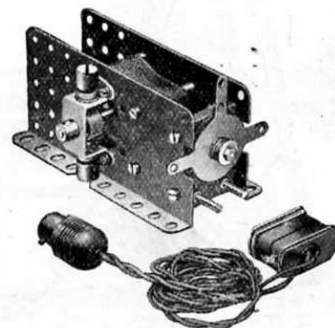
Electric Motor No. 1
(4-Volt)

The 4-volt motor is specially designed to build into Meccano models. It may be run from a 4-volt accumulator. The motor is fitted with reversing motion, provided with stopping and starting controls, and the gearing is interchangeable.

Electric Motor No. 2
(100-250-Volt AC or DC)

This Electric Motor may be employed for any purpose for which a small motor is suitable, but it is specially adapted for driving Meccano models. The side plates are perforated with standard equidistant holes, thus allowing the motor to be built into any Meccano model. The motor is specially designed for connection with the electric-light main. It is supplied for 100-120 volts or 200-250 volts (alternating or direct), and is fitted with 6 ft. length of flex, an insulated plug for connection with the motor terminals, and an adaptor for connection with an ordinary lamp socket.

A suitable resistance is required when the motor is run with a 200-250 volt current, and this is supplied by connecting a 60-watt lamp in series with the motor. A board, on which are mounted a suitable lamp-holder (lamp not included) and a switch, is provided separately.



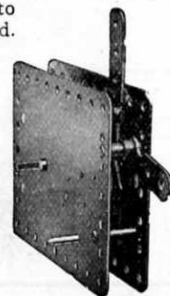
4-Volt Accumulator

This is an excellent type of accumulator that has been adapted to drive the Electric Motor No. 1. It has been subjected to the severest tests and has proved itself to be the most suitable accumulator for use with any type of electric motor. It is non-spillable, has remarkable recuperative powers, and will continue to supply current when nominally exhausted.



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.



HORNBY CLOCK WORK TRAINS

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HORNBY TRAINS are manufactured by Meccano Limited, and they are made from the finest materials obtainable. A most valuable feature of the Locos is that all the parts are standardised and any lost or damaged units may be replaced with new ones.

Each Train is a beautiful piece of workmanship with perfect mechanism, ensuring smooth running. A guarantee of efficiency is furnished with each Loco.

A HORNBY TRAIN LASTS FOR EVER!

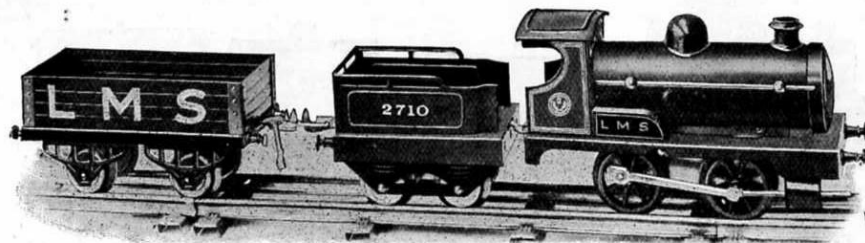
No. 0 Passenger Set

Each Set contains Loco, Tender, two Passenger Coaches and Rails to form either a circle 2 ft. in diameter or an oval 2 ft. in width by 2 ft. 10 in. in length. One of the curved rails is a brake rail by means of which the train may be braked from the track. The doors of the coaches open.

Gauge 0, in colours to represent the principal British Railway Companies' rolling stock. Richly enamelled and highly finished; fitted with brake and governor; non-reversing.

No. 0 Goods Set

The Goods Set is the same as the Passenger Set but contains one Wagon in place of Passenger Coaches. In colours to represent the principal British Railway Companies' rolling stock. Gauge 0.



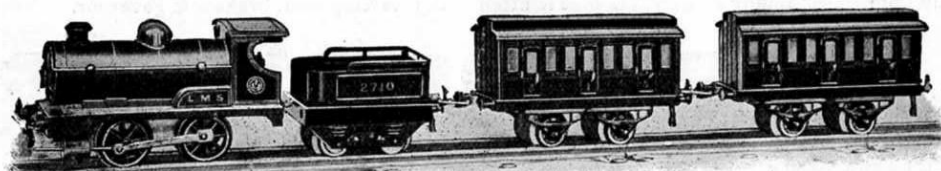
No. 0 GOODS SET

No. 1 Passenger Set

Each Set contains Loco, Tender, and two Coaches, with Rails to form either a circle 2 ft. in diameter or an oval 2 ft. in width by 2 ft. 10 in. in length. One of the curved rails is a brake rail by means of which the train may be braked from the track. The Loco is fitted with reversing gear, brake and governor. In colours to represent the principal British Railway Companies' rolling stock. The doors of the Coaches open. Gauge 0.

No. 1 Goods Set

This Set is similar in every way to No. 1 Passenger Set, except that it contains one Wagon in place of Coaches. Gauge 0.



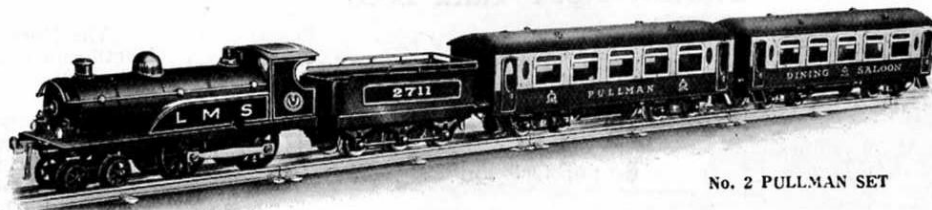
No. 1 PASSENGER SET

No. 2 Pullman Set

This Set includes Loco and Tender of a larger type, measuring 17 in. in length. The Coaches are beautiful both in colour and finish. Each Set includes Loco, Tender, and two Pullman Coaches, with Set of Rails making a 4 ft. diameter circle. The rails include one brake rail by means of which the train may be both braked and reversed from the track. In colours to represent the principal British Railway Companies' rolling stock. The Loco is fitted with reversing gear, brake and governor. Gauge 0.

No. 2 Goods Set

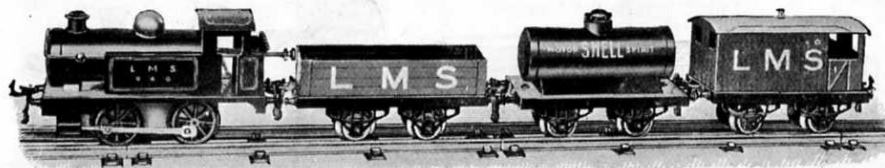
This Set contains Loco, Tender, and Rails as in No. 2 Pullman Set, and two Wagons. Gauge 0.



No. 2 PULLMAN SET

HORNBY CLOCK WORK TRAINS

THE following Hornby Tank Goods and Passenger Sets have become immensely popular since they were introduced into the series last year. Each set contains one of the famous Hornby Tank Locos with attractive rolling stock.



No. 1 TANK GOODS SET

No. 1 Tank Goods Set

This Set contains a No. 1 Hornby Tank Loco, Hornby Wagon, Petrol Tank Wagon, Brake Van and set of rails to form either a circle 2 ft. in diameter or an oval 2 ft. in width by 2 ft. 10 in. in length. One of the curved rails is a brake rail by means of which the train may be braked from the track.

Gauge 0, in colours to represent the principal British Railway Companies' rolling stock. The loco is fitted with reversing gear, brake and governor.

No. 2 Tank Goods Set

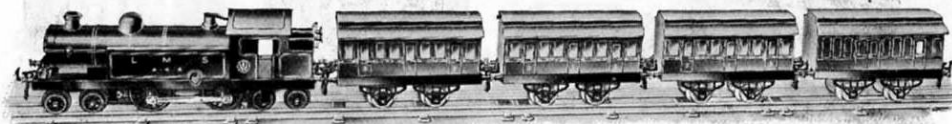
The famous No. 2 Hornby Tank Loco is included in this set. It is 11½ in. in length and is fitted at both ends with a four-wheeled bogie. In addition the set includes a Hornby Wagon, a Petrol Tank Wagon, a No. 1 Cattle Truck and a Brake Van, with a set of rails to form a circle 4 ft. in diameter. The rails include one brake rail by means of which the train may be both braked and reversed from the track.

Gauge 0, in colours to represent the principal British Railway Companies' rolling stock. The loco is fitted with reversing gear, brake and governor.

No. 2 Tank Passenger Set

This set contains a No. 2 Hornby Tank Loco and rails as in the No. 2 Goods set, but three Passenger Coaches and one Guard's Van are included in place of the wagons and vans.

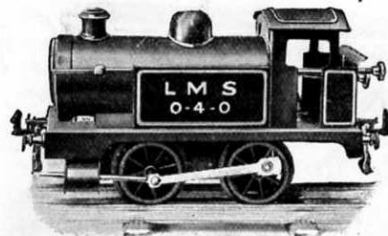
Gauge 0, in colours to represent the principal British Railway Companies' rolling stock.



No. 2 TANK PASSENGER SET

HORNBY TANK LOCOS

Hornby No. 1 Tank Loco



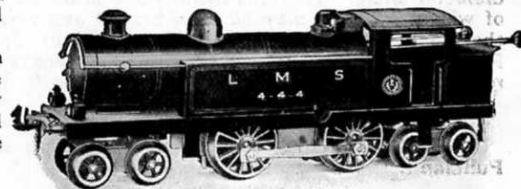
A strong and durable Loco capable of any amount of hard work; richly enamelled and highly finished; fitted with brake, governor and reversing gear.

Gauge 0, in colours to represent the principal British Railway Companies' locos.

Hornby No. 2 Tank Loco

The Hornby No. 2 Tank Loco is a splendid model. It is 11½ in. in length and is fitted at both ends with a four-wheeled bogie.

Beautifully finished in colours to represent the principal British Railway Companies' locos. Fitted with reversing gear, brake and governor.



CONTENTS OF OUTFITS

No.	DESCRIPTION OF PART.	00	00A	0	0A	1	1A	2	2A	3	3A	4	4A	5	5A	6	6A	7
1	Perforated Strips, 12"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1A	" " 9"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1B	" " 7"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	" " 5"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2A	" " 4"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	" " 3"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	" " 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6A	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	Angle Girders, 24"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7A	" " 18"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	" " 12"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8A	" " 8"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8B	" " 7"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	" " 5"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9A	" " 4"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9B	" " 3"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9C	" " 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9D	" " 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9E	" " 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9F	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Flat Brackets...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Double Brackets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	Angle Brackets, 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12A	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12B	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Axe Rods, 11"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13A	" " 8"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	" " 6"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	" " 5"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15A	" " 4"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	" " 3"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16A	" " 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16B	" " 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	" " 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17A	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18A	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18B	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	Crank Handles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19A	Wheels, 3"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19B	Pulley Wheels, 3"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	Flanged Wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20A	Pulley Wheels, 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22A	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22B	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23A	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	Bush Wheels...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	Pinion Wheels, 2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	" " 1"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	Gear Wheels, 50 Teeth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27A	" " 57	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27B	" " 133 (3 1/2" diam.)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Contrate Wheels, 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	Bevel Gears...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Gear Wheels, 1", 38 Teeth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	Worm Wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	Spanners	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	Spring Clips	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35	Screw Drivers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
36	Nuts and Bolts, 7/32" extra long	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	Washers...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37A	Hanks of Cord	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40	Propeller Blades	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
41	Springs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43	Cranked Bent Strips	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
44	Double Bent Strips	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	Double Angle Strips, 2 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
46	" " 3 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
47	" " 1 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
47A	" " 1 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48	" " 1 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48A	" " 1 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48B	" " 1 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48C	" " 1 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48D	" " 1 1/2" x 1 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50	Eye Pieces	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
51	Perforated Flanged Plates, 5 1/2" x 2 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
52	Flat Plates, 5 1/2" x 3 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
52A	Perforated Flanged Plates, 3 1/2" x 2 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
53	Flat Plates, 4 1/2" x 2 1/2"	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
53A	Perforated Flanged Plates (Sector)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
54	Instruction Manuals	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
56	Meccano Standard Mechanisms Manual	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
57	Hooks...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
57A	" (Scientific)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
57B	" (Loaded)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
58	Spring Cord, 40" length	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
59	Collars with Set Screws	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
61	Windmill Sails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
62	Cranks	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
62A	Threaded Cranks	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
63	Couplings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
63A	Octagonal Couplings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
63B	Strip Couplings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
64	Threaded Bosses
65	Centre Forks...

[CONTINUED OVERLEAF]

Contents of Outfits—continued

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MECCANO

Hornby's Original System, First Patented 1901

PATENTS AND DESIGNS

GREAT BRITAIN :

3,869/14	139,125	671,485	682,934
4,183/14	177,430	671,534	683,011
4,564/15	577,207	671,790	686,112
0,535/13	577,272	680,416	698,054
1,117/12	648,958	682,208	699,653
22,962/13	671,484	682,209	699,654
7,732/25			718,731
7,733/25			718,404

Meccano is more than a Toy

IT 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, 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 find that he cannot do so because of the deficiencies of his non-mechanical system.

No Outfit is genuine unless it bears the Trade Mark MECCANO