

MECCANO



(TRADE MARK 296321)

INSTRUCTIONS

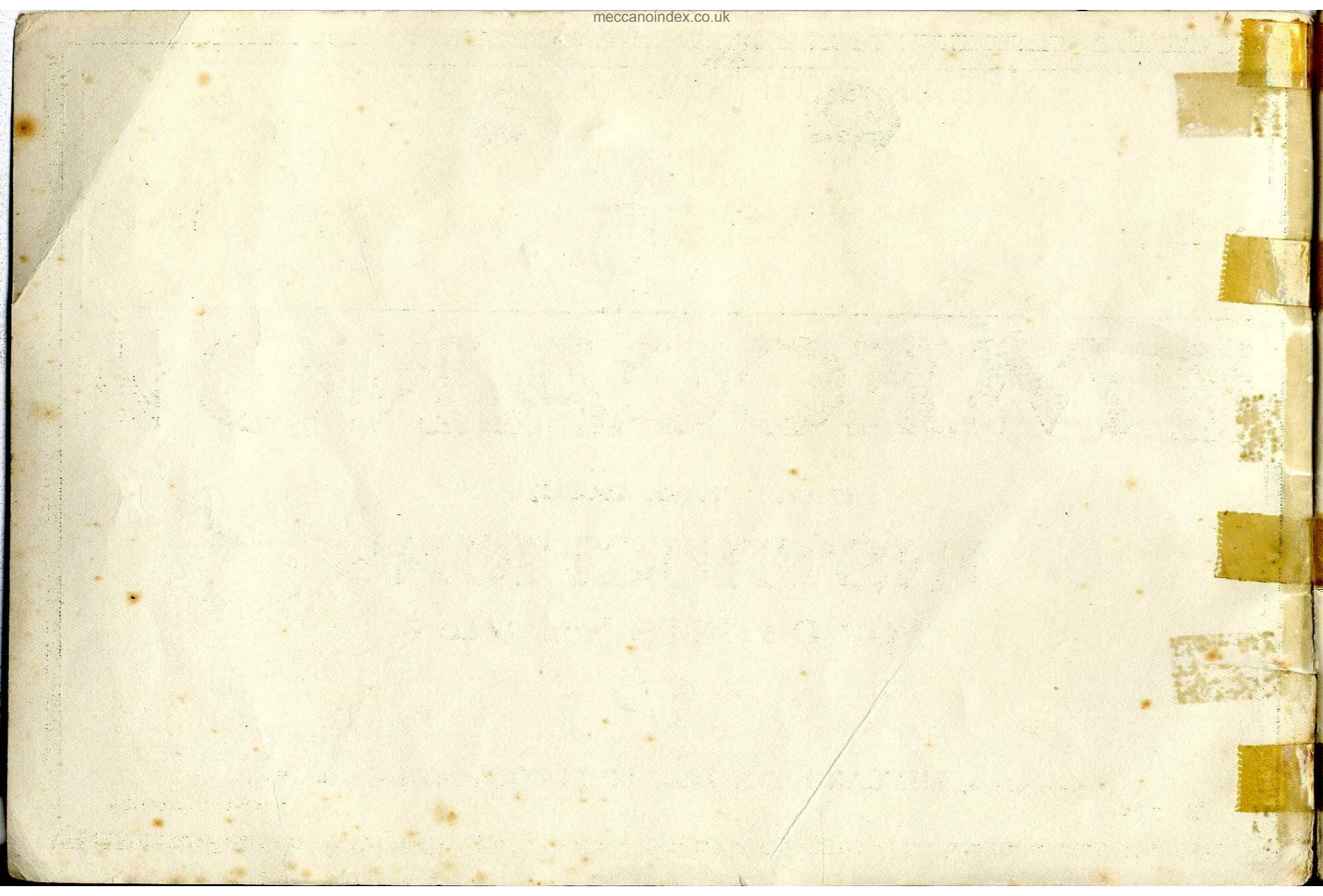
FOR OUTFITS Nos. 0 to 3.

1/-

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No. 22A.

ENGLISH EDITION.



A TALK WITH NEW MECCANO BOYS



MECCANO OUTFITS contain accurately-made and highly-finished engineering parts and enable every movement known to mechanism to 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 anyone 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 boys have ever previously experienced.

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

complicated mechanical movements without any difficulty. The most wonderful feature of Meccano is that it is *real engineering*; it is fascinating and delightful 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; has a shot at the Competitions which are always being held in connection with the hobby; 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. Write to the Editor, *Meccano Magazine*, Binns Road, Liverpool, and he will send you a copy FREE. It is sent regularly to subscribers at the rate of 6d. for six issues, or it may be purchased from any Meccano dealer, price 1d. per copy.



THE MECCANO GUILD



MECCANO GUILD:
CLUB CERTIFICATE.

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. Some of the larger towns and cities have several Clubs, one in each district. Each Club has its Leader, Secretary, Treasurer, and other officials all of whom, with the exception of the Leader, are boys. Write for information as to the nearest Club to 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.



SPECIAL MERIT
MEDALLIONS.

MECCANO PRIZE COMPETITIONS. MONEY AND FAME FOR MECCANO BOYS

EACH year there is a big Meccano Prize Competition, cash prizes and Meccano Outfits to the value of at least £250 being awarded to clever boys who are able to design new models. Particulars and entry forms may be obtained from all Meccano dealers, or direct from us on receipt of a post card.

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.

Meccano is sold in eight different Outfits, numbered 0 to 7. All parts are of the same high quality and finish, the larger Outfits containing a greater quantity and variety.

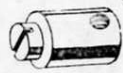
Each Outfit may be converted into the one next higher by the purchase of an Accessory Outfit. Thus, a No. 2 may be converted into a No 3 by adding to it a No. 2A. A No. 3A would then convert it into a No. 4, and so on. In this way, no matter with which Outfit you commence, you may by degrees build up your Outfit to a No. 7.



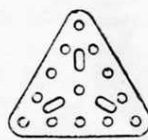
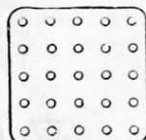
RECRUITING MEDALLION.

Particulars and Prices of Meccano Parts (continued)

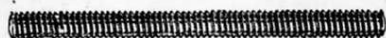
No.	(63A)	(63B)	s. d.
63A.	Octagonal Couplings ...	each	0 8
63B.	Strip Couplings ...	each	0 8



No.	(63C)	(64)	s. d.
63C.	Threaded Couplings ...	each	0 6
64.	Threaded Bosses ...	each	0 2
65.	Centre Forks ...	each	1 0
66.	Weights, 50 grammes ...	each	1 0
67.	" 25 ...	doz.	0 3
68.	Woodscrews, 1" ...	each	0 4
69.	Set Screws ...	each	0 4
69A.	Grub Screws, 3/8" ...	each	0 6
69B.	" 3/2 ...	each	0 6



70.	Flat Plates, 5 1/2" x 2 1/2" ...	each	0 3
72.	" 2 1/2" x 2 1/2" ...	each	0 2
76.	Triangular Plates, 2 1/2" ...	each	0 2
77.	" 1" ...	each	0 1



78.	Screwed Rods, 1 1/2" ...	each	0 6
79.	" 8" ...	each	0 5
79A.	" 6" ...	each	0 4
80.	" 5" ...	each	0 3
80A.	" 3 1/2" ...	each	0 3
80B.	" 4 1/2" ...	each	0 3
81.	" 2" ...	each	0 2
82.	" 1" ...	each	0 1



89.	Curved Strips, 5 1/2" ...	each	0 2
90.	" 2 1/2" ...	each	0 1

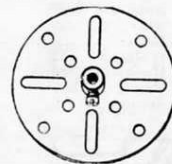
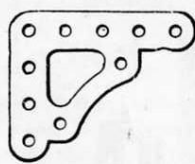


94.	Sprocket Chain ...	per yard	0 6
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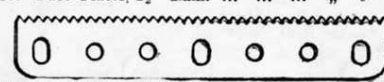
No.		s. d.
95.	Sprocket Wheels, 2" diam. ...	each 0 5
95A.	" 1 1/2" ...	each 0 4
95B.	" 3" ...	each 0 6
96.	" 1" ...	each 0 3
96A.	" 1/2" ...	each 0 3



97.	Braced Girders, 3 1/2" long ...	1 doz.	0 9
98.	" 2 1/2" ...	1 doz.	0 6
99.	" 1 1/2" ...	1 doz.	1 9
99A.	" 9/16" ...	1 doz.	1 6
100.	" 5/8" ...	1 doz.	1 0
101.	Healds, for looms ...	doz.	0 9
102.	Single Bent Strips ...	each	0 1
103.	Flat Girders, 5 1/2" long ...	1 doz.	1 0
103A.	" 9 1/2" ...	1 doz.	1 6
103B.	" 12 1/2" ...	1 doz.	2 0
103C.	" 4 1/2" ...	1 doz.	0 9
103D.	" 3 1/2" ...	1 doz.	0 7
103E.	" 3" ...	1 doz.	0 6
103F.	" 2 1/2" ...	1 doz.	0 5
103G.	" 2" ...	1 doz.	0 4
103H.	" 1 1/2" ...	1 doz.	0 3
104.	Shuttles, for looms ...	each	4 0
105.	Reed Hooks, for looms ...	each	4 0
	Rollers for Looms ...	each	1 3
106.	Wood Rollers ...	each	1 6
106A.	Sand ...	each	1 0
107.	Tables for Designing Machines ...	each	1 0



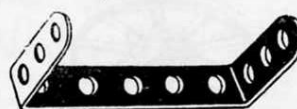
108.	Architraves ...	each	0 2
109.	Face Plates, 2 1/2" diam. ...	each	0 4



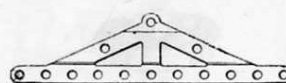
110.	Rack Strips, 3 1/4" ...	each	0 2
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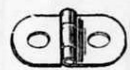
111.	Bolts, 1/2" ...	each	0 1
111A.	" 1/4" ...	2 for	0 1
111B.	" 3/2" ...	doz.	0 4



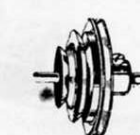
No.		s. d.
112.	Double Angle Strips, 2 1/2" x 1 1/2" ...	1 doz. 0 9
112A.	" 3" x 1 1/2" ...	1 0



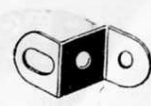
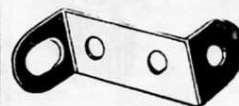
113.	Girder Frames ...	each	0 2
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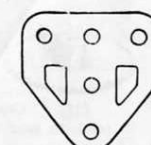
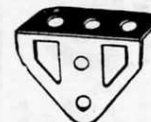
114.	Hinges ...	per pair	0 4
115.	Threaded Pins ...	each	0 2
120.	Buffers ...	each	0 2
120A.	Spring Buffers ...	per pair	0 8



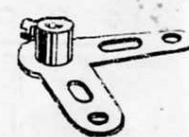
121.	Train Couplings ...	each	0 4
122.	Miniature Loaded Sacks ...	each	0 2
123.	Cone Pulleys ...	each	1 3



124.	Reversed Angle Brackets, 1" ...	1 doz.	0 10
125.	" 1/2" ...	1 doz.	0 6



126.	Trunnions ...	each	0 3
126A.	Flat Trunnions ...	each	0 2



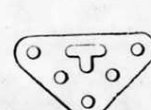
No.	(127)	(128)	s. d.
127.	Simple Bell Cranks ...	each	0 3
128.	Boss Bell Cranks ...	each	0 4



129.	Rack Segments, 3" diam. ...	each	0 6
130.	Triple Throw Eccentrics ...	each	1 3



131.	Dredger Buckets ...	each	0 2
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132.	Flywheels, 2 1/2" diam. ...	each	2 3
133.	Corner Brackets ...	each	0 3



134.	Crank Shafts, 1" stroke ...	each	0 3
135.	Theodolite Protractors ...	each	0 3



136.	Handrail Supports ...	each	0 3
137.	Wheel Flanges ...	each	0 4
138.	Ship's Funnel ...	each	0 4

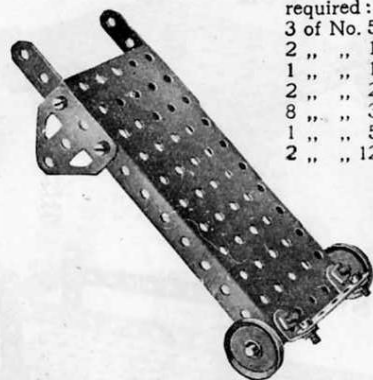
As new parts are frequently added to the Meccano system the foregoing list is not necessarily complete. The latest illustrated list should be obtained from your dealer or from Meccano, Ltd., Liverpool.

These Models can be made with MECCANO Outfit No. 0

5

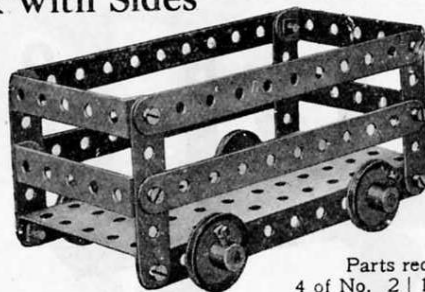
Trucks and Luggage Carts

Model No. 1
Flat Truck



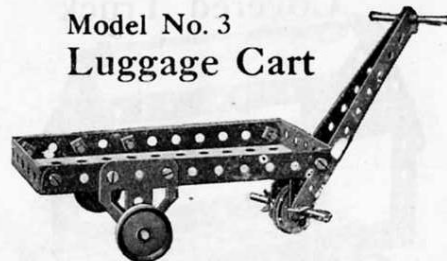
Parts
required:
3 of No. 5
2 " " 12
1 " " 16
2 " " 22
8 " " 37
1 " " 52
2 " " 126A

Model No. 2
Truck with Sides



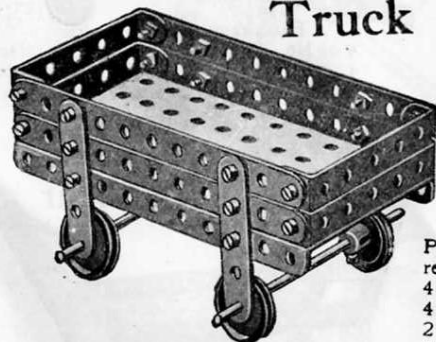
Parts required:
4 of No. 2 | 12 of No. 37
4 " " 5 | 1 " " 52
2 " " 16 | 4 " " 60
4 " " 22

Model No. 3
Luggage Cart



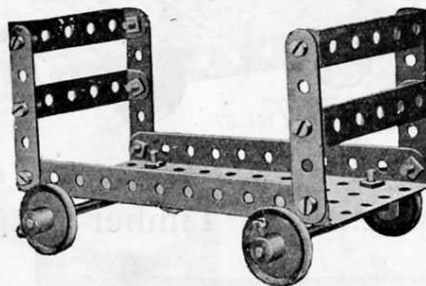
Parts required:
2 of No. 2 | 9 of No. 37
1 " " 16 | 1 " " 44
2 " " 17 | 1 " " 52
3 " " 22 | 2 " " 60
4 " " 35 | 2 " " 126A

Model No. 4
Truck



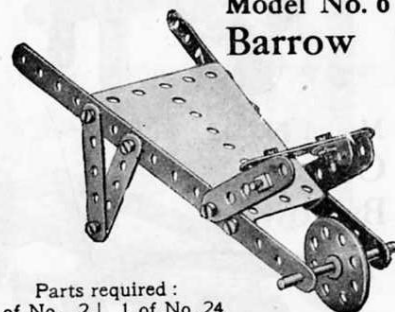
Parts
required:
4 of No. 2
4 " " 5
2 " " 16
4 " " 22
16 " " 37
1 " " 52
4 " " 60

Model No. 5
Luggage Truck



Parts required:
4 of No. 5 | 16 of No. 37
2 " " 16 | 1 " " 52
4 " " 22 | 4 " " 60

Model No. 6
Barrow



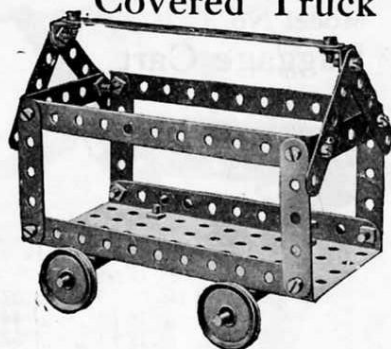
Parts required:
2 of No. 2 | 1 of No. 24
9 " " 5 | 2 " " 35
2 " " 12 | 14 " " 37
1 " " 17 | 1 " " 54

6

These Models can be made with MECCANO Outfit No. 0

Model No. 7

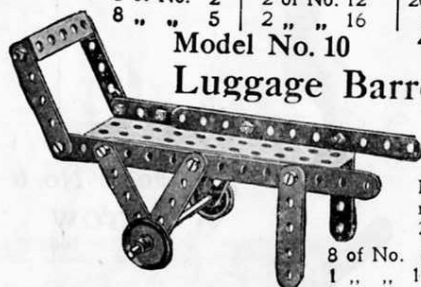
Covered Truck



Parts required			4 of No. 22
3 of No. 2	2 of No. 12	20 " "	37
8 " " 5	2 " " 16	1 " " 52	
		4 " " 60	

Model No. 10

Luggage Barrow



Parts
required:
2 of No. 2

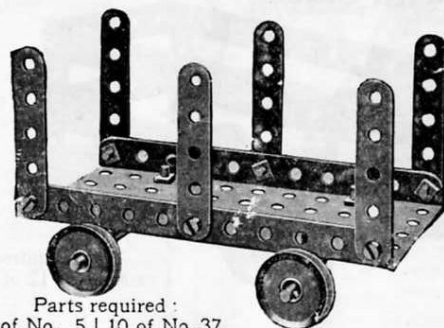
8 of No. 5	10 of No. 37
1 " " 16	1 " " 52
2 " " 22	1 " " 60

Model No. 13
Coster's
Barrow

Parts required:		
4 of No. 2	16 of No. 37	
4 " " 5	1 " " 52	
1 " " 16	2 " " 60	
2 " " 22	2 " " 126A	

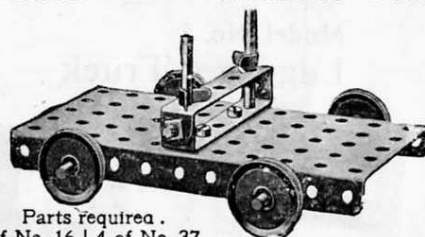
Trucks and Luggage Carts (continued)

Model No. 8 Timber Truck



Parts required:	
6 of No. 5	10 of No. 37
2 " " 16	1 " " 52
4 " " 22	2 " " 60

Model No. 11 Timber Truck

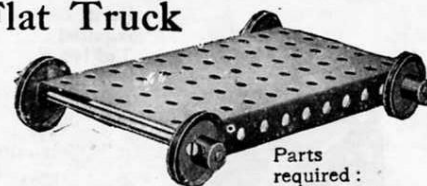


Parts required:	
2 of No. 16	4 of No. 37
2 " " 17	1 " " 52
4 " " 22	2 " " 60
4 " " 35	

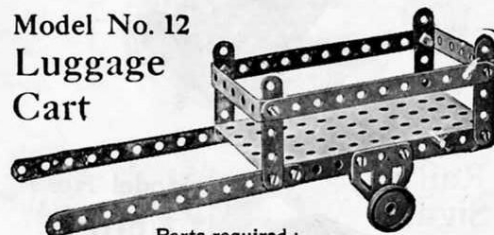
Model No. 14 Timber Drag



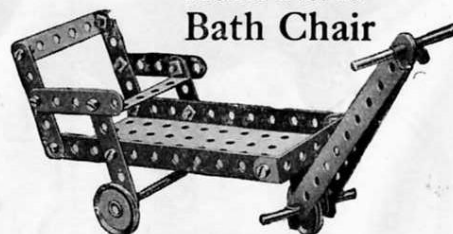
Parts required:		
4 of No. 2	2 of No. 11	8 of No. 37
	2 " " 16	4 " " 60
	4 " " 22	

Model No. 9
Flat Truck

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

Model No. 12
Luggage
Cart

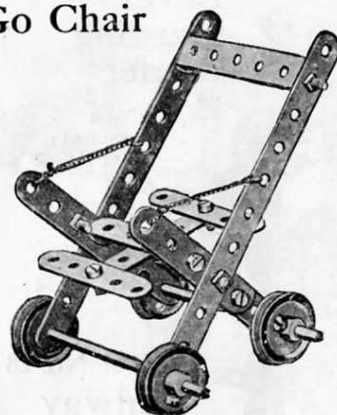
Parts required:	
4 of No. 2	14 of No. 37
4 " " 5	1 " " 52
1 " " 16	2 " " 60
2 " " 22	2 " " 126A

Model No. 15
Bath Chair

Parts required:		
1 of No. 16	13 of No. 37	
2 " " 17	1 " " 44	
3 " " 22	1 " " 52	
4 " " 35	3 " " 60	

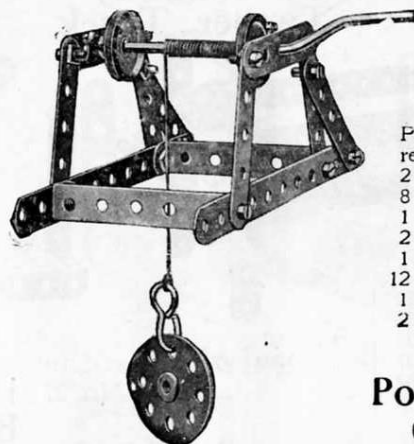
These Models can be made with MECCANO Outfit No. 0

Model No. 16
Go Chair



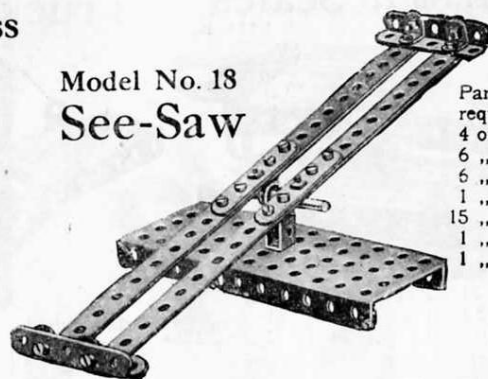
Parts
required:
2 of No. 2
7 " " 5
2 " " 16
4 " " 22
11 " " 37
2 " " 60

Model No. 17 Well Windlass



Parts
required:
2 of No. 2
8 " " 5
1 " " 19
2 " " 22
1 " " 24
12 " " 37
1 " " 57
2 " " 60

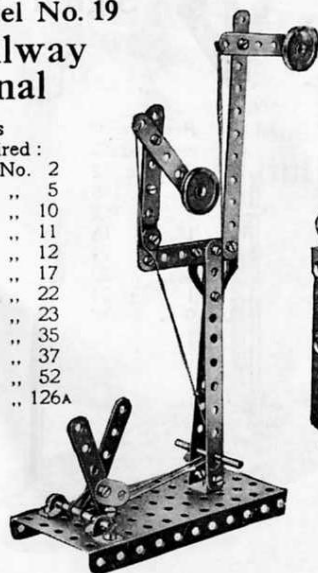
Model No. 18
See-Saw



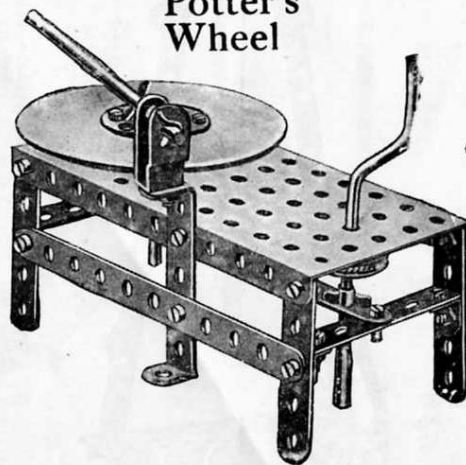
Parts
required:
4 of No. 2
6 " " 5
6 " " 12
1 " " 17
15 " " 37
1 " " 44
1 " " 52

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)

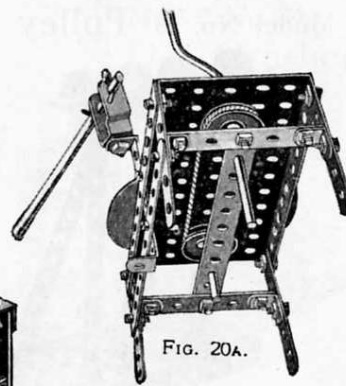
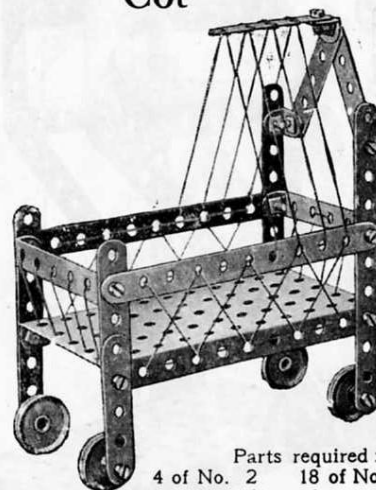


FIG. 20A.

Parts required:
3 of No. 2
4 " " 5
1 " " 16
1 " " 19
2 " " 22
1 " " 24
2 of No. 35
17 " " 37
1 " " 44
1 " " 52
3 " " 60

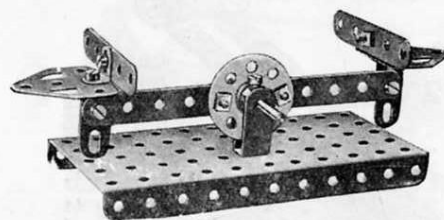
Model No. 21
Cot



Parts required:
4 of No. 2
7 " " 5
3 " " 12
4 " " 22
18 of No. 37
1 " " 52
2 " " 60

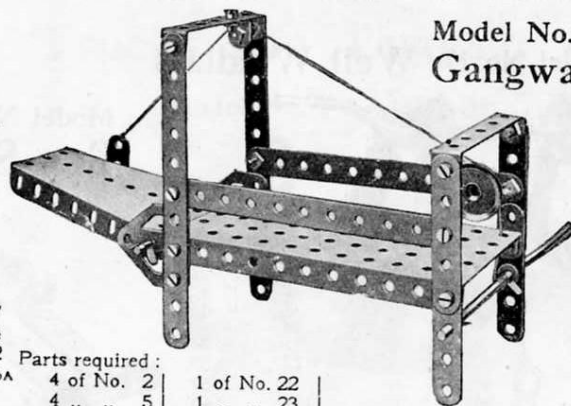
These Models can be made with MECCANO Outfit No. 0

Model No. 22 Scales



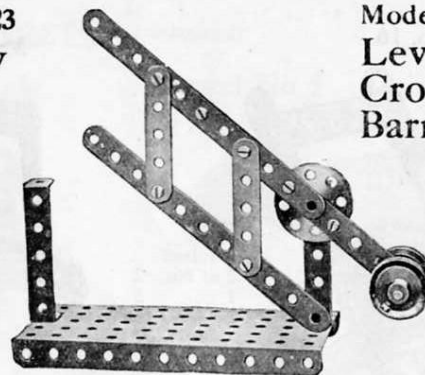
Parts required:		
1 of No. 2	2 of No. 12	9 " " 37
2 " " 5	1 " " 17	1 " " 44
2 " " 10	1 " " 24	1 " " 52
		2 " " 126A

Model No. 23 Gangway



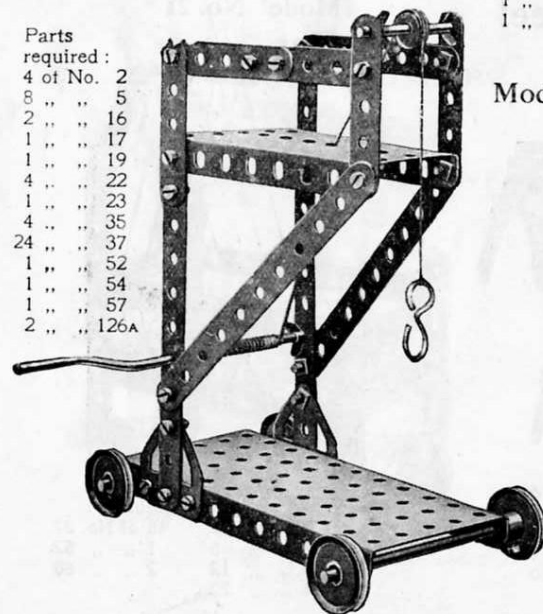
Parts required:		
4 of No. 2	1 of No. 22	
4 " " 5	1 " " 23	
1 " " 10	4 " " 35	2 of No. 60
1 " " 12	18 " " 37	2 " " 126A
1 " " 16	1 " " 52	
1 " " 19	11 " " 54	

Model No. 24 Level Crossing Barrier



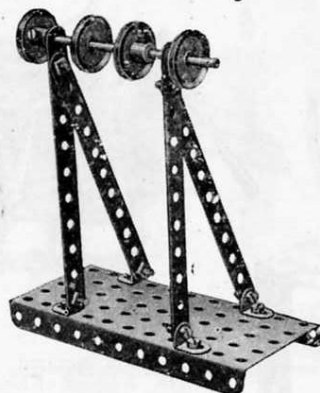
Parts required:		
3 of No. 2		
2 " " 5		
1 " " 17		
4 " " 22		
1 " " 24		
10 " " 37		
1 " " 52		
2 " " 60		

Model No. 25 Tower Wagon



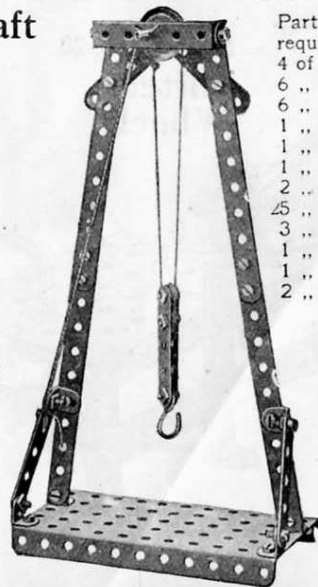
Parts required:		
4 of No. 2		
8 " " 5		
2 " " 16		
1 " " 17		
1 " " 19		
4 " " 22		
1 " " 23		
4 " " 35		
24 " " 37		
1 " " 52		
1 " " 54		
1 " " 57		
2 " " 126A		

Model No. 26 Pulley Shaft



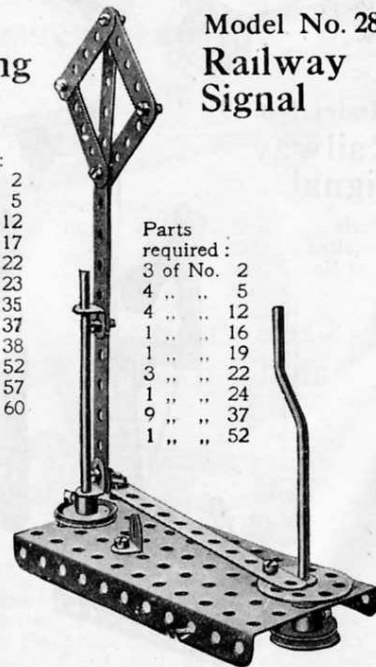
Parts required:		
4 of No. 2	10 of No. 37	
4 " " 12	2 " " 38	
1 " " 16	1 " " 52	
4 " " 22		

Model No. 27 Hoisting Block



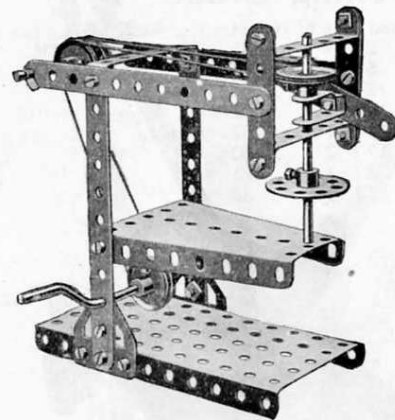
Parts required:		
4 of No. 2		
6 " " 5		
6 " " 12		
1 " " 17		
1 " " 22		
1 " " 23		
2 " " 35		
45 " " 37		
3 " " 38		
1 " " 52		
1 " " 57		
2 " " 60		

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		

Model No. 29 Drilling Machine



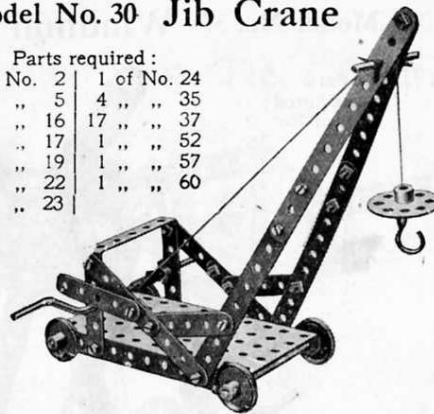
Parts required:

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
1 " " 52	52
1 " " 54	54
3 " " 60	60
2 " " 126A	126A

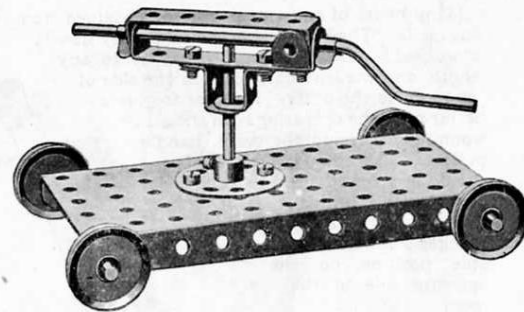
Model No. 30 Jib Crane

Parts required:

4 of No. 2	1 of No. 24
9 " " 5	4 " " 35
2 " " 16	17 " " 37
1 " " 17	1 " " 52
1 " " 19	1 " " 57
4 " " 22	1 " " 60
1 " " 23	



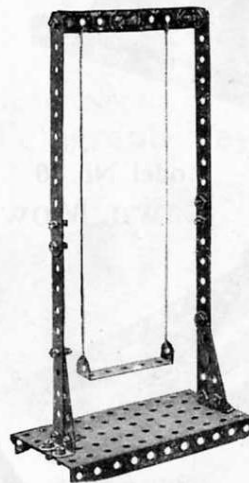
Model No. 31 Rock Drill



Parts required:

1 of No. 19	4 of No. 37
4 " " 22	1 " " 52
2 of No. 16	1 " " 24
1 " " 17	2 " " 35
	2 " " 125

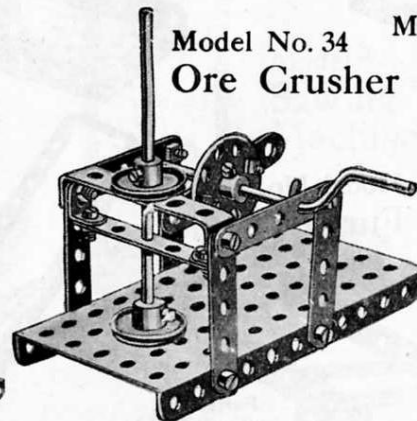
Model No. 33 Swing



Parts required.

4 of No. 2	20 of No. 37
4 " " 5	1 " " 52
6 " " 12	1 " " 60

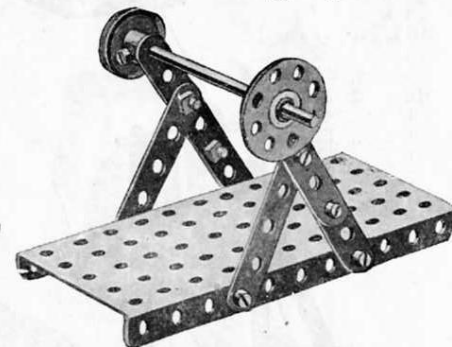
Model No. 34 Ore Crusher



Parts required:

6 of No. 5	1 of No. 24
2 " " 10	2 " " 35
1 " " 16	10 " " 37
1 " " 19	1 " " 52
2 " " 22	2 " " 60

Model No. 35 Buffing Spindle

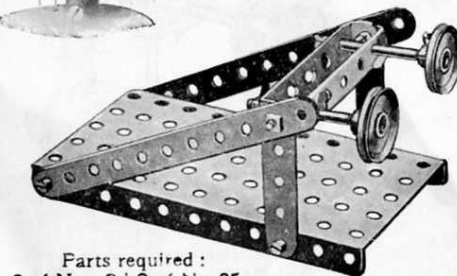
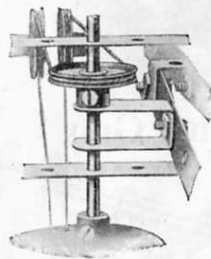


Parts required:

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

FIG. 29A
Detail of
Drilling
Machine.

Model No. 32 Buffers



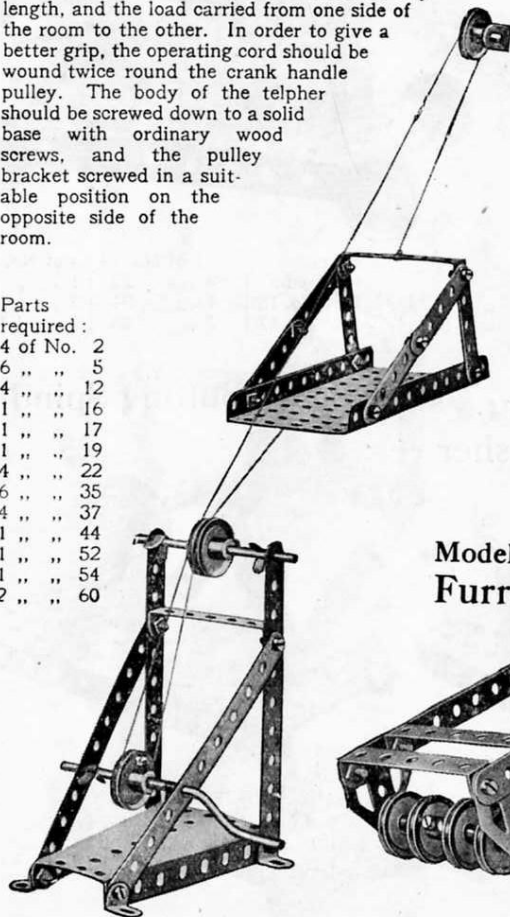
Parts required:

2 of No. 2	2 of No. 35
2 " " 5	6 " " 37
2 " " 17	1 " " 52
2 " " 22	2 " " 60

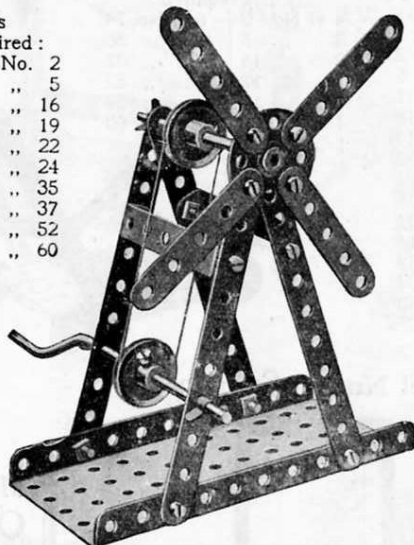
Model No. 36 Telpher Span

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 telpher 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.

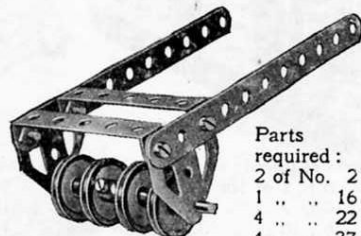
Parts required:
 4 of No. 2
 6 " " 5
 4 " " 12
 1 " " 16
 1 " " 17
 1 " " 19
 4 " " 22
 6 " " 35
 14 " " 37
 1 " " 44
 1 " " 52
 1 " " 54
 2 " " 60

**Model No. 37 Windmill**

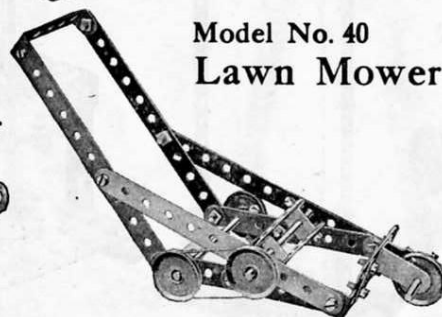
Parts required:
 4 of No. 2
 4 " " 5
 1 " " 16
 1 " " 19
 2 " " 22
 1 " " 24
 4 " " 35
 12 " " 37
 1 " " 52
 2 " " 60

**Model No. 39 Furrow Roller**

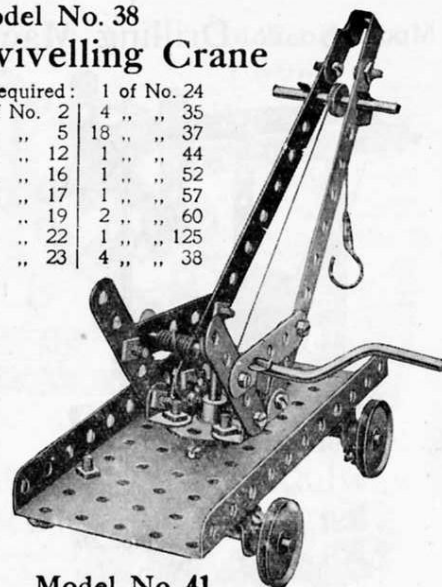
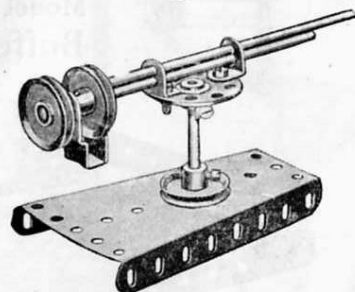
Parts required:
 2 of No. 2
 1 " " 16
 4 " " 22
 4 " " 37
 2 " " 60
 2 " " 126A

**Model No. 40 Lawn Mower**

Parts required:
 4 of No. 2 | 4 of No. 22
 7 " " 5 | 19 " " 37
 2 " " 11 | 1 " " 44
 2 " " 16 | 3 " " 60
 1 " " 17

**Model No. 38 Swivelling Crane**

Parts required:
 2 of No. 2 | 1 of No. 24
 4 " " 5 | 4 " " 35
 4 " " 12 | 18 " " 37
 4 " " 16 | 1 " " 44
 2 " " 17 | 1 " " 52
 1 " " 19 | 1 " " 57
 4 " " 22 | 2 " " 60
 1 " " 23 | 1 " " 125
 4 " " 38

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

Parts required:
 2 of No. 12 | 4 of No. 37
 2 " " 16 | 1 " " 44
 1 " " 17 | 1 " " 54
 1 " " 24

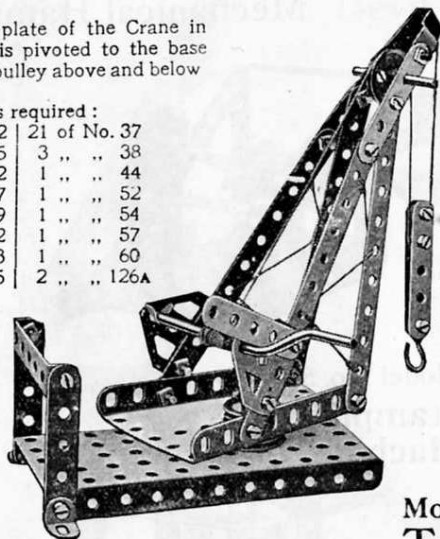
These Models can be made with MECCANO Outfit No. 0

11

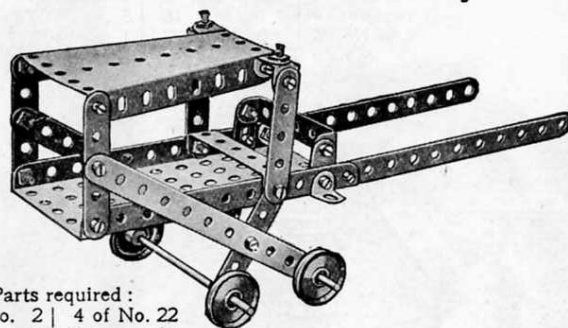
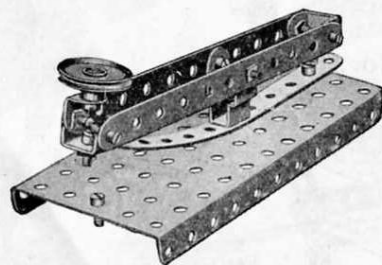
Model No. 42 Swivelling Crane

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

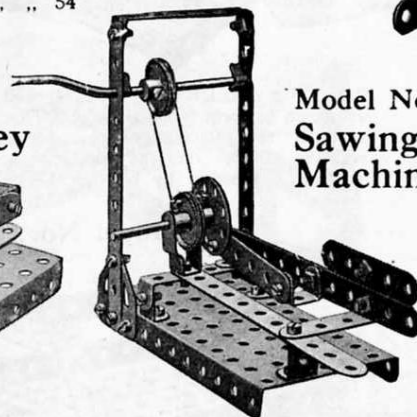
Parts required:	
4 of No. 2	21 of No. 37
7 " " 5	3 " " 38
2 " " 12	1 " " 44
2 " " 17	1 " " 52
1 " " 19	1 " " 54
4 " " 22	1 " " 57
1 " " 23	1 " " 60
2 " " 35	2 " " 126A

**Model No. 43 Ticca Gharry**

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

**Model No. 46 Telegraph Key**

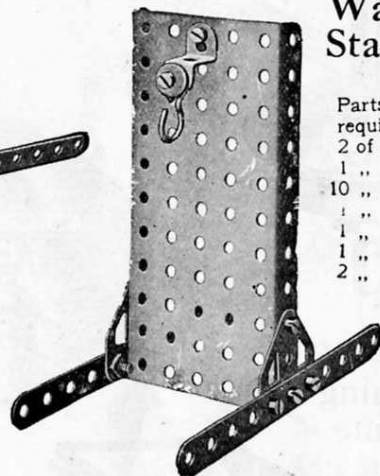
Parts required:	
3 of No. 2	1 of No. 22
1 " " 10	11 " " 37
2 " " 11	1 " " 44
1 " " 12	1 " " 52

Model No. 47 Sawing Machine

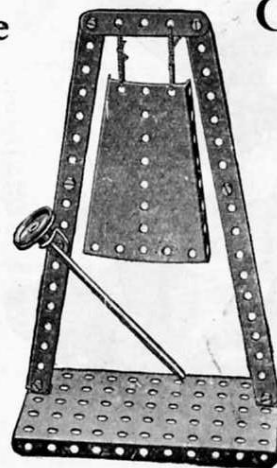
Parts required:	
4 of No. 2	2 of No. 35
3 " " 5	23 " " 37
4 " " 12	1 " " 44
1 " " 17	1 " " 52
1 " " 19	2 " " 60
2 " " 22	2 " " 126A
1 " " 24	

Model No. 44 Watch Stand

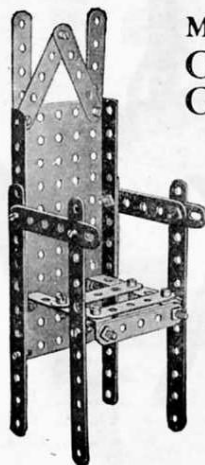
Parts required:	
2 of No. 2	
1 " " 23	
10 " " 37	
1 " " 52	
1 " " 57	
1 " " 125	
2 " " 126A	

**Model No. 48 Gong**

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

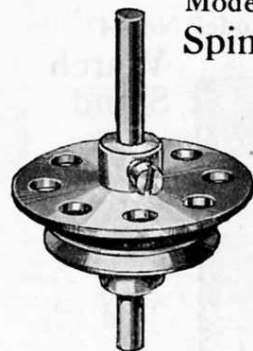
**Model No. 45 Coronation Chair**

Parts required:	
4 of No. 2	
9 " " 5	
2 " " 10	
2 " " 12	
19 " " 37	
1 " " 52	
2 " " 60	



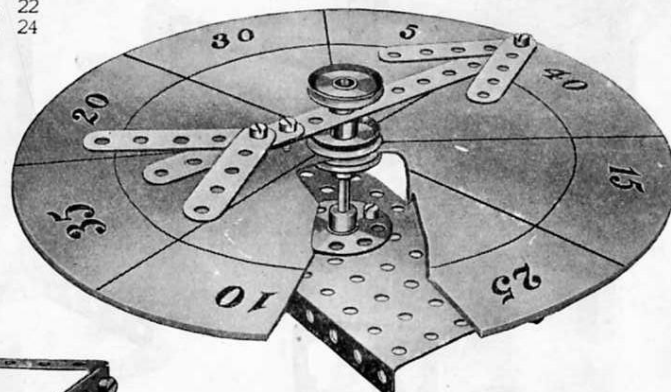
These Models can be made with MECCANO Outfit No. 0

Model No. 49 Spinning Top



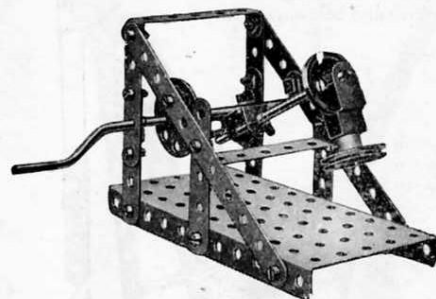
Parts
required:
1 of No. 17
1 " " 22
1 " " 24

Model No. 50 Roulette Wheel



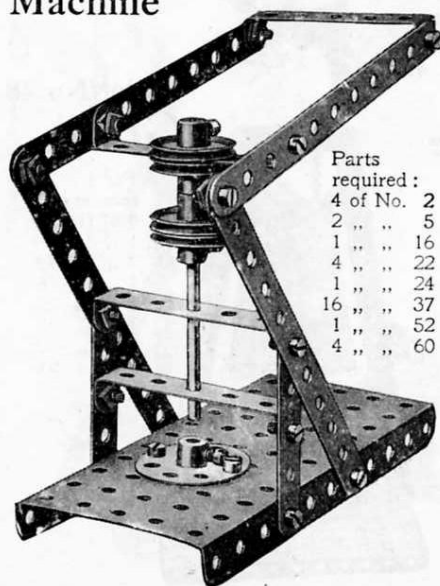
Parts required:	5 of No. 5	1 of No. 24
	1 " " 16	5 " " 37
	1 of No. 2	3 " " 22
		1 " " 52

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
1 " " 52
3 " " 60

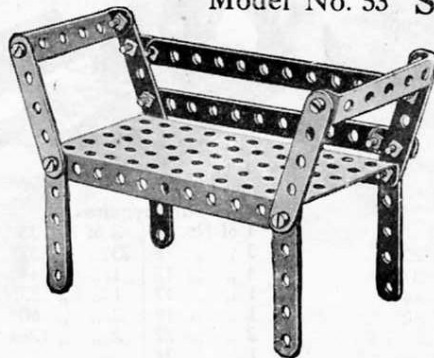
Model No. 52 Punching Machine



Parts
required:
4 of No. 2
2 " " 5
1 " " 16
4 " " 22
1 " " 24
16 " " 37
1 " " 52
4 " " 60

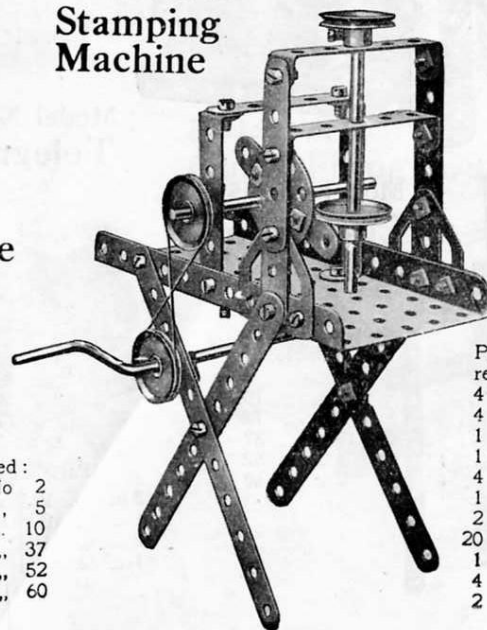
Cut out a circular piece of cardboard and mark as shown to form scoring board. This is clamped between two 1" pulley wheels. The pointer revolves freely on the upright spindle and is held in position by another 1" pulley wheel.

Model No. 53 Settee



Parts
required:
2 of No. 2
8 " " 5
3 " " 10
15 " " 37
1 " " 52
2 " " 60

Model No. 54 Stamping Machine

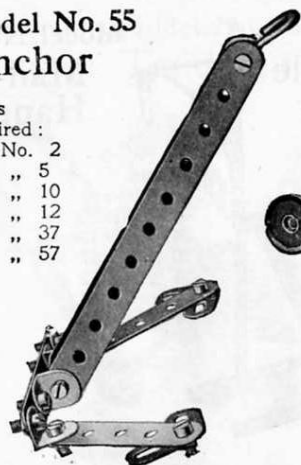


Parts
required:
4 of No. 2
4 " " 5
1 " " 16
1 " " 19
4 " " 22
1 " " 24
2 " " 35
20 " " 37
1 " " 52
4 " " 60
2 " " 126

These Models can be made with MECCANO Outfit No. 0

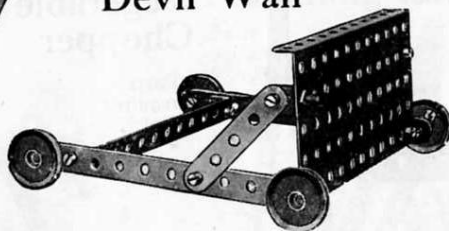
Model No. 55
Anchor

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



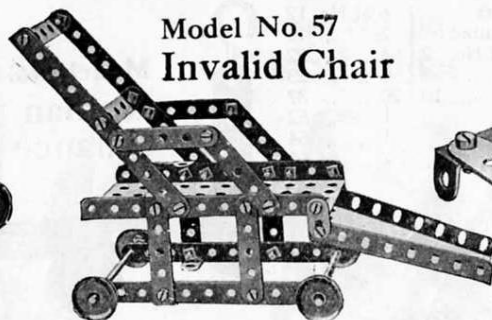
Model No. 56
Devil Wall

Parts required:
3 of No. 2 | 4 of No. 22
2 " " 5 | 18 " " 37
6 " " 12 | 1 " " 52



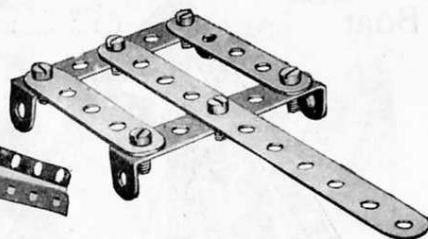
Model No. 57
Invalid Chair

Parts
required:
4 of No. 2 | 2 of No. 10 | 1 of No. 52
6 " " 5 | 2 " " 16 | 1 " " 54
4 " " 22 | 4 " " 22 | 4 " " 60
24 " " 37



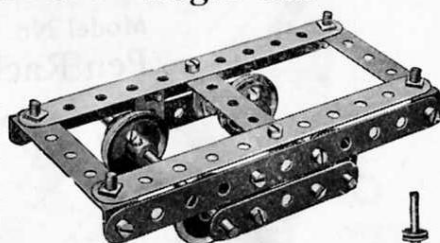
Model No. 58
Grill

Parts required:
1 of No. 2 | 6 of No. 37
2 " " 5 | 2 " " 60



Model No. 59 **Bogie Car**

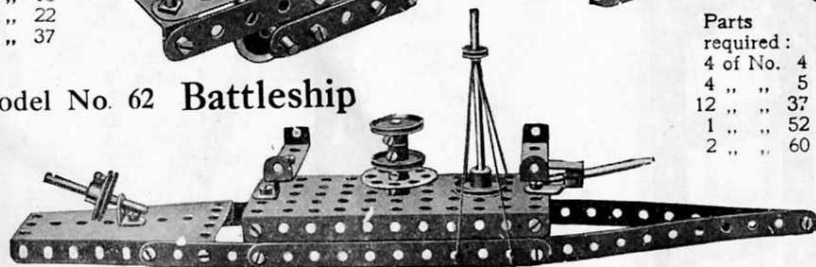
Parts
required:
4 of No. 2
3 " " 5
4 " " 10
2 " " 16
4 " " 22
18 " " 37



Model No. 62 **Battleship**

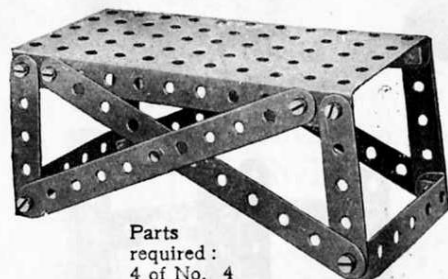
Parts required:

4 of No. 2	1 of No. 16	1 of No. 24	1 of No. 52
3 " " 5	2 " " 17	3 " " 35	1 " " 54
4 " " 10	4 " " 22	19 " " 37	2 " " 60
1 " " 12	1 " " 23	1 " " 44	1 " " 125



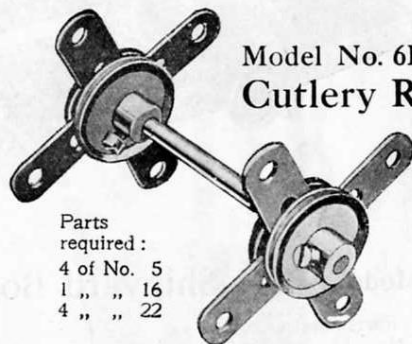
Model No. 60—Fire Stand

Parts
required:
4 of No. 4
4 " " 5
12 " " 37
1 " " 52
2 " " 60



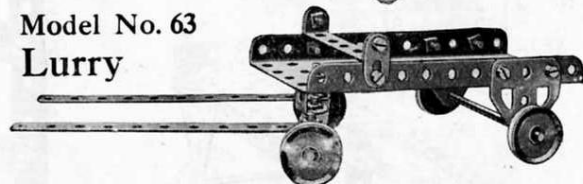
Model No. 61
Cutlery Rest

Parts
required:
4 of No. 5
1 " " 16
4 " " 22



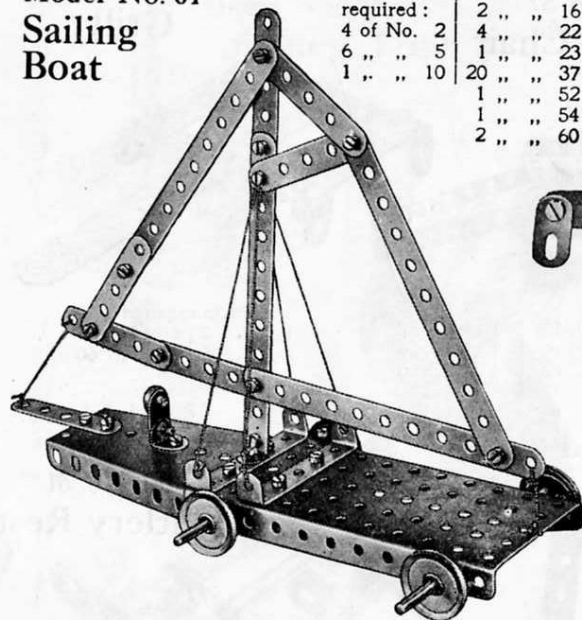
Model No. 63
Lorry

Parts required:
2 of No. 2 | 2 of No. 16 | 1 of No. 52
2 " " 10 | 4 " " 22 | 2 " " 60
1 " " 11 | 12 " " 37 | 2 " " 126A



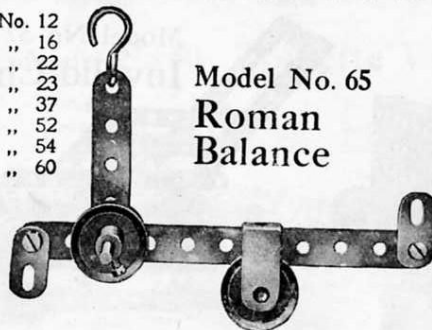
These Models can be made with MECCANO Outfit No. 0

Model No. 64
Sailing
Boat



Parts required :	6 of No. 12
4 of No. 2	2 " " 16
6 " " 5	4 " " 22
1 " " 10	1 " " 23
	20 " " 37
	1 " " 52
	1 " " 54
	2 " " 60

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 " " 60	

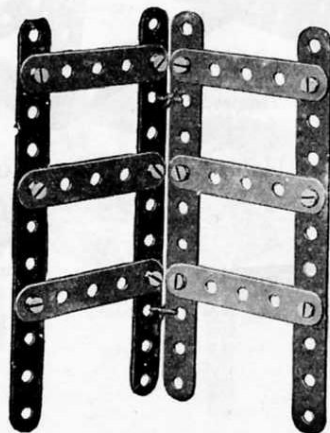


Model No. 67
Mail-Bag
Hanger

Parts required :	
4 of No. 2	
4 " " 12	
10 " " 37	
1 " " 52	
1 " " 57	
1 " " 60	

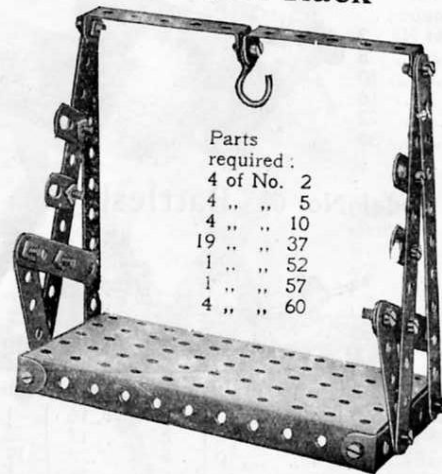


Model No. 69
Clothes Horse



Parts required :	
4 of No. 2	
6 " " 5	
12 " " 37	

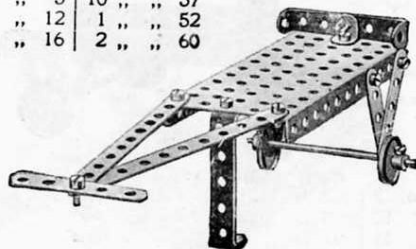
Model No. 70
Pen Rack



Parts required :	
4 of No. 2	
4 " " 5	
4 " " 10	
19 " " 37	
1 " " 52	
1 " " 57	
4 " " 60	

Model No. 68 **Shipyard Bogie**

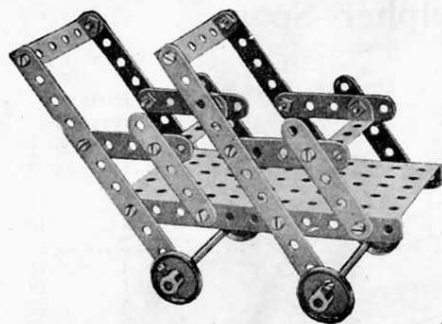
Parts required :	
2 of No. 2	2 of No. 22
5 " " 5	10 " " 37
1 " " 12	1 " " 52
1 " " 16	2 " " 60



These Models can be made with MECCANO Outfit No. 1, or No. 0 and No. 10A

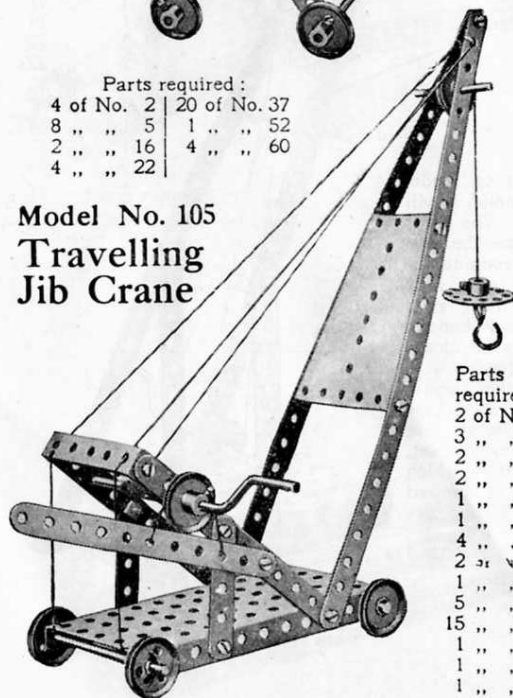
15

**Model No. 101
Tandem Car**



Parts required:
 4 of No. 2 | 20 of No. 37
 8 " " 5 | 1 " " 52
 2 " " 16 | 4 " " 60
 4 " " 22

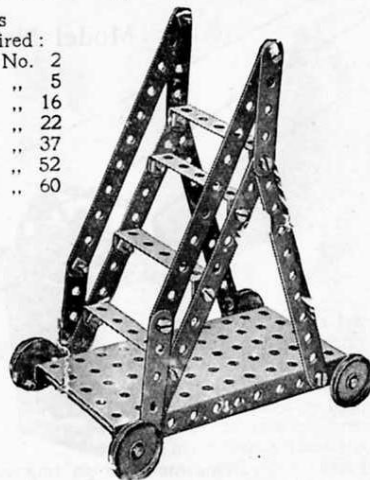
**Model No. 105
Travelling
Jib Crane**



Parts required:
 2 of No. 1
 3 " " 2
 2 " " 5
 2 " " 16
 1 " " 17
 1 " " 19
 4 " " 22
 2 " " 22A
 1 " " 24
 5 " " 35
 15 " " 37
 1 " " 52
 1 " " 54
 1 " " 57
 1 " " 60

**Model No. 102
Travelling Ladder**

Parts required:
 6 of No. 2
 4 " " 5
 2 " " 16
 4 " " 22
 16 " " 37
 1 " " 52
 4 " " 60



**Model No. 103
Step Ladder**



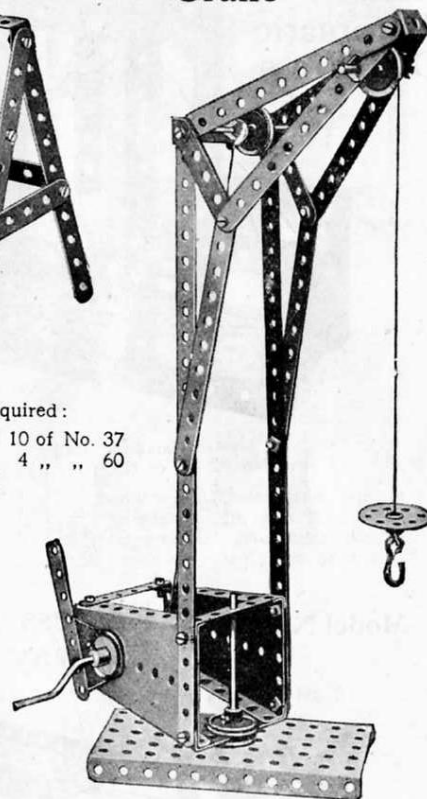
Parts required:
 4 of No. 2 | 10 of No. 37
 3 " " 5 | 4 " " 60
 2 " " 12

**Model No. 106
Swing**

Parts required:
 4 of No. 1
 1 " " 2
 6 " " 5
 4 " " 12
 12 " " 37
 1 " " 52
 3 " " 60



**Model No. 104
Swivelling
Crane**



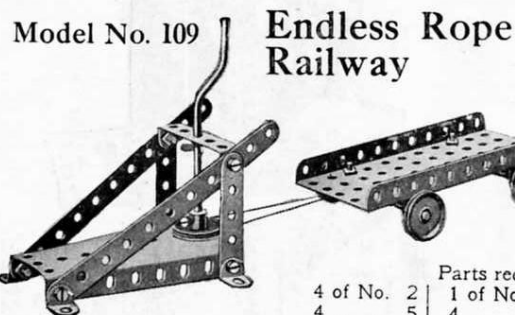
Parts required:
 2 of No. 1 | 2 of No. 17 | 18 of No. 37
 6 " " 2 | 1 " " 19 | 1 " " 44
 1 " " 3 | 4 " " 22 | 1 " " 52
 4 " " 5 | 2 " " 22A | 2 " " 54
 1 " " 11 | 1 " " 24 | 1 " " 57
 1 " " 16 | 4 " " 35 | 3 " " 60

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

Model No. 107
Automatic
Dial Press

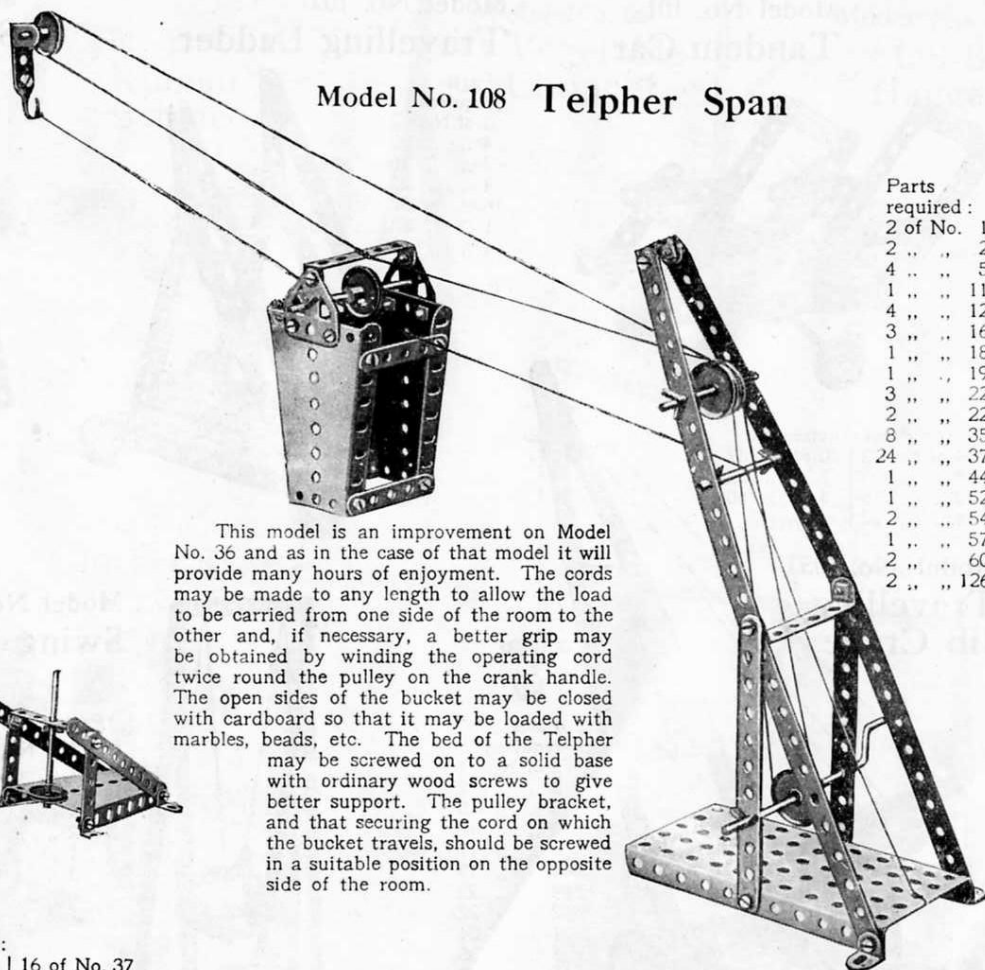


Parts required :		
4 of No. 2	1 of No. 19	18 of No. 37
7 " " 5	4 " " 22	1 " " 52
2 " " 16	2 " " 22A	1 " " 54
1 " " 17	1 " " 24	3 " " 60
	7 " " 35	



Parts required :		
4 of No. 2	1 of No. 19	16 of No. 37
4 " " 5	4 " " 22	1 " " 52
8 " " 12	2 " " 22A	2 " " 54
3 " " 16	4 " " 35	4 " " 60

Model No. 108 Telfer Span



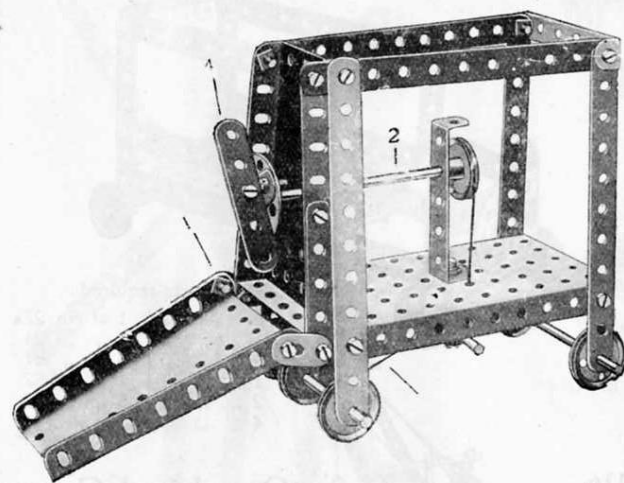
This model is an improvement on Model No. 36 and as in the case of that model it will provide many hours of enjoyment. The cords may be made to any length to allow the load to be carried from one side of the room to the other and, if necessary, a better grip may be obtained by winding the operating cord 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 Telfer 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.

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	
1 " " 52	
2 " " 54	
1 " " 57	
2 " " 60	
2 " " 126A	

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

17

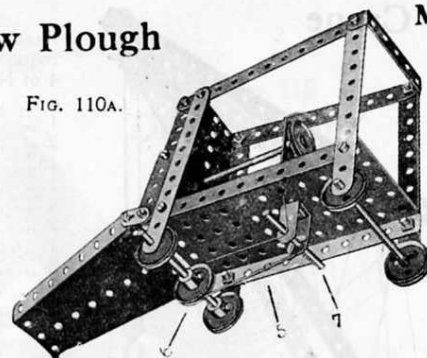
Model No. 110 Snow Plough



Parts required:

6 of No. 2	1 of No. 24
3 " " 5	4 " " 35
2 " " 10	19 " " 37
1 " " 12	1 " " 44
3 " " 16	1 " " 52
1 " " 17	2 " " 54
4 " " 22	2 " " 60
2 " " 22A	

Fig. 110A.



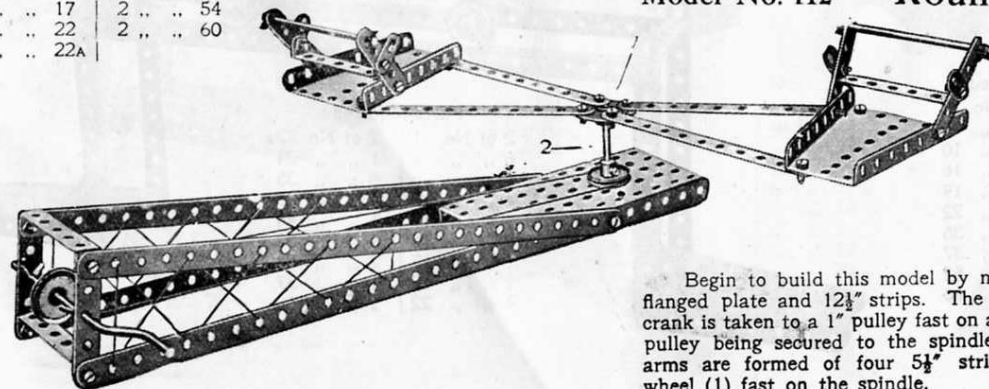
Model No. 111 Dinner Wagon

Parts required:

6 of No. 2	2 of No. 35
8 " " 5	22 " " 37
4 " " 12	1 " " 52
3 " " 16	4 " " 60
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.

Model No. 112 Roundabout



Parts required:

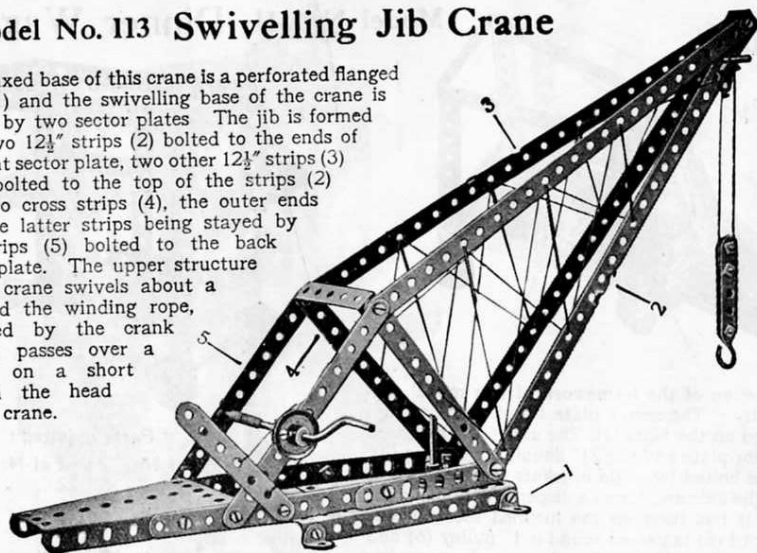
4 of No. 1	1 of No. 17	22 of No. 37
4 " " 2	1 " " 19	1 " " 52
5 " " 5	3 " " 22	2 " " 54
4 " " 10	1 " " 24	4 " " 60
2 " " 16	6 " " 35	

Begin to build this model by making the platform from a flanged plate and $1\frac{1}{2}$ " 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. 3A

Model No. 113 Swivelling Jib Crane

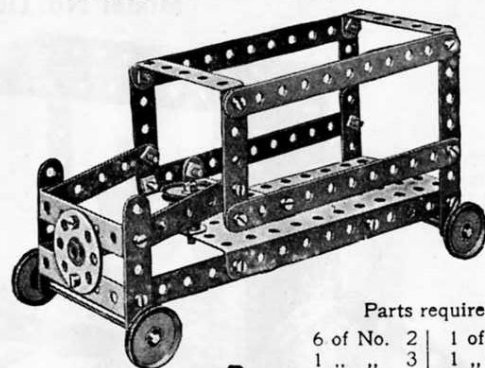
The fixed base of this crane is a perforated flanged plate (1) and the swivelling base of the crane is formed by two sector plates. The jib is formed from two 12½" strips (2) bolted to the ends of the front sector plate, two other 12½" strips (3) being bolted to the top of the strips (2) and two cross 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
20 "	37
3 "	38
1 "	52
2 "	54
1 "	57
1 "	60

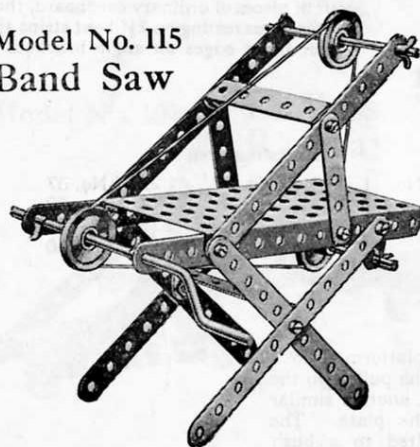
Model No. 114 Motor Van



Parts required:

6 of No.	2	1 of No.	22A
1 "	3	1 "	24
9 "	5	26 "	37
1 "	11	1 "	52
2 "	16	5 "	60
4 "	22		

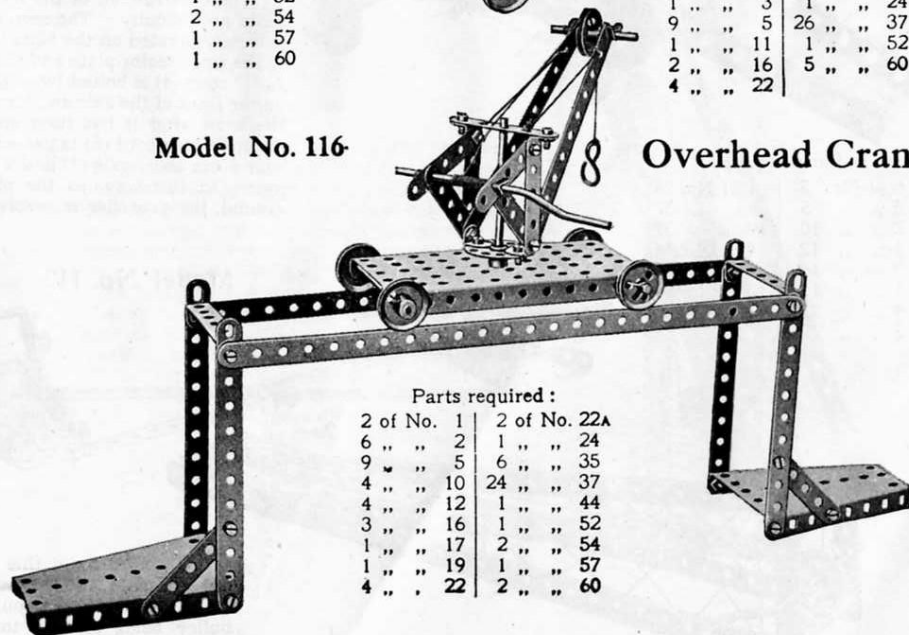
Model No. 115 Band Saw



Parts required:

6 of No.	2
4 "	5
2 "	10
2 "	16
1 "	19
3 "	22
6 "	35
10 "	37
1 "	52
2 "	60

Model No. 116



Overhead Crane

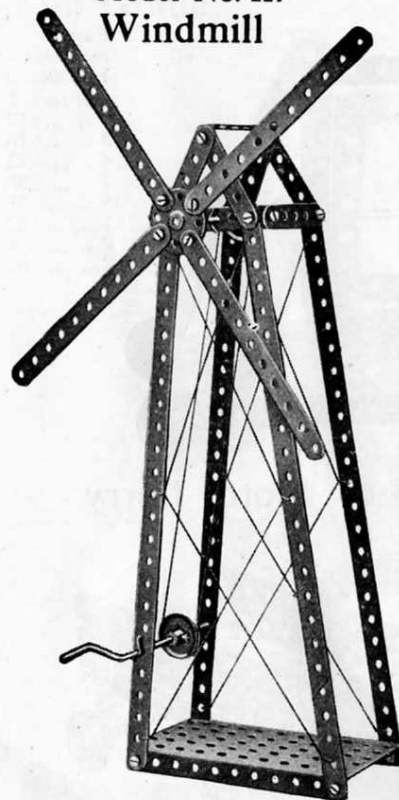
Parts required:

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	1 "	52
1 "	17	2 "	54
1 "	19	1 "	57
4 "	22	2 "	60

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

19

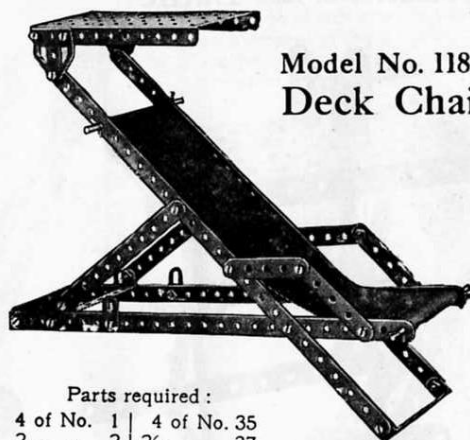
**Model No. 117
Windmill**



Parts required :

4 of No. 1	2 of No. 22
4 " " 2	1 " " 24
7 " " 5	4 " " 35
2 " " 12	20 " " 37
1 " " 16	1 " " 52
1 " " 19	3 " " 60

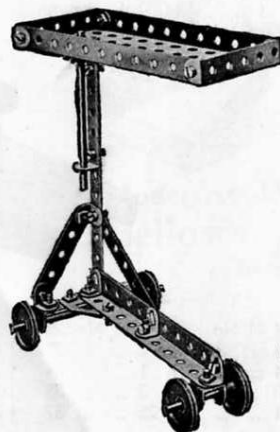
**Model No. 118
Deck Chair**



Parts required :

4 of No. 1	4 of No. 35
2 " " 2	26 " " 37
4 " " 5	1 " " 52
4 " " 10	3 " " 60
2 " " 16	2 " " 126A

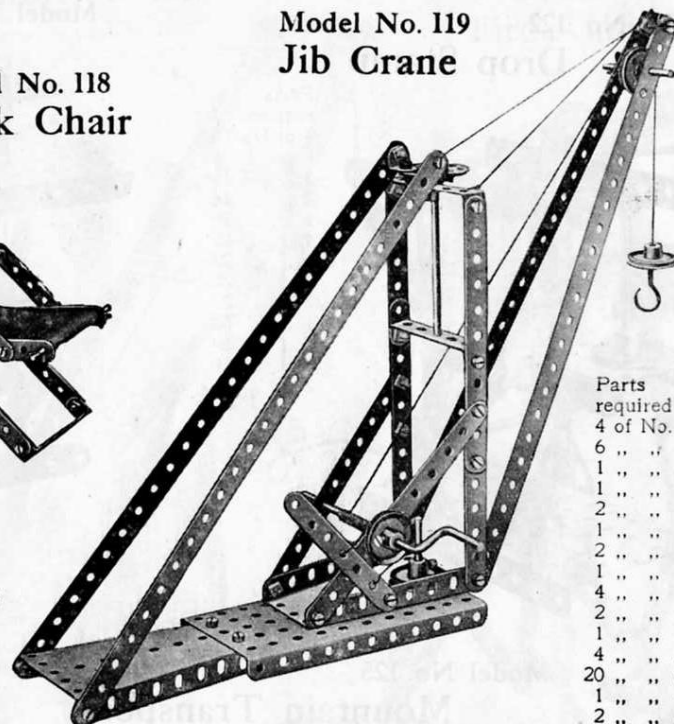
Model No. 120—Bed Table



Parts required :

3 of No. 2
1 " " 3
1 " " 5
1 " " 11
5 " " 12
2 " " 16
1 " " 17
4 " " 22
1 " " 24
21 " " 37
1 " " 52
4 " " 60
1 " " 126A

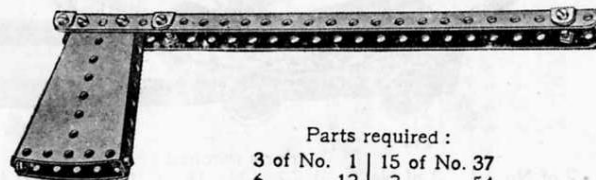
**Model No. 119
Jib Crane**



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
1 " " 52
2 " " 54
1 " " 57
2 " " 60

Model No. 121 Hatchet



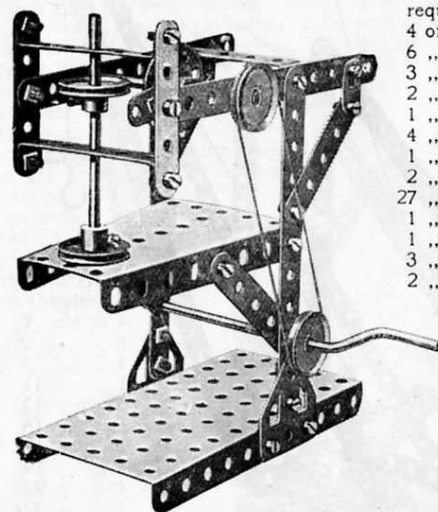
Parts required :

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

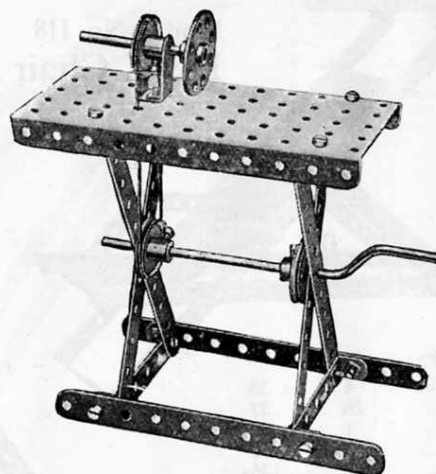
Model No. 122

Drop Stamp



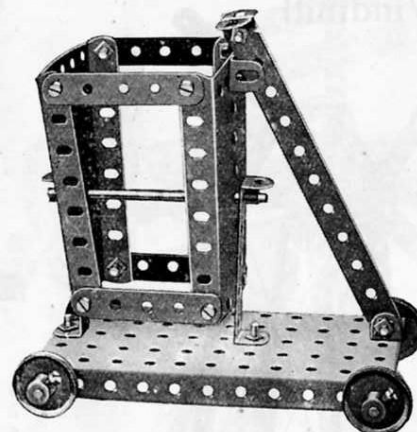
Parts
required :
4 of No. 2
6 " " 5
3 " " 10
2 " " 16
1 " " 19
4 " " 22
1 " " 24
2 " " 35
27 " " 37
1 " " 52
1 " " 54
3 " " 60
2 " " 126A

Model No. 123 Lathe



Parts required :
6 of No. 2 | 1 of No. 24
4 " " 12 | 17 " " 37
1 " " 17 | 1 " " 44
1 " " 19 | 1 " " 52
3 " " 22 | 2 " " 60

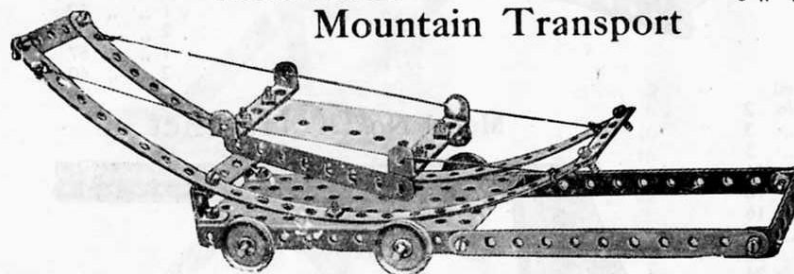
Model No. 124 Tip Wagon



Parts
required :
1 of No. 2
4 " " 5
5 " " 12
3 " " 16
4 " " 22
2 " " 35
14 " " 37
1 " " 52
2 " " 54
2 " " 60

Model No. 125

Mountain Transport



2 of No. 1	3 of No. 5	2 of No. 16	18 of No. 37	1 of No. 54
2 " " 2	4 " " 12	4 " " 22	1 " " 52	2 " " 60

Parts required :

4 of No. 2	3 of No. 22	3 of No. 38
8 " " 5	2 " " 22A	1 " " 52
4 " " 12	1 " " 24	1 " " 54
2 " " 16	2 " " 35	3 " " 60
1 " " 17	25 " " 37	2 " " 125

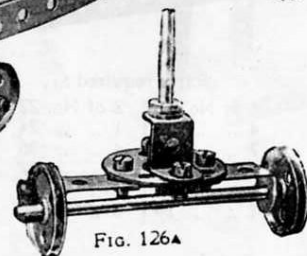
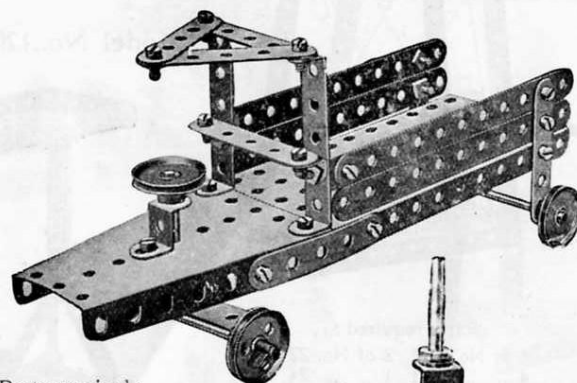


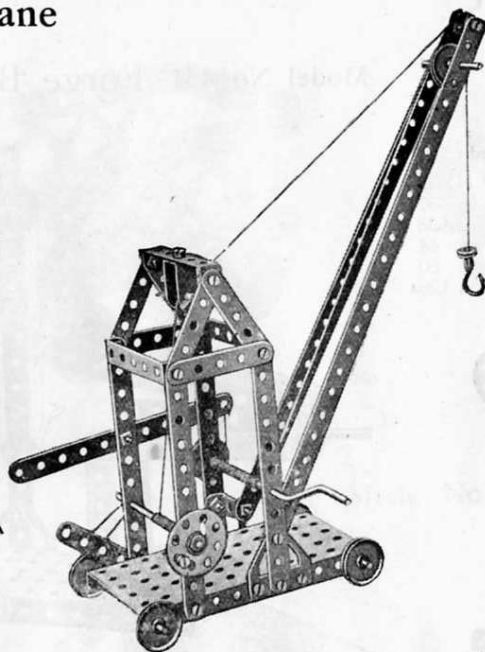
FIG. 126A

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

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
1 " "	52
1 " "	57
3 " "	60
2 " "	125
2 " "	126A

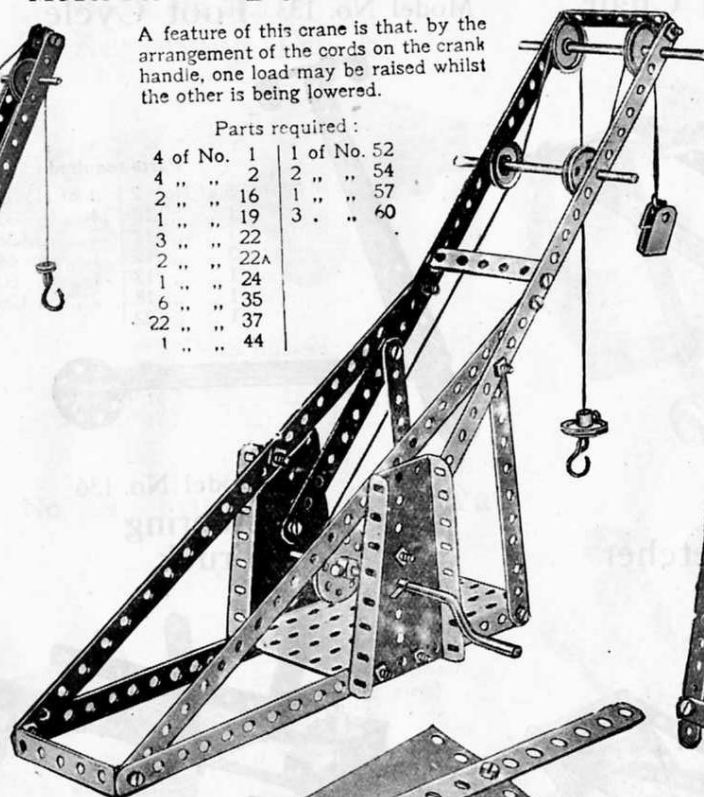


Model No. 128 Double Action Crane

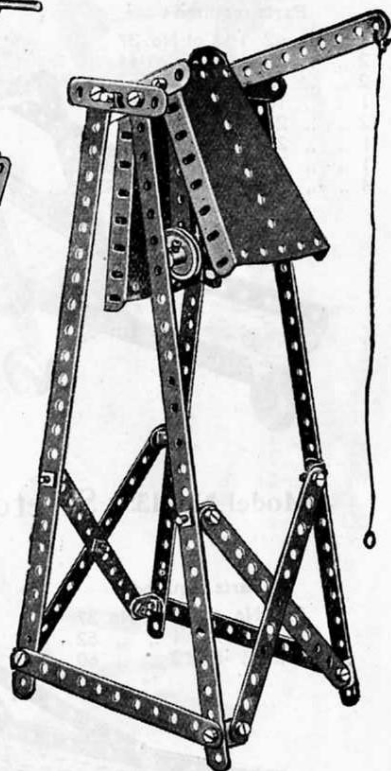
A feature of this crane is that, by the arrangement of the cords on the crank handle, one load may be raised whilst the other is being lowered.

Parts required:

4 of No.	1	1 of No.	52
4 " "	2	2 " "	54
2 " "	16	1 " "	57
1 " "	19	3 " "	60
3 " "	22		
2 " "	22A		
1 " "	24		
6 " "	35		
22 " "	37		
1 " "	44		



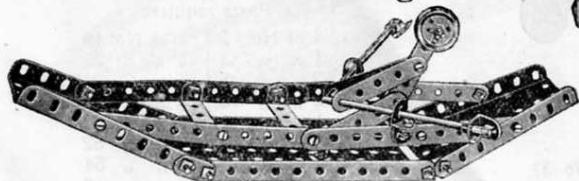
Model No. 129 Fire Alarm



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		

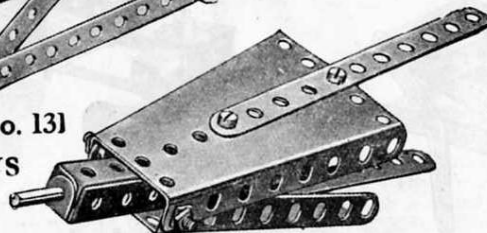
Model No. 130—Rowing Boat



Parts required:

4 of No.	2	2 of No.	16	4 of No.	38
5 " "	5	1 " "	18A	1 " "	52
4 " "	10	2 " "	22A	2 " "	54
7 " "	12	4 " "	35	3 " "	60
		24 " "	37		

Model No. 131 Bellows



Parts required:

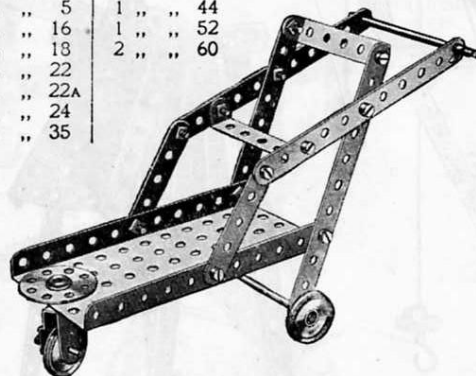
2 of No.	2	2 of No.	54
1 " "	17	4 " "	60
9 " "	37		

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

Model No. 132 Invalid Chair

Parts required :

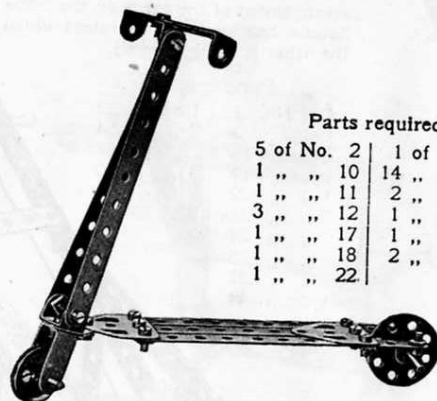
4 of No. 2	13 of No. 37
2 " " 5	1 " " 44
2 " " 16	1 " " 52
1 " " 18	2 " " 60
2 " " 22	
1 " " 22A	
1 " " 24	
4 " " 35	



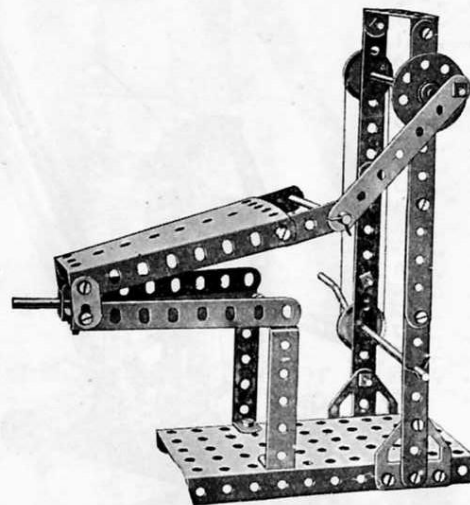
Model No. 133 Foot Cycle

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 " " 60
1 " " 18	2 " " 126A
1 " " 22	



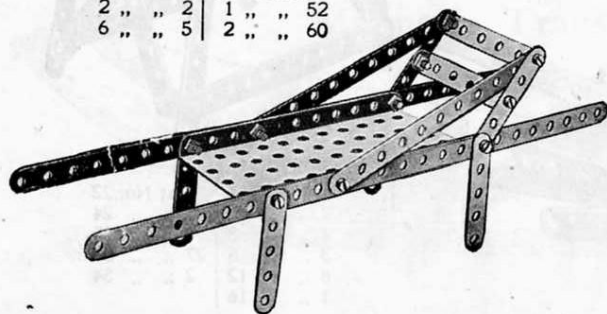
Model No. 134 Forge Bellows



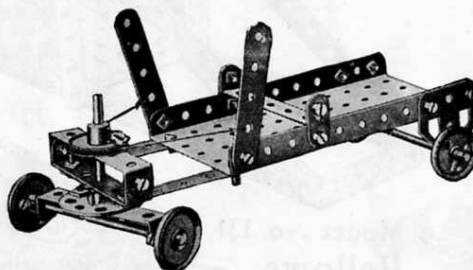
Model No. 135 Stretcher

Parts required :

2 of No. 1	10 of No. 37
2 " " 2	1 " " 52
6 " " 5	2 " " 60



Model No. 136 Steering Truck



Parts required :	1 of No. 17	18 of No. 37
4 of No. 5	3 " " 22	2 " " 38
2 " " 10	2 " " 22A	1 " " 52
2 " " 16	1 " " 24	4 " " 60
	2 " " 35	2 " " 126A

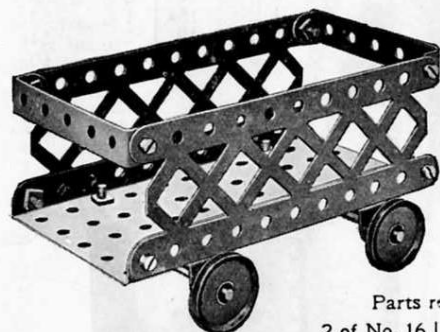
Parts required :

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	1 " " 52
2 " " 16	2 " " 54
1 " " 17	3 " " 60

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

23

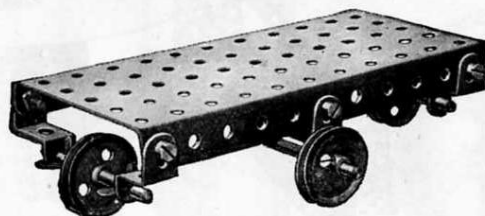
Model No. 201 Truck



Parts required :

2 of No. 16	1 of No. 52
4 " " 22	4 " " 60
12 " " 37	2 " " 100

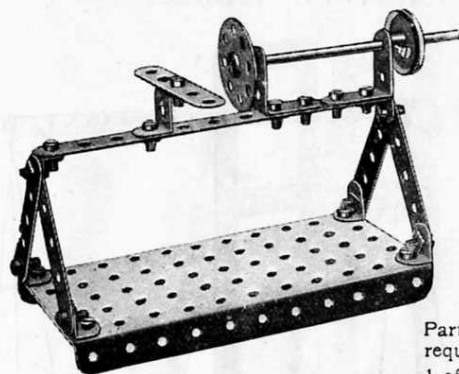
Model No. 202 Revolving Truck



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

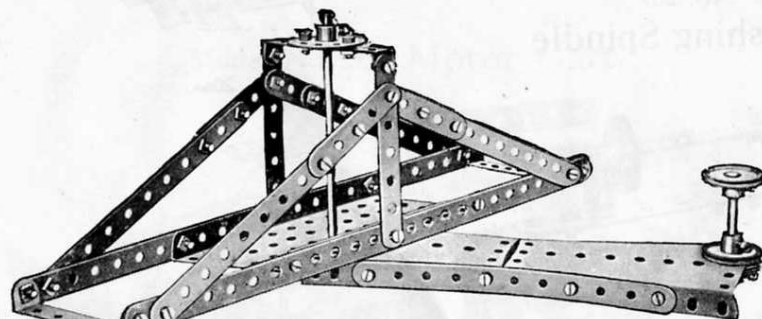
Model No. 203 Lathe



Parts required :

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

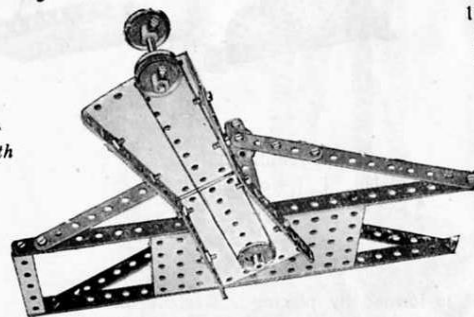
Model No. 204 Turntable Gangway



Parts required :

2 of No. 1	4 of No. 22
6 " " 2	1 " " 24
2 " " 3	34 " " 37
4 " " 5	1 " " 52
1 " " 15A	2 " " 54
1 " " 17	3 " " 60

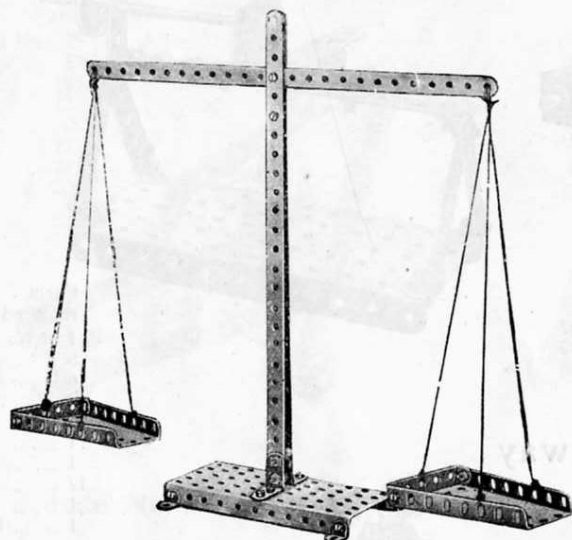
FIG. 204A
(underneath
view)



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

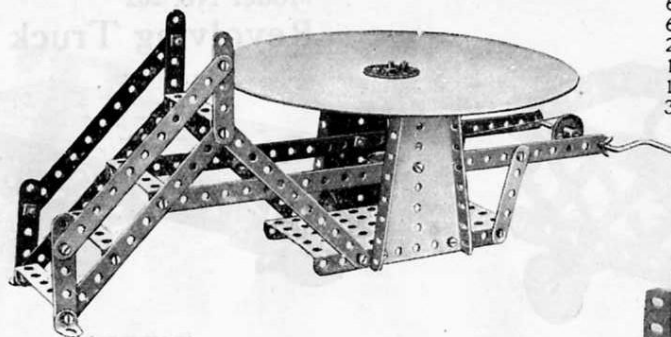


Parts required :

3 of No. 1	4 of No. 38
4 " " 12	1 " " 52
2 " " 12A	2 " " 54
19 " " 37	2 " " 60

The slot is formed by placing 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	1 " " 52
1 " " 19	2 " " 54
3 " " 22	5 " " 60

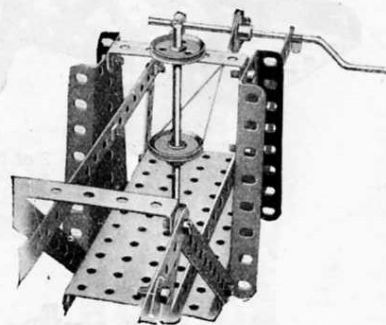
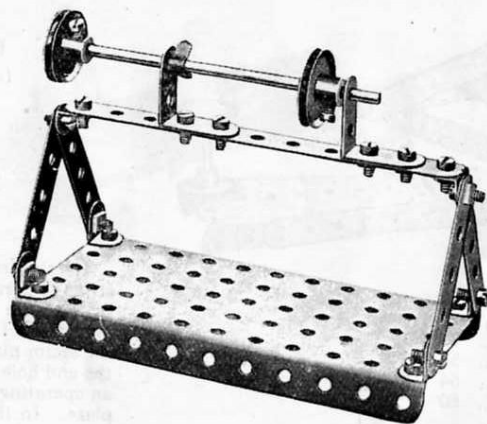


Fig. 206A.

Model No. 207 Polishing Spindle



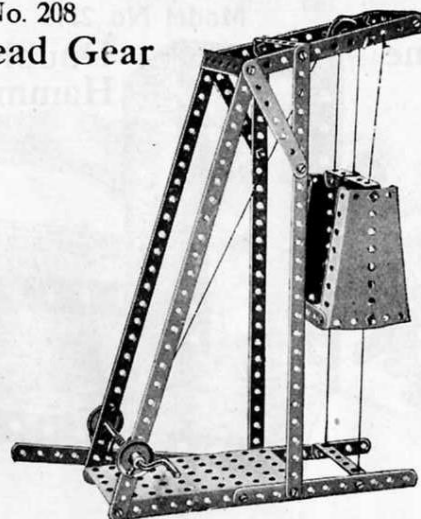
Parts required :

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

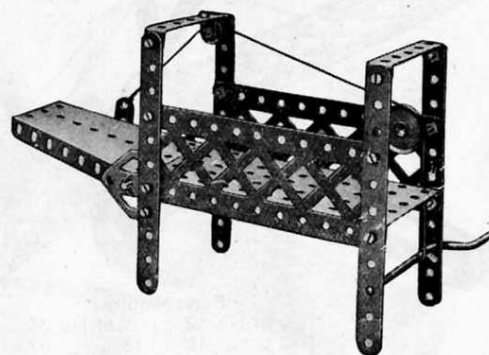
These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A

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
1 " " 52
2 " " 54
5 " " 60



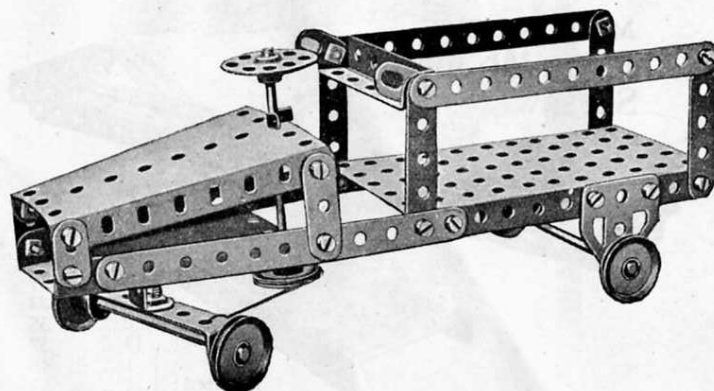
Model No. 209 Gangway



Parts required:

4 of No. 2	1 of No. 22	1 of No. 54
1 " " 10	1 " " 23	2 " " 60
1 " " 12	4 " " 35	2 " " 100
1 " " 16	17 " " 37	2 " " 126A
1 " " 19	1 " " 52	

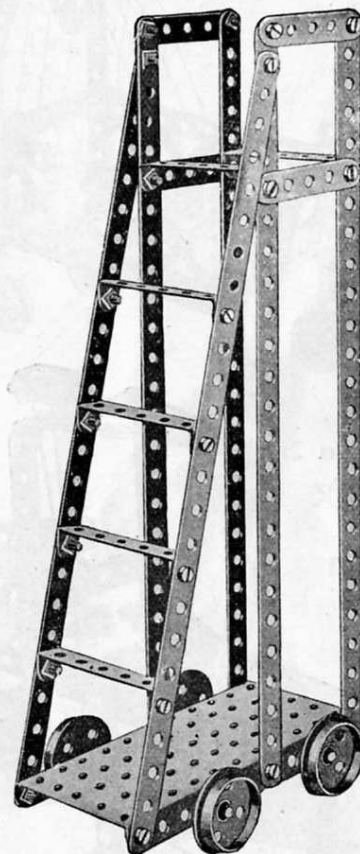
Model No. 211 Motor Cart



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	1 " " 52
2 " " 54	3 " " 60
2 " " 126A	

Model No. 210 Ladder on Wheels



Parts required:

3 of No. 1	24 of No. 37
4 " " 5	1 " " 52
2 " " 16	6 " " 60
4 " " 20	

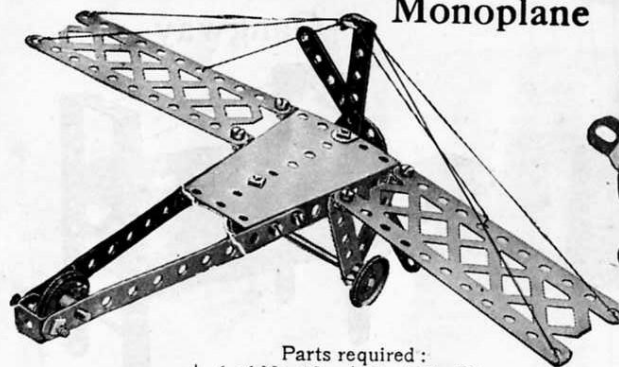
These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A

Model No. 212 Cot on Wheels

Parts
required:
2 of No. 2
7 " " 5
3 " " 12
4 " " 22
18 " " 37
2 " " 60
2 " " 100



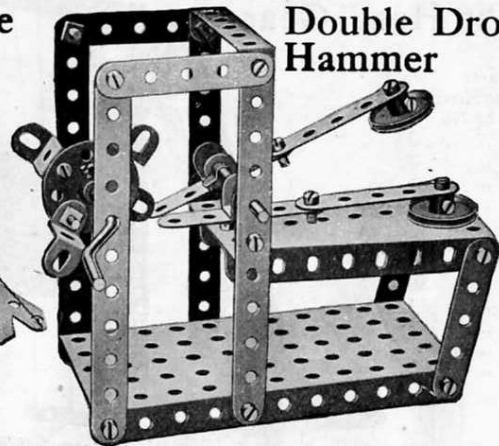
Model No 213 Monoplane



Parts required:

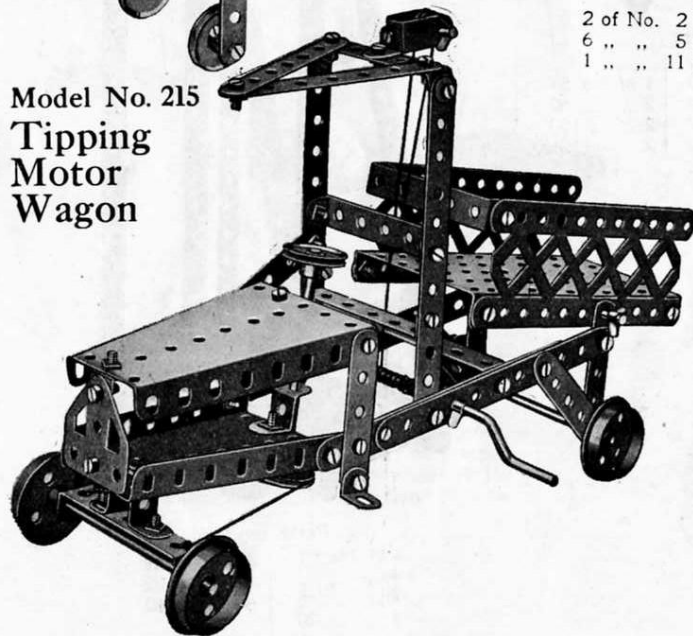
2 of No. 2	6 of No. 12	1 of No. 35
6 " " 5	2 " " 16	18 " " 37
1 " " 11	1 " " 18A	1 " " 54
	3 " " 22	1 " " 60
	1 " " 24	2 " " 100

Model No. 214 Double Drop Hammer



Parts required:	1 of No. 16	25 of No. 37
4 of No. 2	1 " " 19	1 " " 52
8 " " 5	2 " " 22	1 " " 54
2 " " 11	1 " " 24	2 " " 60
	6 " " 35	4 " " 125

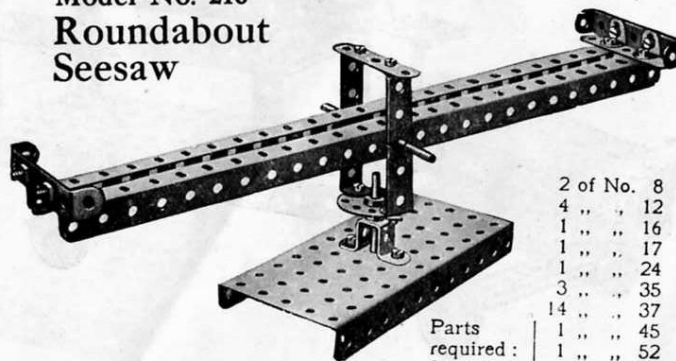
Model No. 215 Tipping Motor Wagon



Parts
required:

6 of No. 2	2 " " 3
2 " " 5	7 " " 10
1 " " 12	4 " " 16
4 " " 18A	1 " " 19
1 " " 20	2 " " 22
1 " " 23	7 " " 35
43 " " 37	2 " " 38
2 " " 44	1 " " 45
1 " " 52	2 " " 54
6 " " 60	2 " " 100
2 " " 125	1 " " 126A

Model No. 216 Roundabout Seesaw

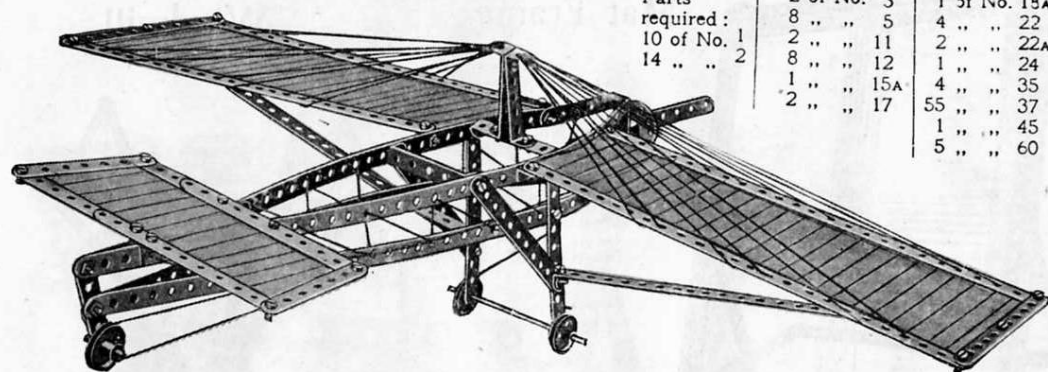


2 of No. 8	4 " " 12
1 " " 16	1 " " 17
1 " " 24	3 " " 35
14 " " 37	1 " " 45
Parts required:	1 " " 52
3 of No 5	4 " " 60

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

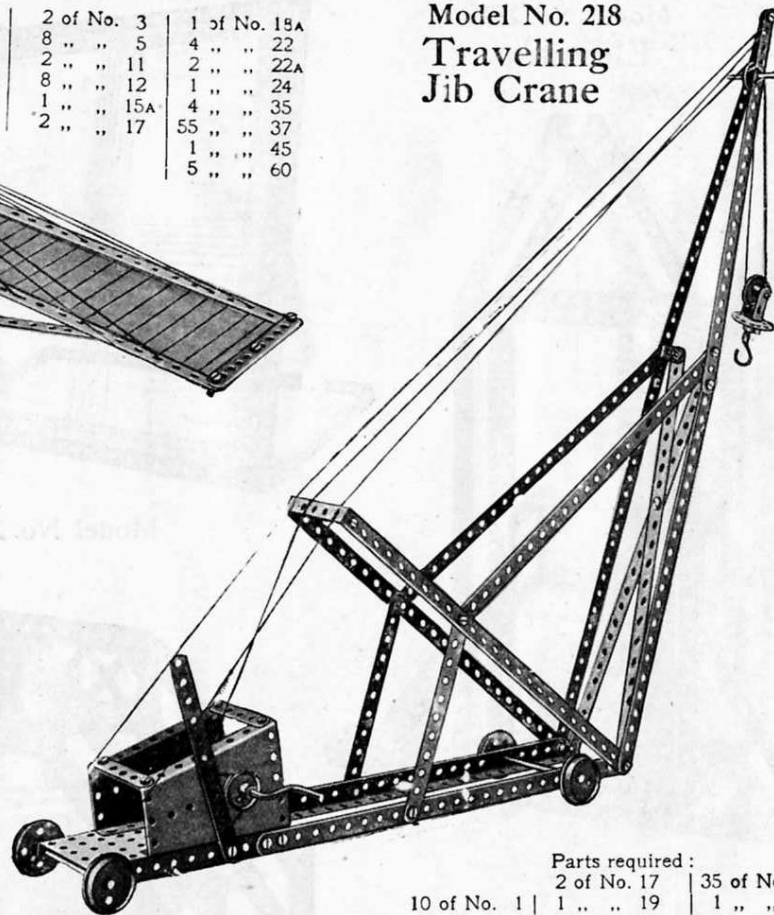
27

Model No. 217 Monoplane



Parts required:	2 of No. 3	1 of No. 19A
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 " " 60

Model No. 218 Travelling Jib Crane



Parts required:	2 of No. 17	35 of No. 37
10 of No. 1	1 " " 19	1 " " 44
3 " " 2	4 " " 20	1 " " 52
3 " " 5	2 " " 22	2 " " 54
2 " " 8	1 " " 22A	1 " " 57
4 " " 12	1 " " 24	1 " " 60
2 " " 16	5 " " 35	

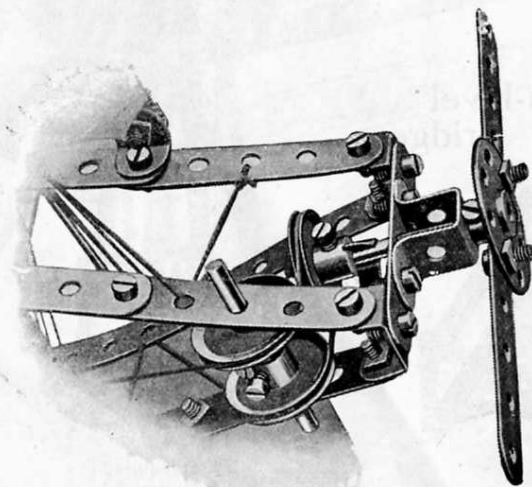
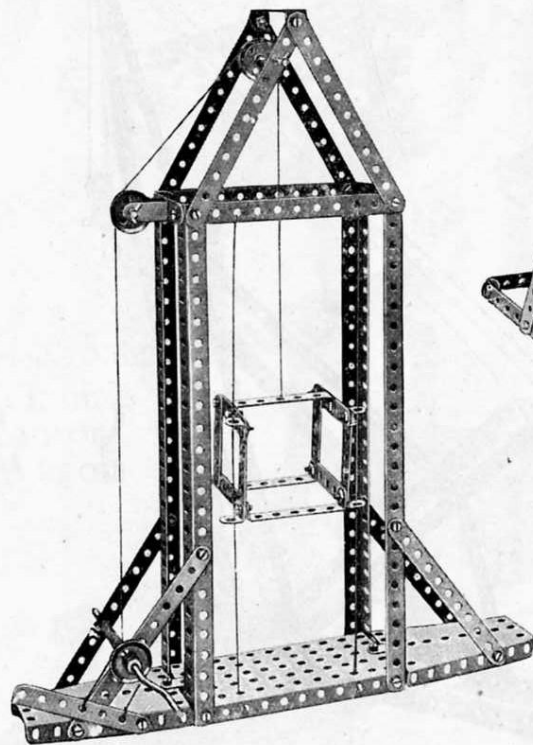


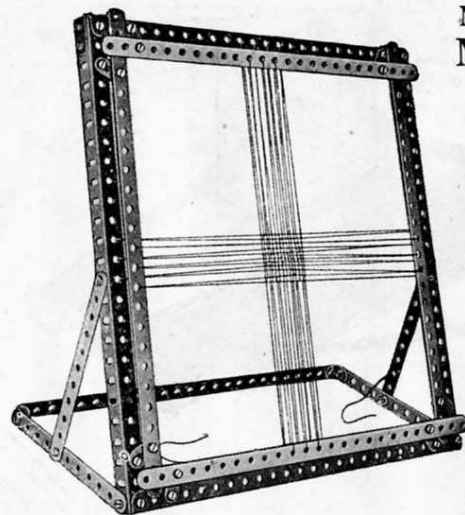
Fig. 217A

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

Model No. 219
Elevator



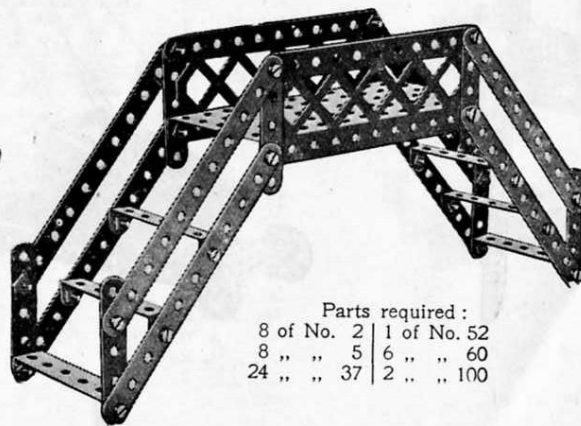
		Parts required:	
10 of No. 2	1 of No. 16	38 of No. 37	
1 " " 3	1 " " 18A	1 " " 44	
10 " " 5	1 " " 19	1 " " 52	
4 " " 8	1 " " 22	2 " " 54	
2 " " 10	2 " " 22A	4 " " 60	
4 " " 12	5 " " 35		



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	1 of No. 52
8 " " 5	6 " " 60
24 " " 37	2 " " 100

Model No. 221
Windmill

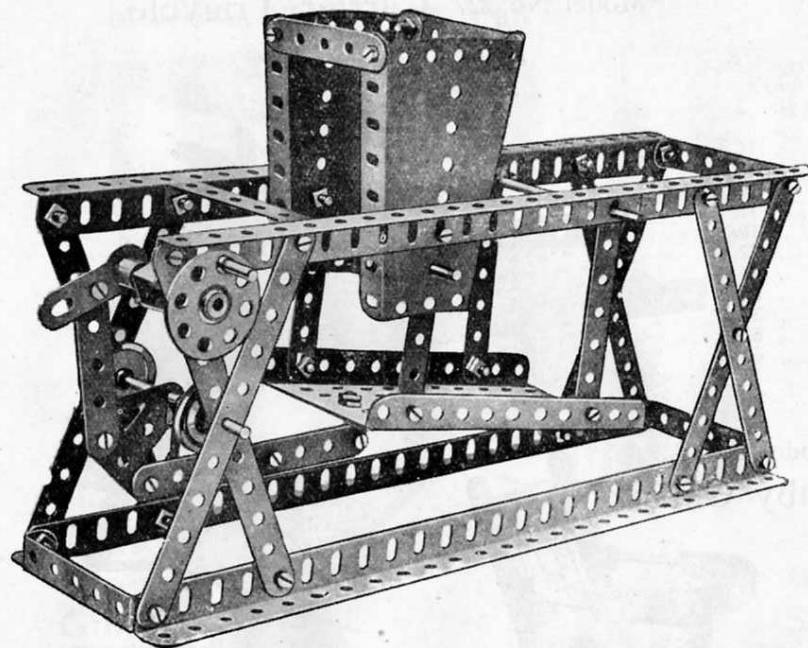


		Parts required:	
10 of No. 1	4 of No. 8	1 of No. 24	
14 " " 2	4 " " 12	4 " " 35	
2 " " 3	1 " " 15	45 " " 37	
2 " " 5	2 " " 19	2 " " 54	
	2 " " 22		

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

29

Model No. 223 Coal Sifter



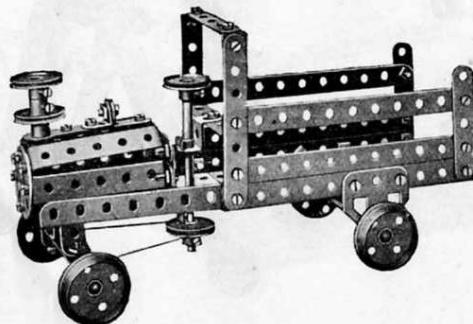
Parts
required :

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
1 " "	52
2 " "	54
4 " "	60
1 " "	62
1 " "	115
1 " "	126A

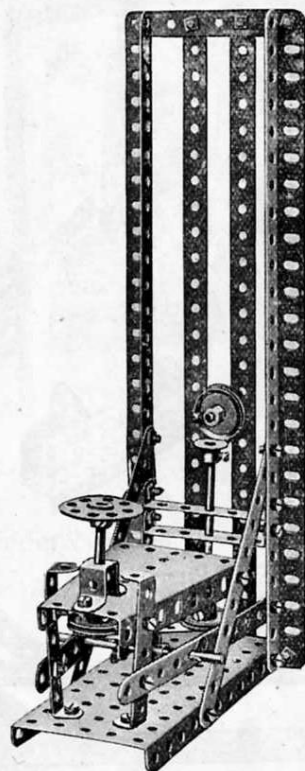
Model No. 225 Locomotive

Parts required :

4 of No.	2	1 of No.	24
2 " "	3	2 " "	35
6 " "	5	47 " "	37
3 " "	10	1 " "	45
7 " "	12	1 " "	52
3 " "	16	1 " "	54
1 " "	17	6 " "	60
4 " "	20	1 " "	62
4 " "	22	2 " "	125
1 " "	23	2 " "	126A



Model No. 224 Try-your-strength Machine

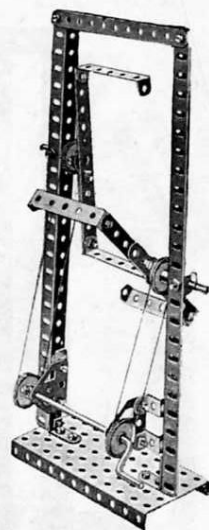


Parts required :

2 of No.	1	1 of No.	17	12 of No.	33
5 " "	2	1 " "	18A	1 " "	45
2 " "	3	4 " "	22	1 " "	52
2 " "	8	1 " "	24	1 " "	54
1 " "	11	4 " "	35	4 " "	60
2 " "	16	30 " "	37	1 " "	126A

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

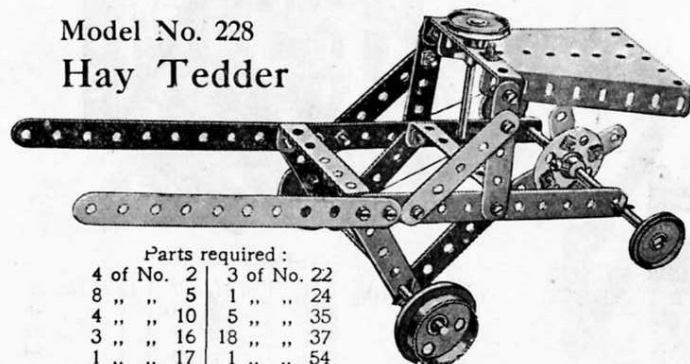
Model No. 226 Candy Puller



Parts required:

3 of No. 2	2
2 " "	8
2 " "	12
2 " "	12A
2 " "	17
1 " "	19
4 " "	22
2 " "	35
26 " "	37
10 " "	38
1 " "	52
4 " "	60
2 " "	62
4 " "	125
2 " "	126

Model No. 228 Hay Tedder



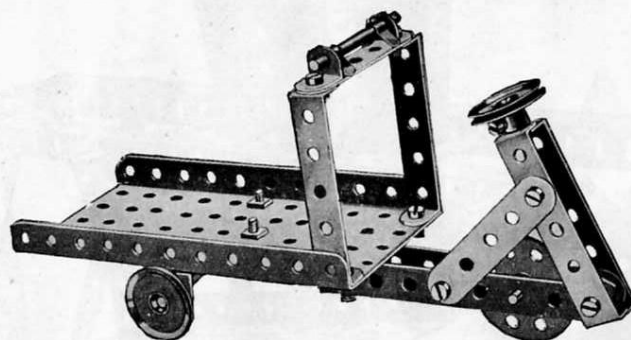
Parts required:

4 of No. 2	3 of No. 22
8 " " 5	1 " " 24
4 " " 10	5 " " 35
3 " " 16	18 " " 37
1 " " 17	1 " " 54
2 " " 20	3 " " 60

Model No. 227 Carrier Tricycle

Parts required:

2 of No. 2	2
3 " "	5
1 " "	11
2 " "	12
1 " "	16
1 " "	17
1 " "	18A
3 " "	22
1 " "	24
2 " "	35
15 " "	37
1 " "	52
5 " "	60



Model No. 229 Baby Chair

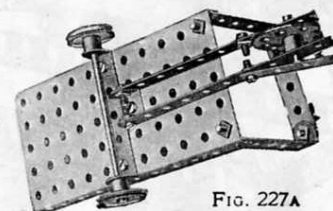
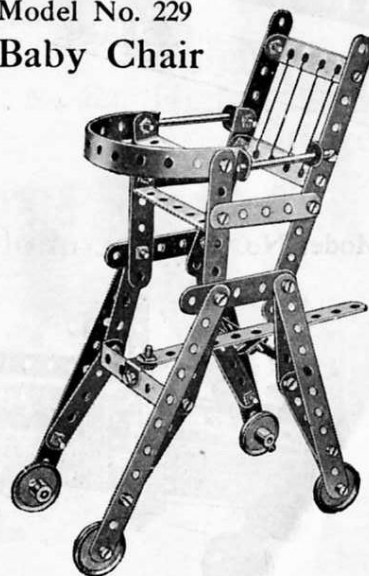


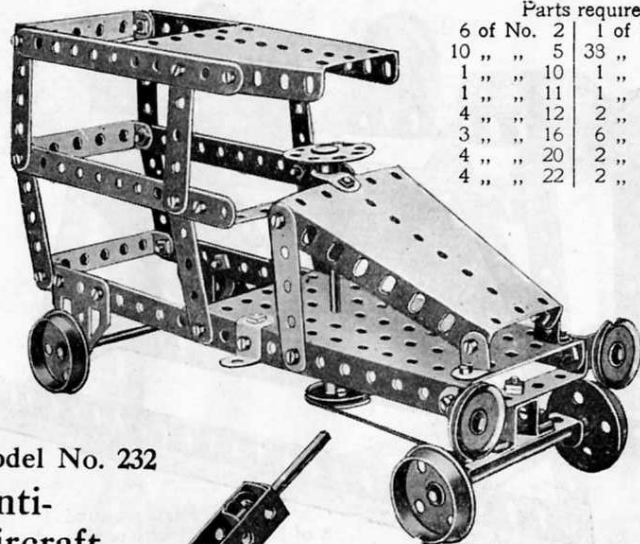
FIG. 227A
Underneath view

Parts required:

8 of No. 2	2
2 " "	3
12 " "	5
6 " "	12
2 " "	17
4 " "	22
31 " "	37
6 " "	60

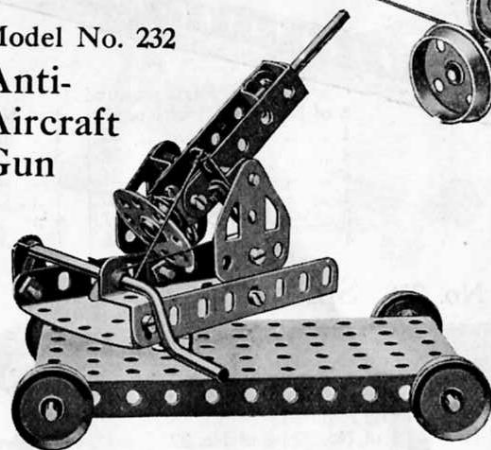
These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A

Model No. 230 Motor Van



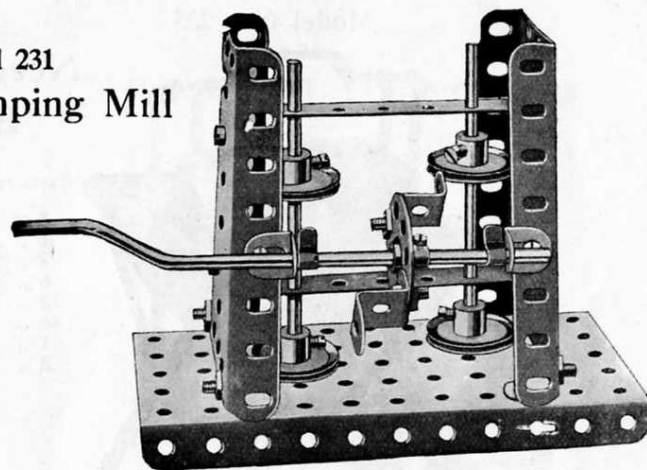
Parts required:			
6 of No. 2	1 of No. 24		
10 " " 5	33 " " 37		
1 " " 10	1 " " 44		
1 " " 11	1 " " 52		
4 " " 12	2 " " 54		
3 " " 16	6 " " 60		
4 " " 20	2 " " 125		
4 " " 22	2 " " 126A		

Model No. 232 Anti-Aircraft Gun



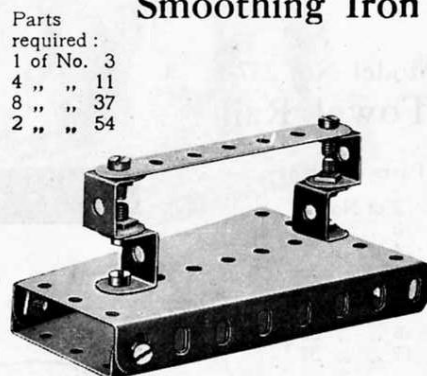
Parts required:		
5 of No. 10	4 of No. 22	1 of No. 54
2 " " 11	1 " " 24	2 " " 60
2 " " 16	4 " " 35	4 " " 125
2 " " 17	12 " " 37	2 " " 126A
1 " " 19	1 " " 52	

Model 231 Stamping Mill



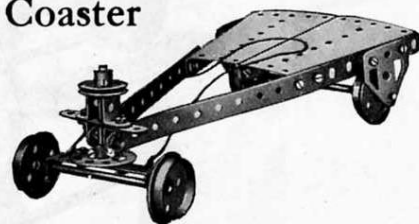
Parts required:		
2 of No. 3	4 of No. 22	1 of No. 52
10 " " 12	1 " " 24	2 " " 54
2 " " 16	2 " " 35	2 " " 125
1 " " 19	16 " " 37	

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	6 of No. 38
1 " " 5	4 " " 20	1 " " 45
2 " " 12	1 " " 22	2 " " 54
1 " " 15	1 " " 24	1 " " 60
1 " " 16	16 " " 37	2 " " 126A

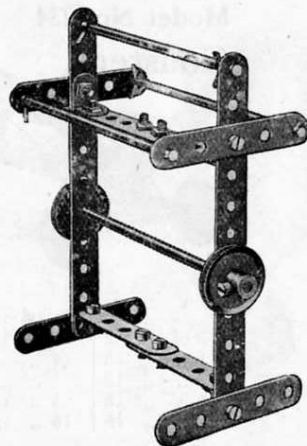
These Models can be made with MECCANO Outfit No. 2, or No. 1 and No. 1A



Needlework Basket

Parts required :

6 of No.	1
6 " "	2
2 " "	3
6 " "	5
12 " "	12
46 " "	37
1 " "	52
3 " "	60

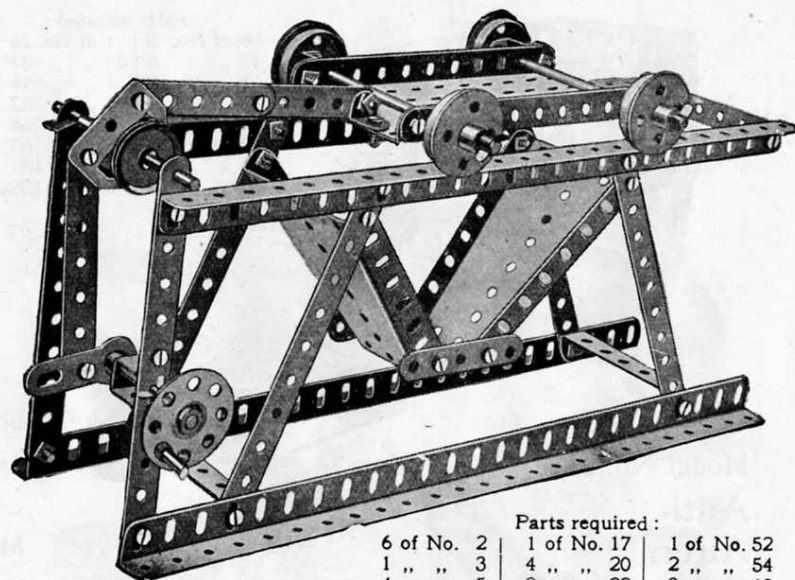


Model No. 237 Towel Rail

Parts required :

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

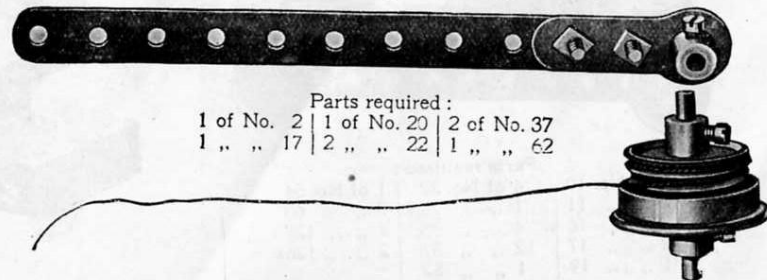
Model No. 236 Sifter



Parts required :

6 of No.	2	1 of No.	17	1 of No.	52
1 " "	3	4 " "	20	2 " "	54
4 " "	5	2 " "	22	3 " "	60
4 " "	8	1 " "	24	1 " "	62
1 " "	12	7 " "	35	1 " "	115
2 " "	15	34 " "	37	4 " "	125
1 " "	16	1 " "	45	1 " "	126A

Model No. 238 Spinning Top



Parts required :

1 of No.	2	1 of No.	20	2 of No.	37
1 " "	17	2 " "	22	1 " "	62

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

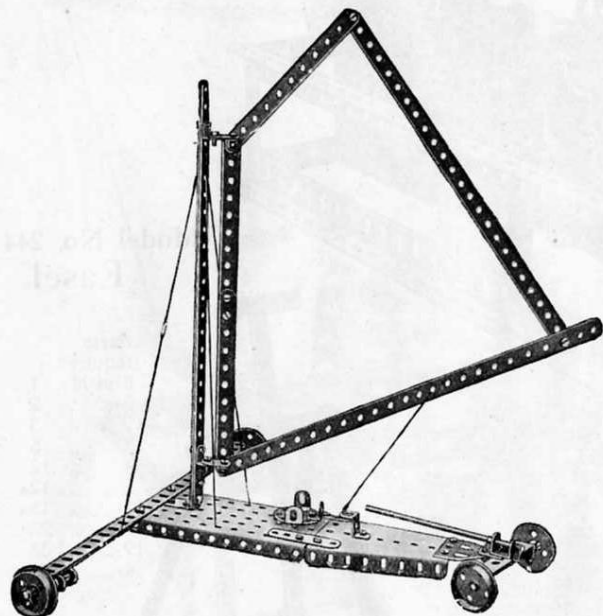
33

Model No. 240

Embossing Machine

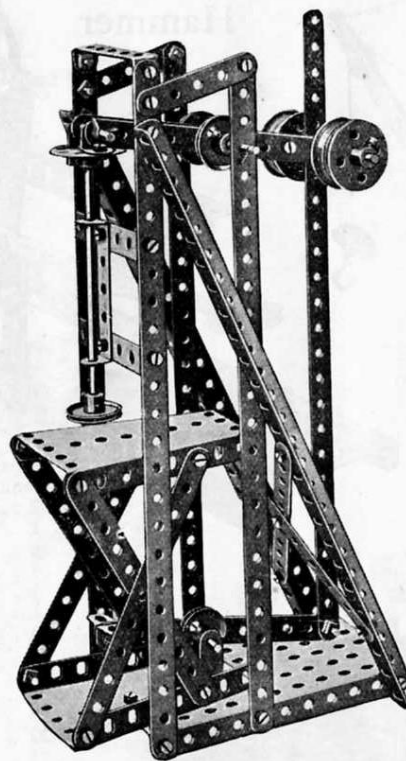
Model No. 241 Dinner Gong

Model No. 239 Seashore Aeroplane



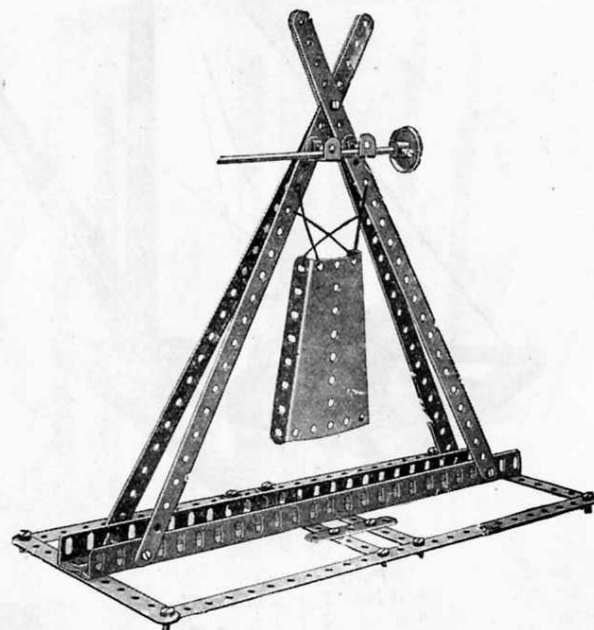
Parts required :

4 of No. 1	1 of No. 12A	33 of No. 37
3 " " 2	1 " " 15	1 " " 38
2 " " 5	1 " " 16	1 " " 52
1 " " 8	2 " " 17	1 " " 54
3 " " 10	4 " " 20	1 " " 60
3 " " 11	1 " " 24	1 " " 125
7 " " 12	6 " " 35	1 " " 126A



Parts required :

5 of No. 1	2 of No. 16	44 of No. 37
9 " " 2	1 " " 17	1 " " 44
2 " " 5	1 " " 18A	1 " " 52
2 " " 8	4 " " 20	2 " " 54
2 " " 11	4 " " 22	4 " " 60
4 " " 12	1 " " 24	
1 " " 15	4 " " 35	

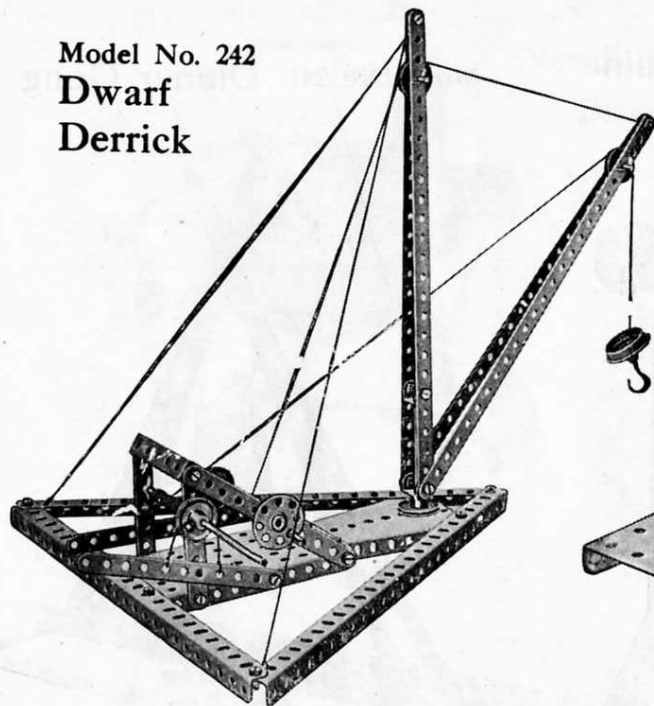


Parts required :

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

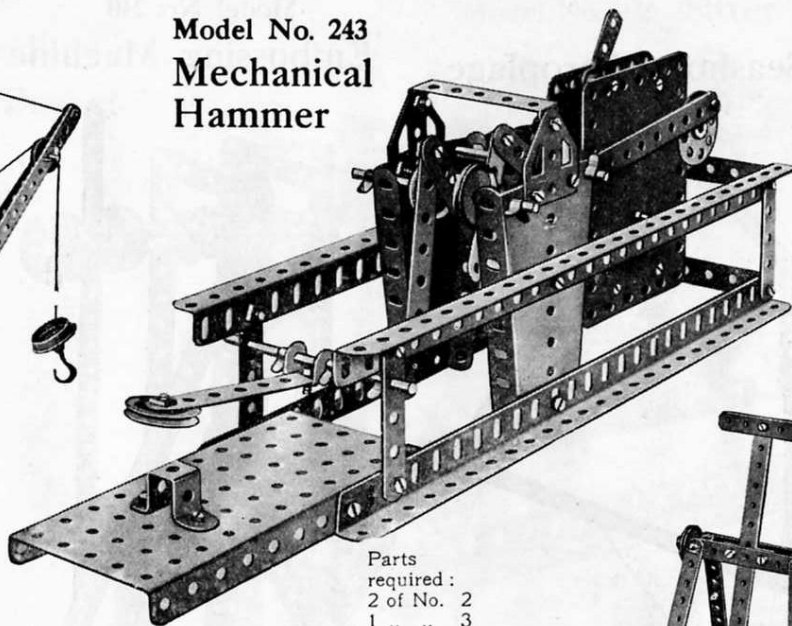
Model No. 242
Dwarf
Derrick



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 " " 52
2 " " 18A	1 " " 54
1 " " 19	1 " " 57
1 " " 20	1 " " 60
4 " " 22	1 " " 115

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
1 " " 52
2 " " 54
3 " " 60
2 " " 126A

Clockwork Motor

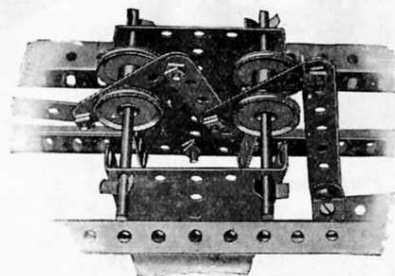
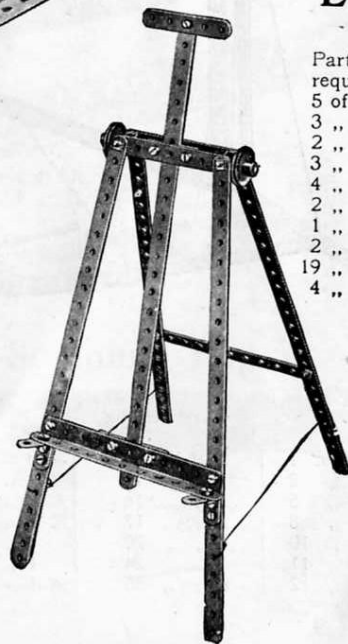


Fig. 243A.

Model No. 244
Easel

Parts required :

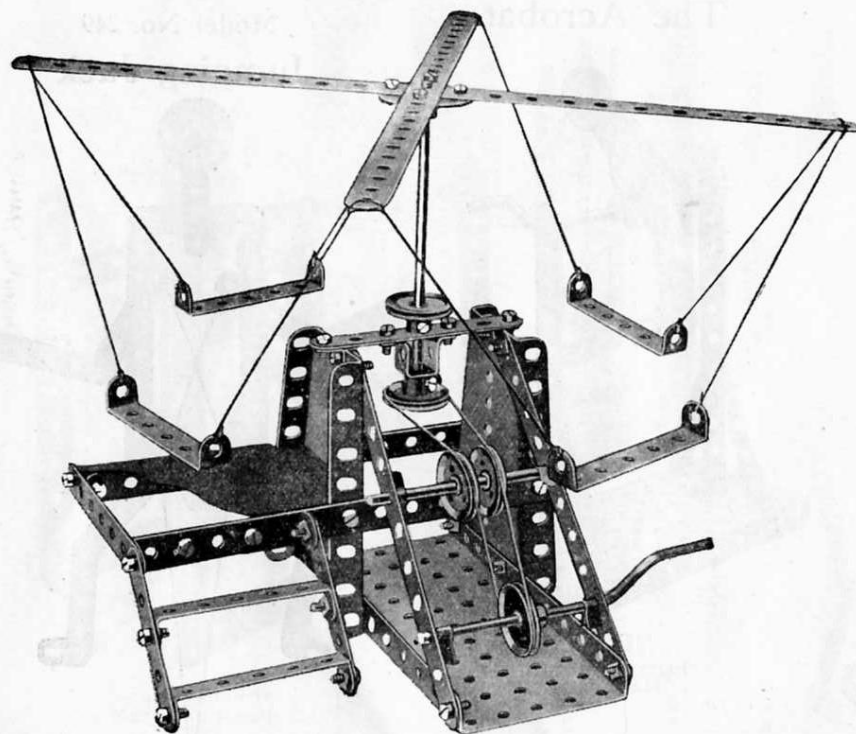
5 of No. 1
3 " " 2
2 " " 3
3 " " 5
4 " " 12
2 " " 12A
1 " " 15A
2 " " 22
19 " " 37
4 " " 38



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

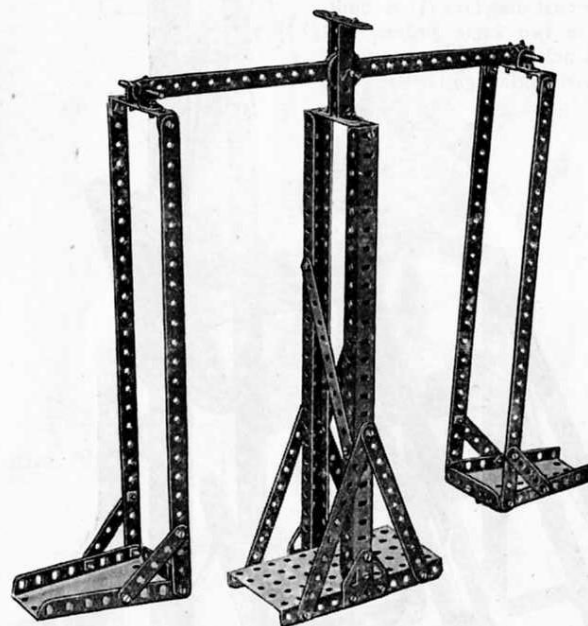
35

Model No. 245 Roundabout



Parts required :		
2 of No. 1	1 of No. 16	35 of No. 37
4 " " 2	1 " " 19	1 " " 45
2 " " 3	3 " " 22	1 " " 52
4 " " 5	2 " " 22A	2 " " 54
3 " " 12	1 " " 24	7 " " 60
1 " " 15	4 " " 35	

Model No. 246 Beam Scales

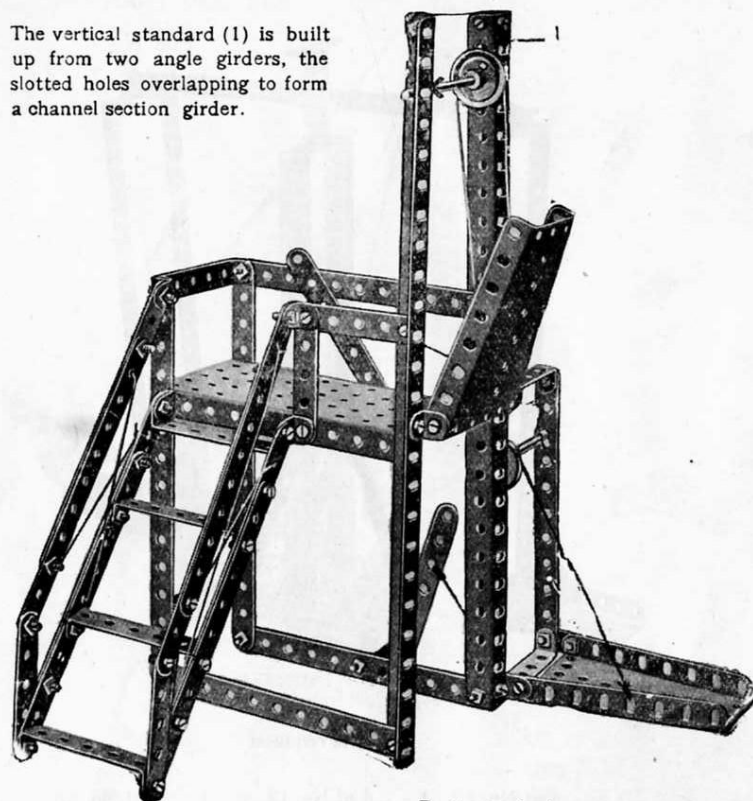


Parts required :

5 of No. 1	6 of No. 12	1 of No. 52
6 " " 2	2 " " 17	2 " " 54
7 " " 5	2 " " 22A	5 " " 60
4 " " 8	6 " " 35	2 " " 126A
	48 " " 37	

Model No. 247 Ferry Gangway

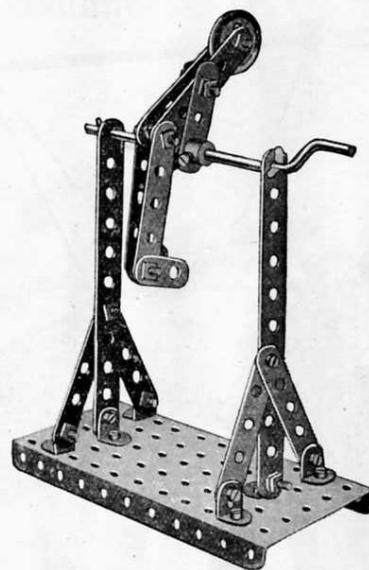
The vertical standard (1) is built up from two angle girders, the slotted holes overlapping to form a channel section girder.



Parts required :

14 of No. 2	6 of No. 12	1 of No. 45
2 " " 3	2 " " 16	1 " " 52
6 " " 5	2 " " 22	2 " " 54
3 " " 8	2 " " 35	8 " " 60
2 " " 10	54 " " 37	

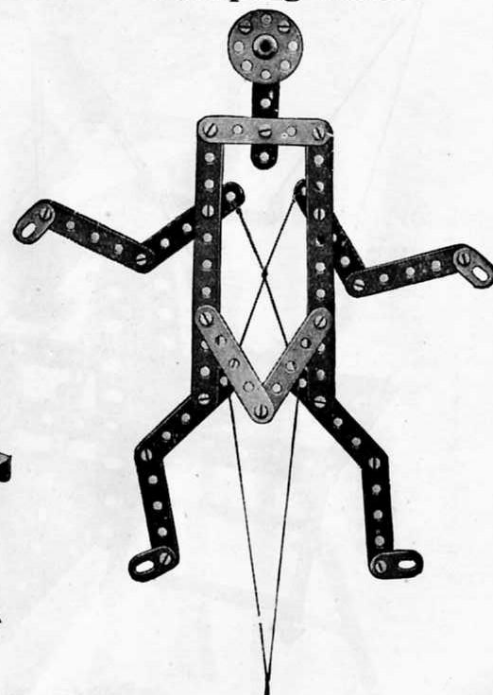
Model No. 248 The Acrobat



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. 249 Jumping Jack



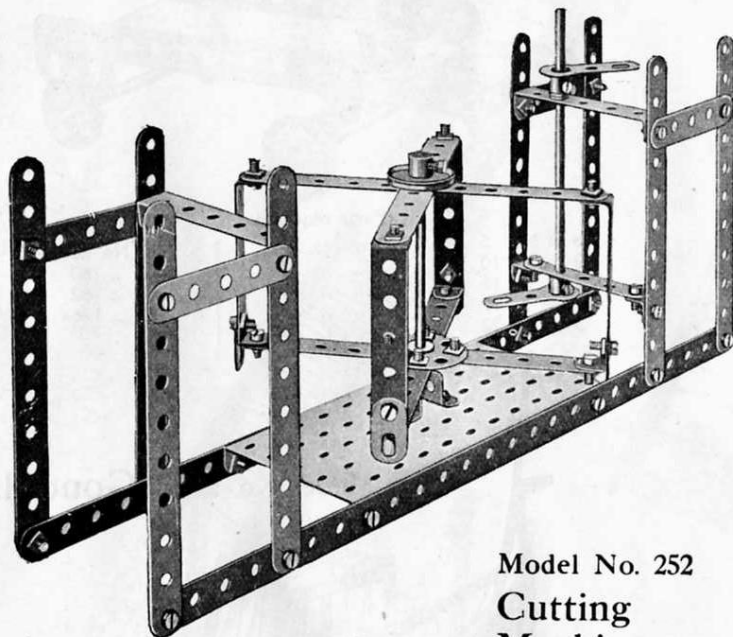
Parts required :

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

37

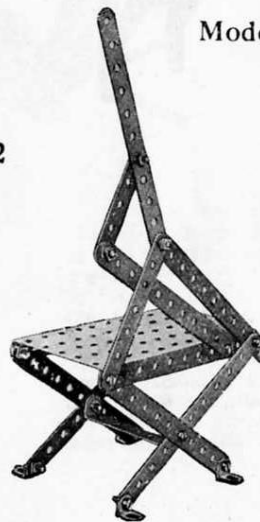
Model No. 250 Turnstile



Parts required :			
2 of No. 1	1 of No. 24		
10 " " 2	42 " " 37		
9 " " 5	2 " " 38		
4 " " 10	1 " " 45		
2 " " 12	1 " " 52		
1 " " 15	6 " " 60		
1 " " 15A	2 " " 62		
2 " " 22			

Model No. 252
Cutting
Machine

Parts required :			
7 of No. 2			
1 " " 3			
1 " " 5			
4 " " 12			
14 " " 37			
1 " " 52			
1 " " 60			



Model No. 251

Chair for
Wounded

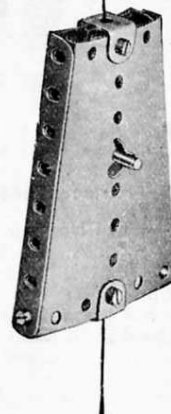
Parts required :			
6 of No. 2			
2 " " 3			
10 " " 5			
2 " " 11			
2 " " 16			
4 " " 22			
21 " " 37			
1 " " 52			
2 " " 60			



Model No. 253

Magic Sector
Plates

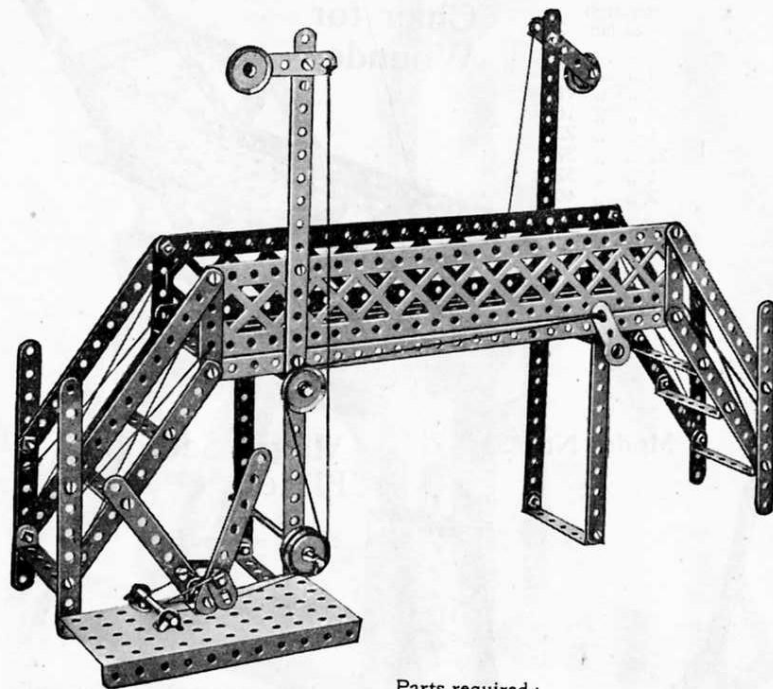
Parts required :			
2 of No. 11			
1 " " 17			
2 " " 35			
6 " " 37			
2 " " 54			



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

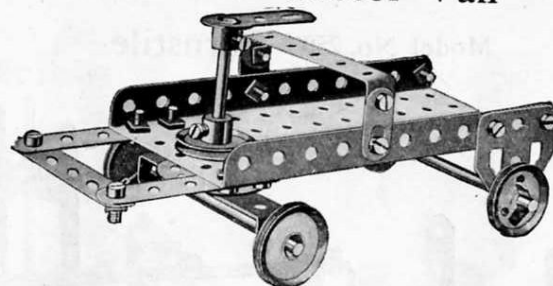
Model No. 254 Railway Foot Bridge and Signals



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	1 " " 52
2 " " 8	1 " " 17	8 " " 60
2 " " 10	3 " " 22	

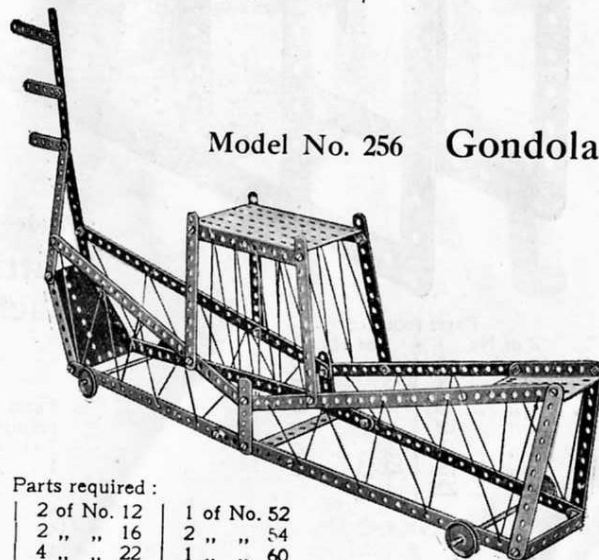
Model No. 255 Motor Van



Parts required :

3 of No. 5	2 of No. 22A	1 of No. 52
2 " " 10	1 " " 24	2 " " 60
2 " " 16	2 " " 35	1 " " 62
1 " " 17	16 " " 37	2 " " 126A
3 " " 22	2 " " 38	

Model No. 256 Gondola



Parts required :

8 of No. 1	2 of No. 12	1 of No. 52
9 " " 2	2 " " 16	2 " " 54
1 " " 3	4 " " 22	1 " " 60
5 " " 5	29 " " 37	

Model No. 257 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
1 "	52
2 "	54
7 "	60
1 "	115
2 "	125
2 "	126A

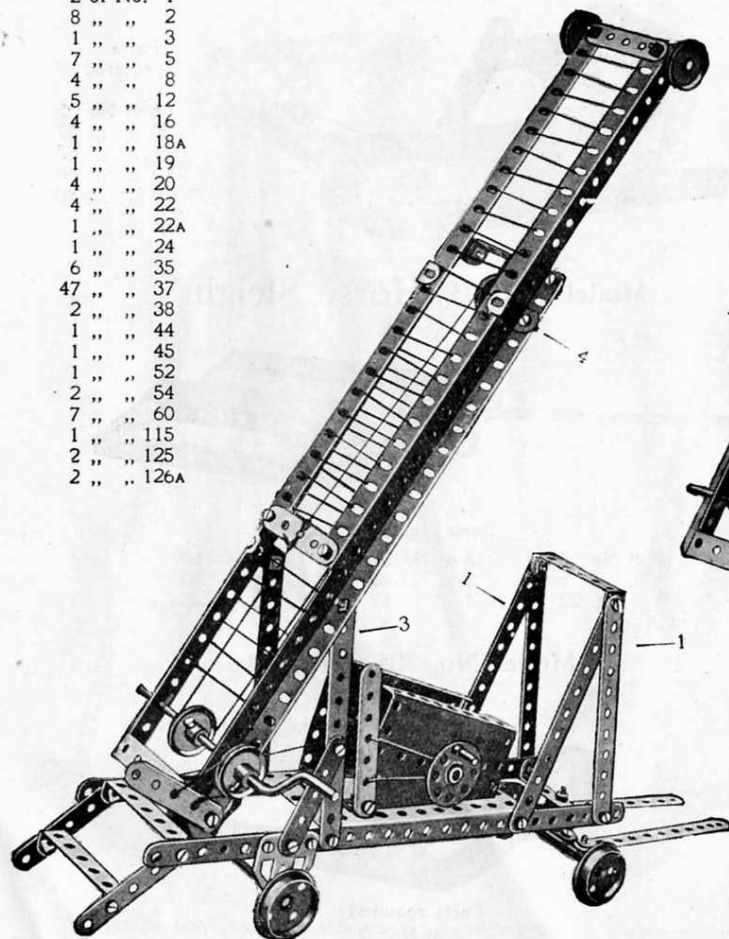


FIG. 257A

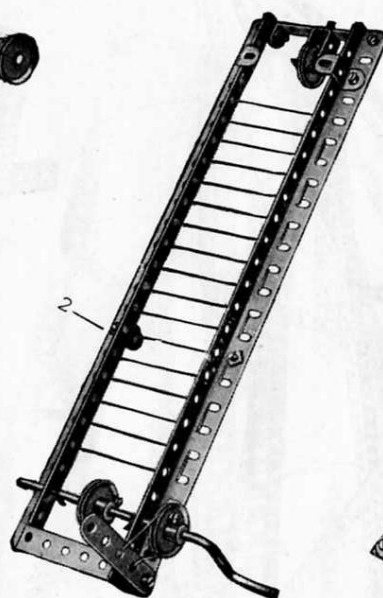
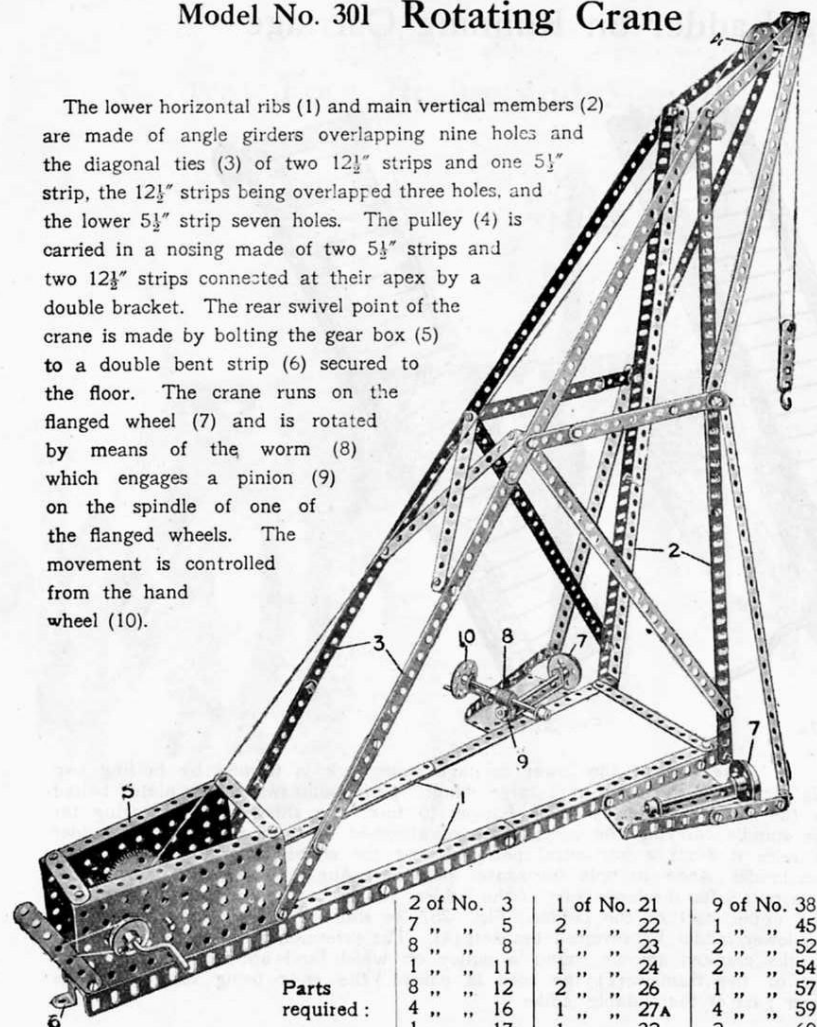


FIG. 257B

The bed of the lower carriage framework is formed by bolting two $12\frac{1}{2}$ " 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. 257A, form pivots for the lower part of the ladder, and are carried from the supports (3). The upper part of the ladder, Fig. 257, is slidably 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 slidable ladder.

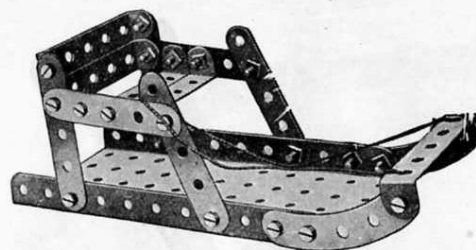
Model No. 301 Rotating Crane

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 wheel (7) and is rotated by means of the worm (8) which engages a pinion (9) on the spindle of one of the flanged wheels. The movement is controlled from the hand wheel (10).



Parts required:		2 of No. 3	1 of No. 21	9 of No. 38
10 of No. 1	1	7 " " 5	2 " " 22	1 " " 45
11 " " 2	2	8 " " 8	1 " " 23	2 " " 52
		1 " " 11	1 " " 24	2 " " 54
		8 " " 12	2 " " 26	1 " " 57
		4 " " 16	1 " " 27A	4 " " 59
		1 " " 17	1 " " 32	2 " " 60
		1 " " 19	2 " " 35	1 " " 115
		2 " " 20	70 " " 37	2 " " 125

Model No. 302 Toboggan



Parts required:

6 of No. 5	
20 " " 37	
1 " " 52	
5 " " 60	
2 " " 90	

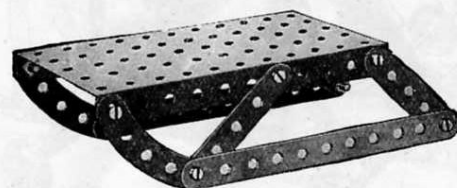
Model No. 303 Horse Sleigh



Parts required:

3 of No. 2	13 of No. 37	1 of No. 60
4 " " 5	1 " " 52	2 " " 90
1 " " 23	1 " " 57	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
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
2 "	52
3 "	59
10 "	60
1 "	98
2 "	100
1 "	115
2 "	126a

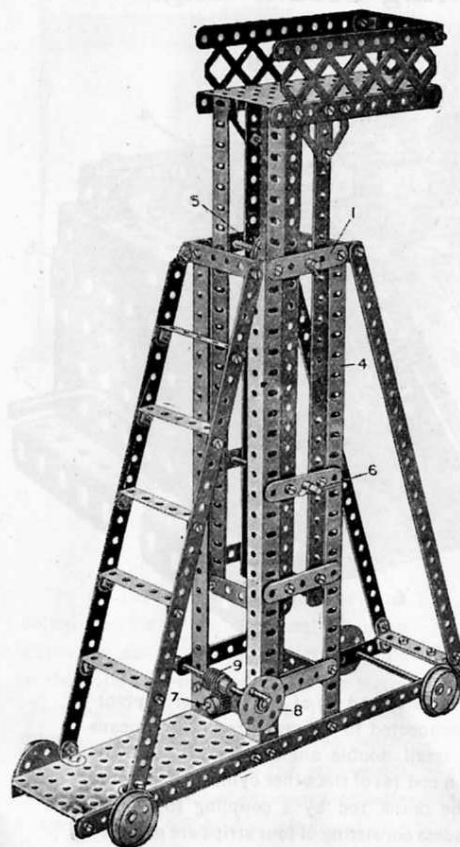


FIG. 305

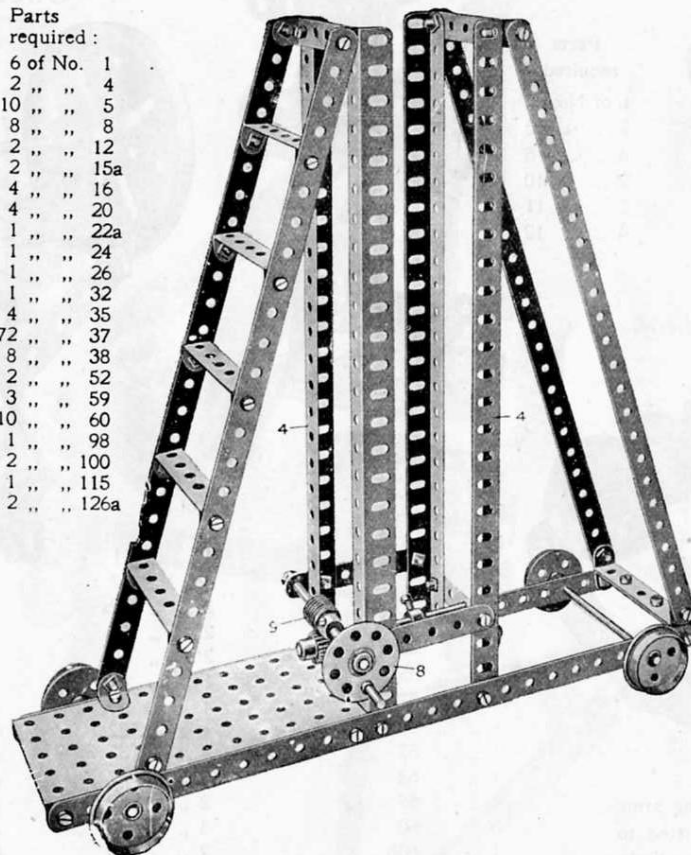


FIG. 305A

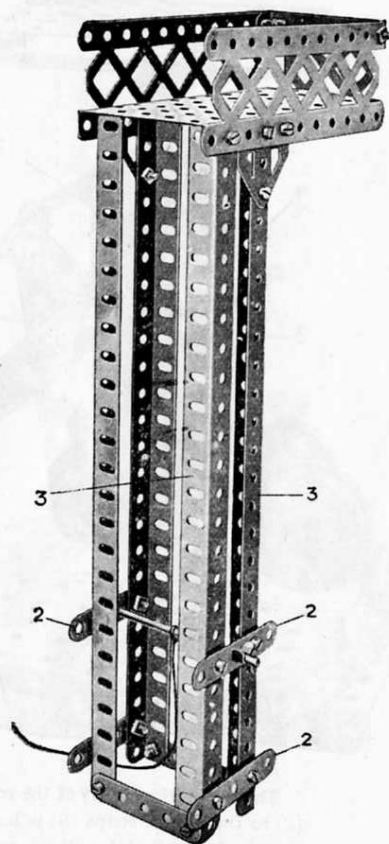
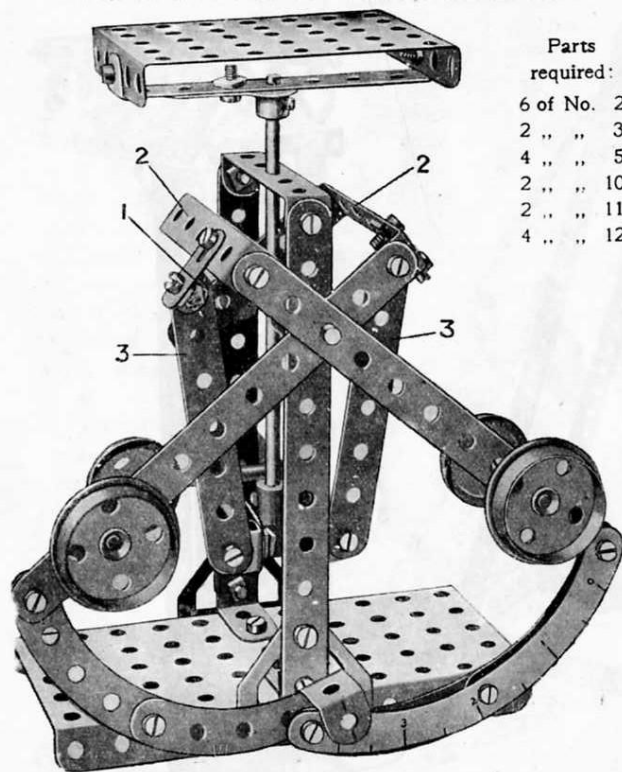


FIG. 305B

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



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

Parts
required:

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

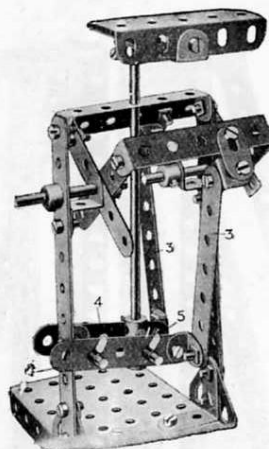
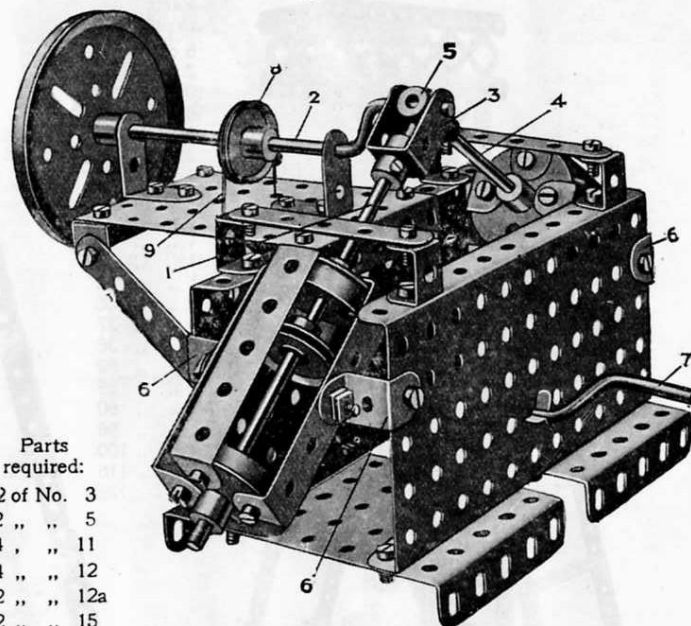


FIG. 306A

2 of No. 12a
1 " " 15
2 " " 17
2 " " 18a
2 " " 20
2 " " 22
4 " " 35
40 " " 37
6 " " 38
1 " " 52
1 " " 53
4 " " 59
3 " " 60
1 " " 60b
1 " " 62
1 " " 63
4 " " 90
2 " " 125
2 " " 126

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
2 " " 52
3 " " 53
2 " " 59
6 " " 60
1 " " 63
1 " " 102
4 " " 125

The piston rod (1) of one cylinder is pivotally connected to the crank rod (2) by means of a small double angle strip (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 $\frac{1}{4}$ " 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

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Model No. 308 Railway Wagon Swivel Crane

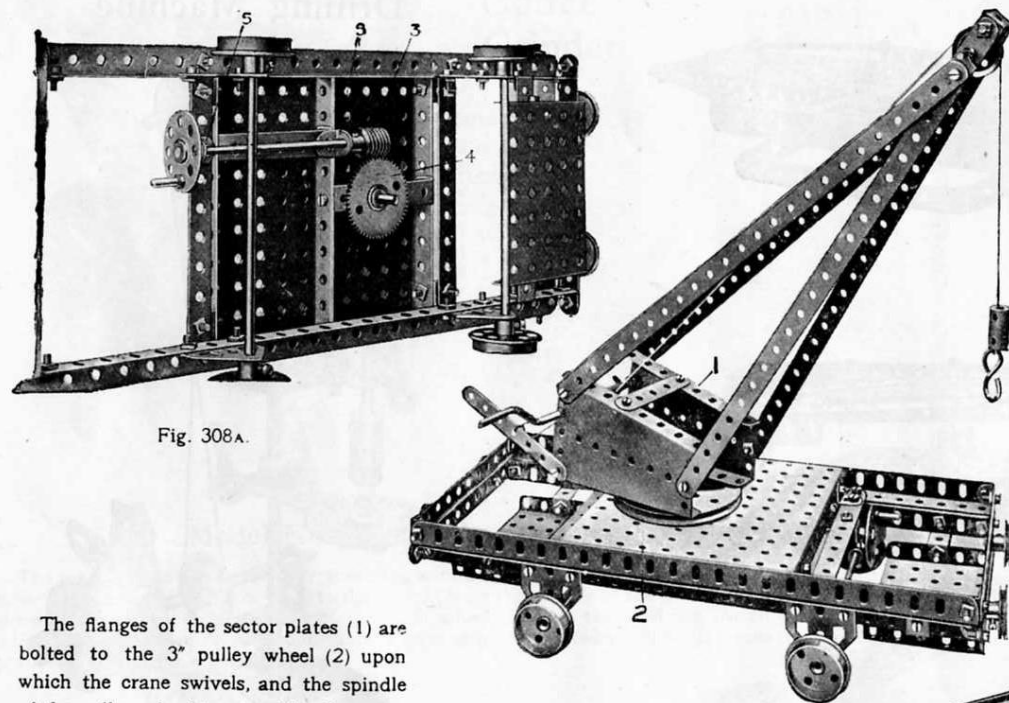


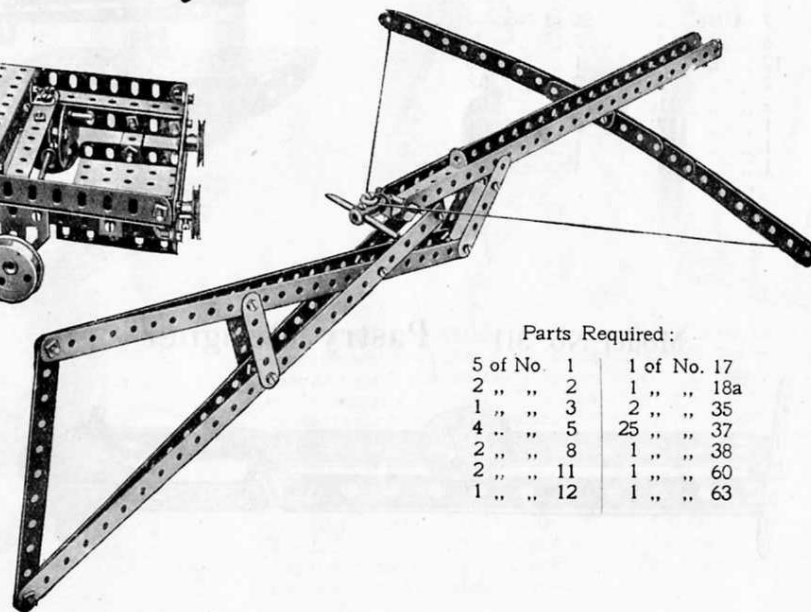
Fig. 308A.

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) on the spindle. In order to bring the worm centrally over the teeth of the gear wheel (4), washers are placed between the angle brackets (5) in which the spindle of the worm is journaled.

Parts required:

4 of No. 1	1 of No. 19	2 of No. 38
6 " " 2	1 " " 19b	2 " " 52
1 " " 3	4 " " 20	2 " " 53
2 " " 5	4 " " 22	2 " " 54
4 " " 8	1 " " 22a	1 " " 57
1 " " 11	1 " " 24	3 " " 59
14 " " 12	1 " " 27a	2 " " 60
2 " " 15	1 " " 32	1 " " 63
1 " " 15a	3 " " 35	1 " " 115
2 " " 17	70 " " 37	4 " " 125
		4 " " 126a

Model No. 309 Crossbow

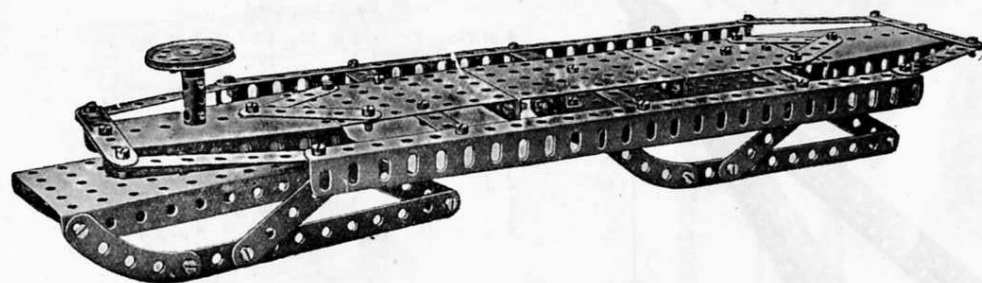


Parts Required:

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 " " 60
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

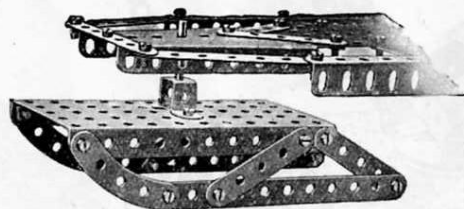
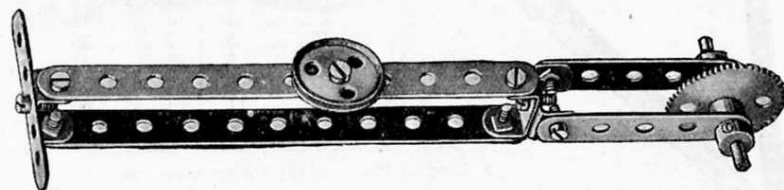


Fig. 310A.

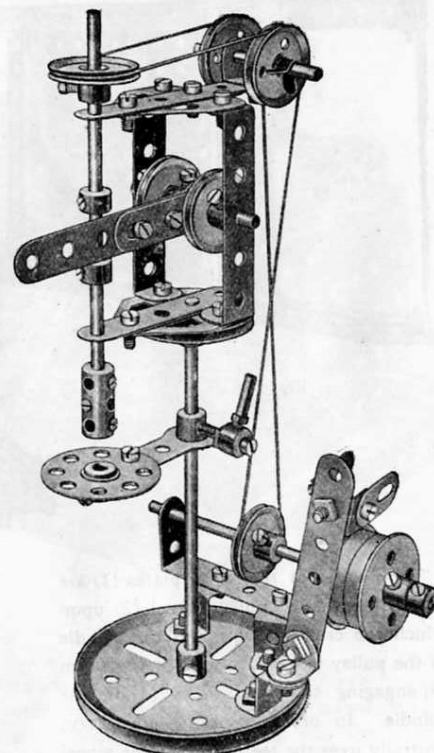
Model No. 311 Pastry Designer



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

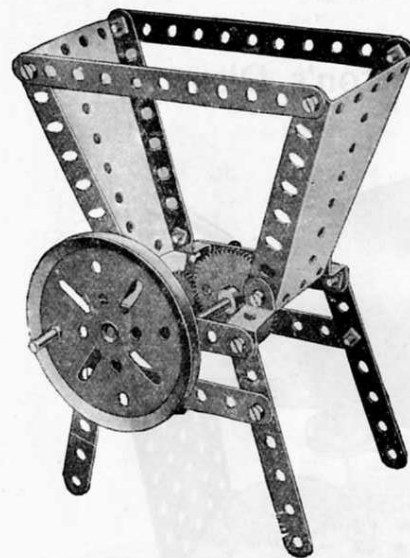


Parts required:

2 of No. 4	2 of No. 20	5 of No. 59
2 " " 5	1 " " 21	2 " " 60
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

45



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	

Parts required:

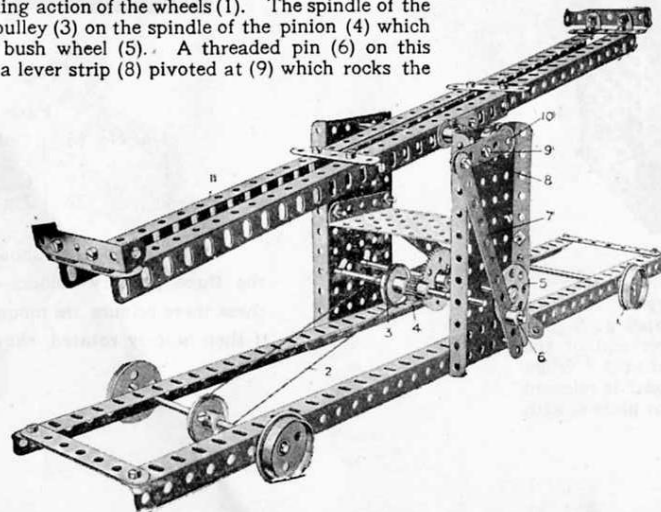
3 of No. 1	
4 " " 2	
6 " " 3	
1 " " 4	
2 " " 5	
8 " " 8	
4 " " 11	
6 " " 12	
2 " " 12A	
2 " " 17	
1 " " 18A	
1 " " 22	
2 " " 35	
58 " " 37	
1 " " 44	
2 " " 52	
2 " " 53	
2 " " 59	
2 " " 62	
4 " " 90	
1 " " 125	
3 " " 126A	

Model No. 315 Actuated See-Saw

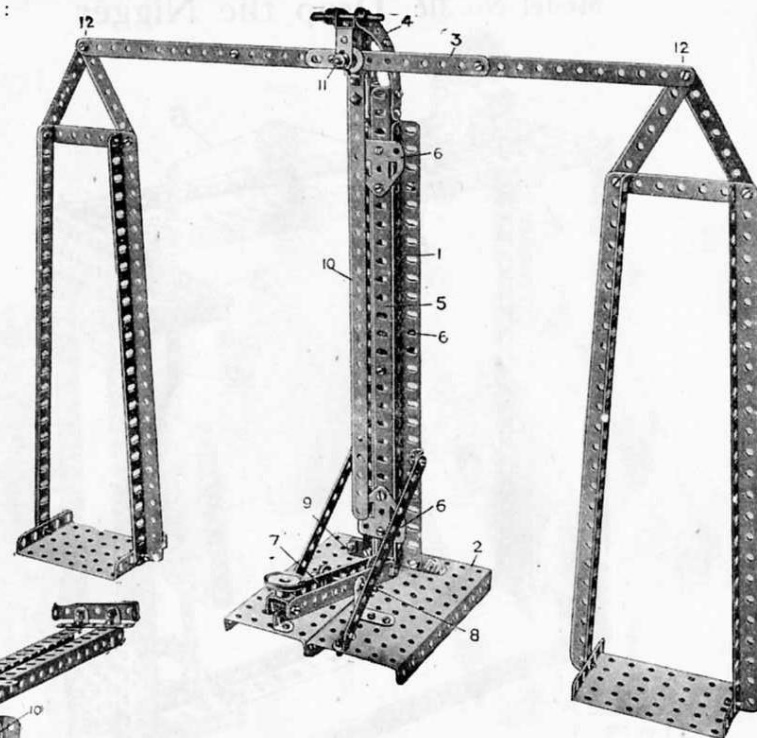
The see-sawing is actuated by the travelling action of the wheels (1). The spindle of the wheels is connected by the cord (2) to the pulley (3) on the spindle of the pinion (4) which drives a gear wheel on the spindle of the bush wheel (5). A threaded pin (6) on this wheel engages the strip (7) coupled 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	1 of No. 26
2 " " 3	1 " " 27A
5 " " 5	4 " " 35
8 " " 8	36 " " 37
4 " " 12	2 " " 52
2 " " 15	1 " " 53
3 " " 15A	3 " " 59
4 " " 20	2 " " 60
2 " " 22	2 " " 62
1 " " 24	1 " " 115



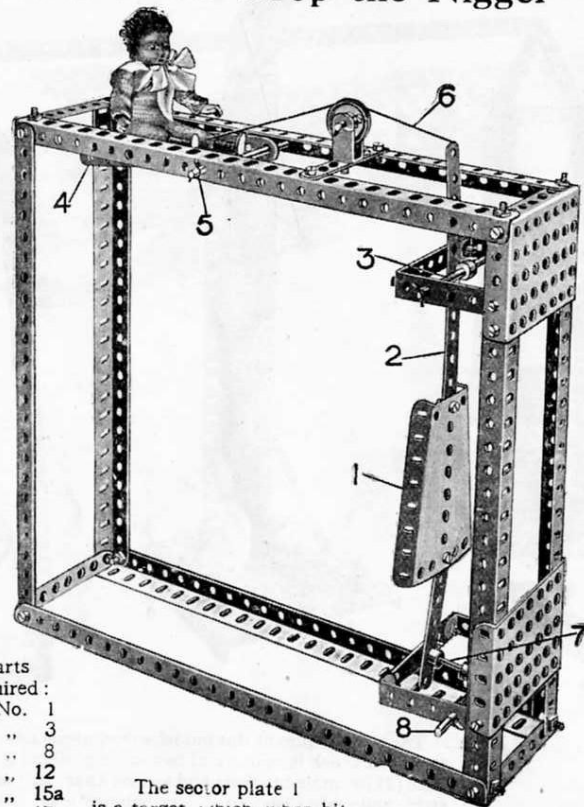
Model No 314 Demonstration Scales



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 24" 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

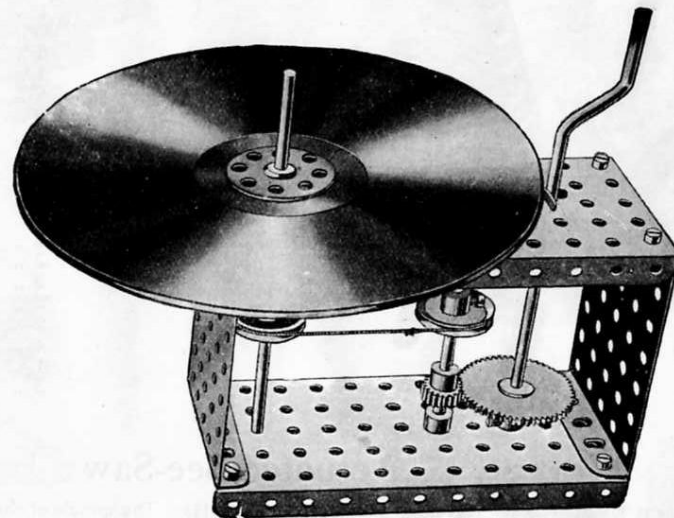


Parts
required :

1 of No. 1	
6 " " 3	
8 " " 8	
1 " " 12	
3 " " 15a	
1 " " 17	
1 " " 22	
6 " " 35	
33 " " 37	
1 " " 44	
2 " " 53	
2 " " 54	
3 " " 59	
4 " " 60	
1 " " 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. 22a	3 of No. 53
4 " " 2	1 " " 23	1 " " 54
4 " " 11	1 " " 24	1 " " 57
1 " " 12	2 " " 26	2 " " 59
3 " " 15a	1 " " 32	2 " " 60
1 " " 16	1 " " 33	2 " " 60b
2 " " 17	4 " " 35	1 " " 63
1 " " 19	36 " " 37	1 " " 115
1 " " 19b	5 " " 38	1 " " 126a
4 " " 20	2 " " 52	

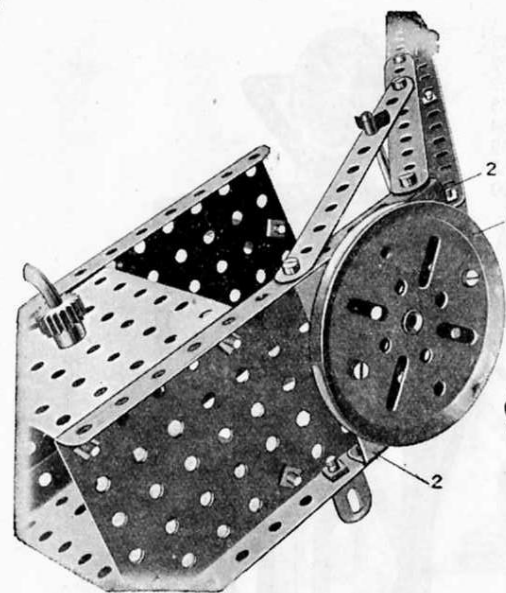
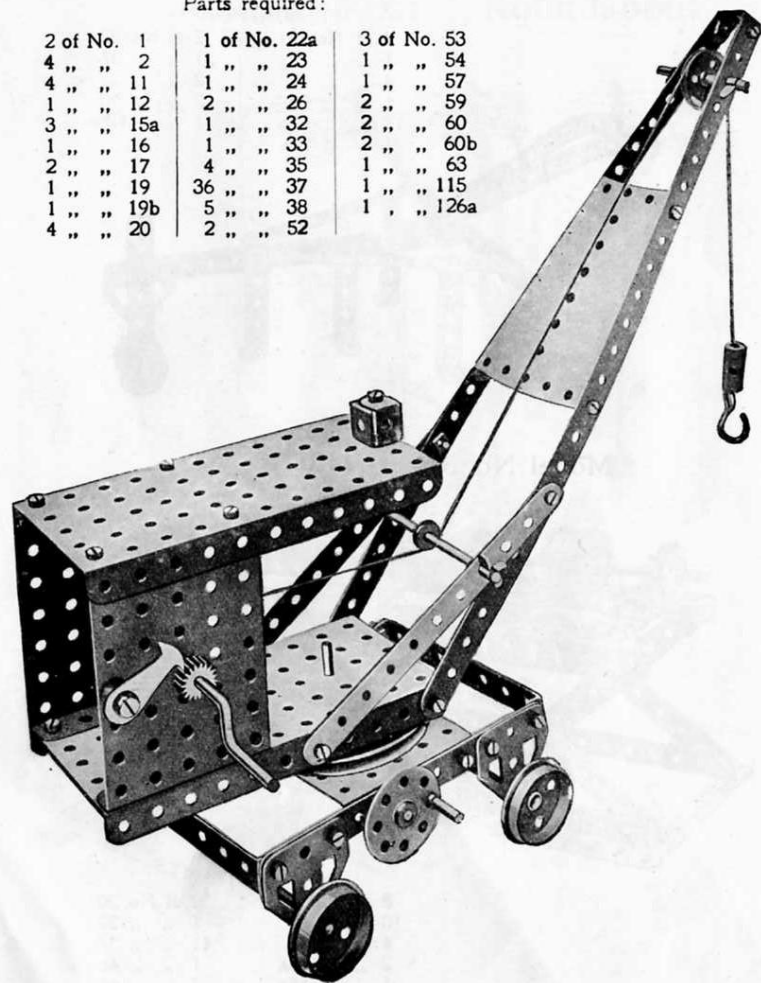


FIG. 318A.

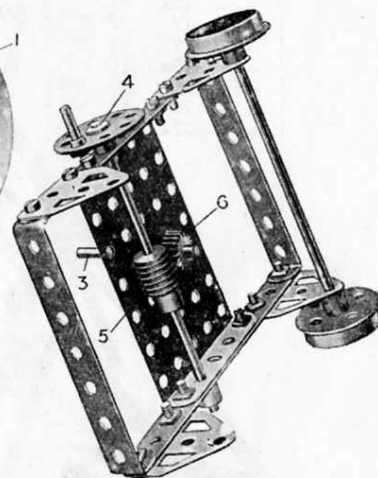


Fig. 318B.

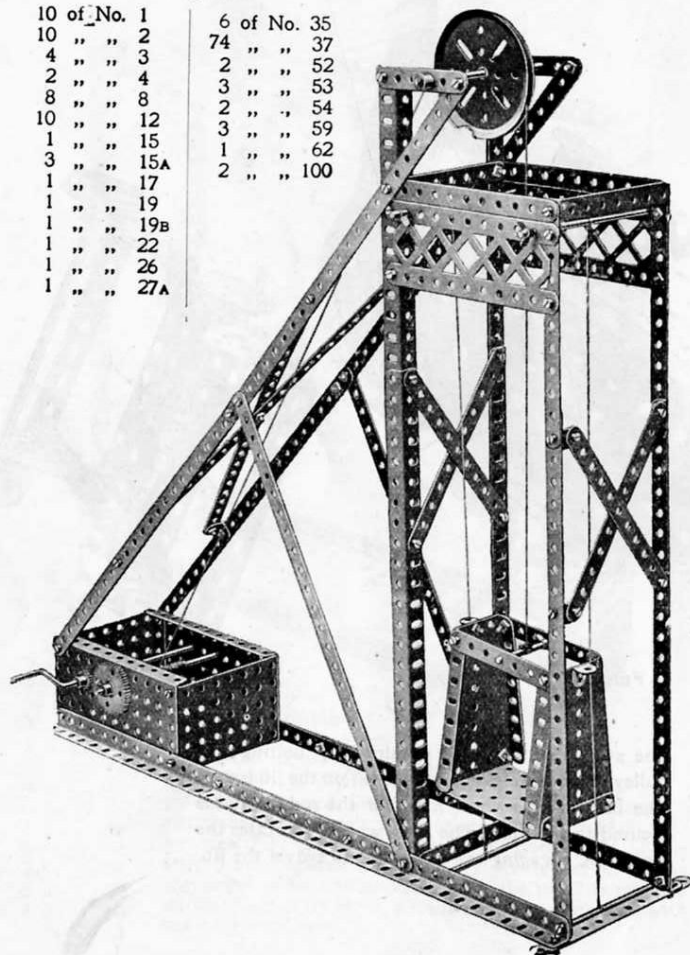
The swivelling action is obtained by bolting a 3" pulley (1) to double angle strips (2) on the jib frame. The boss of this wheel fits over the rod (3) and is secured to the rod. The hand wheel (4) rotates the worm (5), engaging the pinion (6) to swivel the jib.

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

Model No. 319 Pit Head Gear

Parts required:

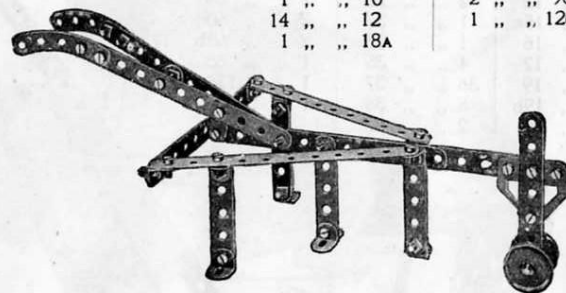
10 of No. 1	6 of No. 35
10 " " 2	74 " " 37
4 " " 3	2 " " 52
2 " " 4	3 " " 53
8 " " 8	2 " " 54
10 " " 12	3 " " 59
1 " " 15	1 " " 62
3 " " 15A	2 " " 100
1 " " 17	
1 " " 19	
1 " " 19B	
1 " " 22	
1 " " 26	
1 " " 27A	



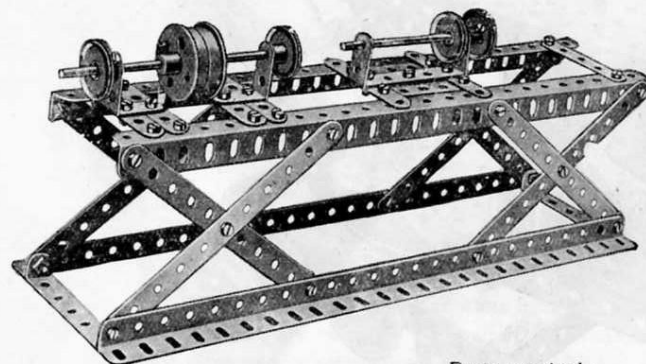
Model No. 320 Scarifier

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



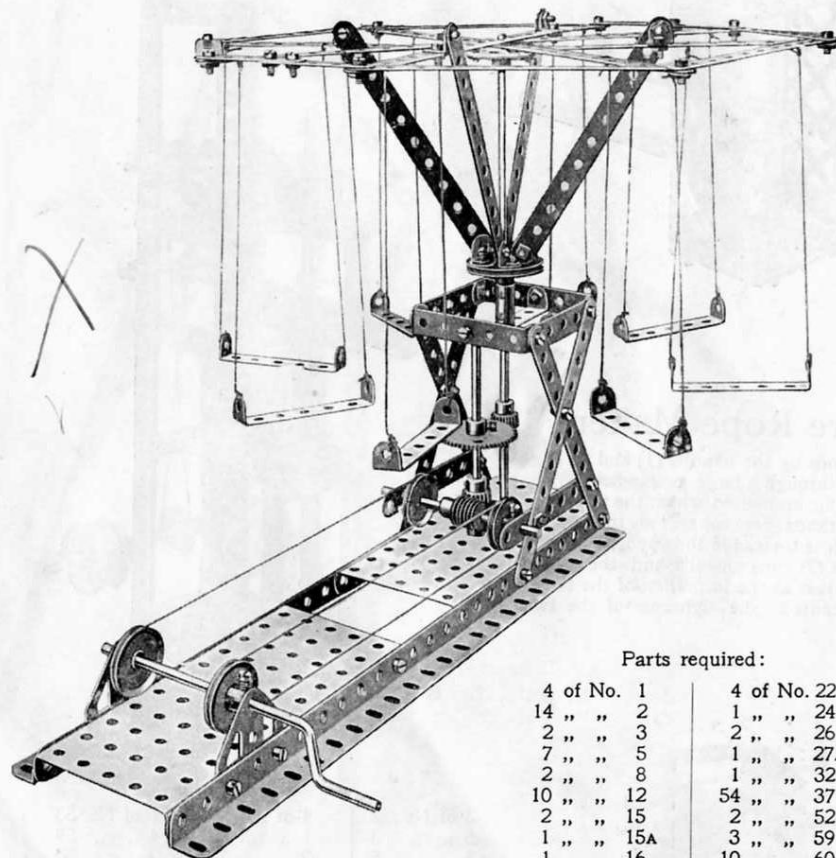
Parts required:

8 of No. 2	2 of No. 20
10 " " 5	1 " " 22
4 " " 8	41 " " 37
2 " " 12A	1 " " 46
1 " " 15A	2 " " 60
1 " " 16	

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

49

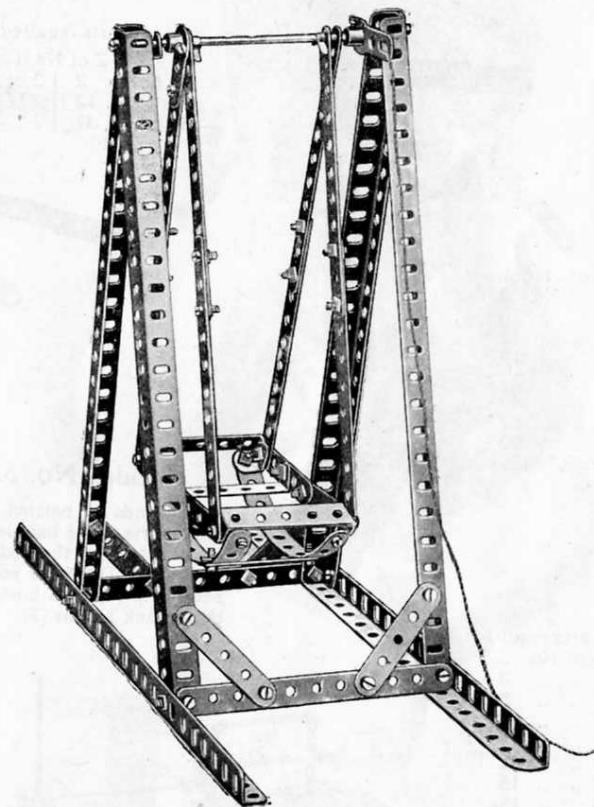
Model No. 322 Roundabout



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	2 " " 52
1 " " 15A	3 " " 59
1 " " 16	10 " " 60
1 " " 19	1 " " 63
1 " " 21	2 " " 126A

Model No. 323 Swing



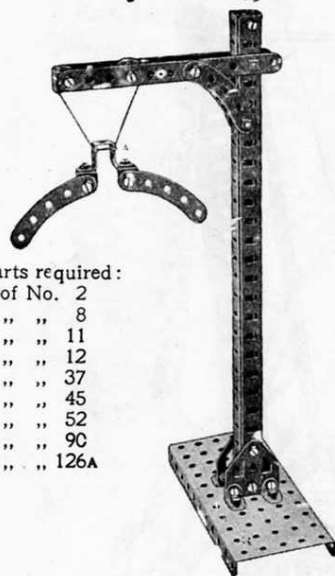
Parts required:

12 of No. 2	1 of No. 15
9 " " 5	2 " " 35
6 " " 8	43 " " 37
2 " " 11	4 " " 60
4 " " 12	2 " " 62

50

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 " " 9C
2 " " 126A

Parts required :

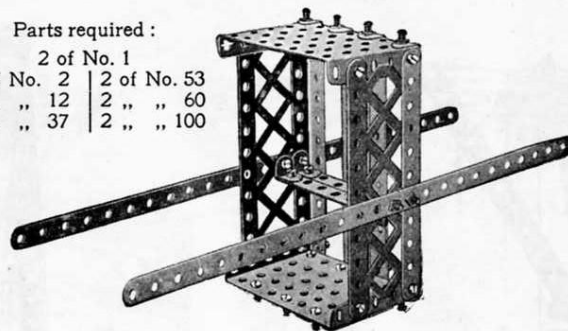
6 of No. 2
1 " " 3
2 " " 5
2 " " 8
3 " " 11
12 " " 12
2 " " 15
3 " " 15A
2 " " 19
4 " " 20
1 " " 24
2 " " 26
1 " " 27A
3 " " 35
50 " " 37
1 " " 45
2 " " 52

3 of No. 53
4 " " 59
2 " " 60
2 " " 62
4 " " 126A

Model No. 325 Chinese Palanquin

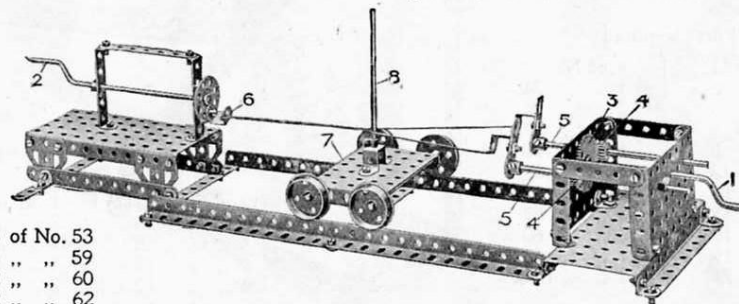
Parts required :

2 of No. 1
4 of No. 2 | 2 of No. 53
8 " " 12 | 2 " " 60
30 " " 37 | 2 " " 100

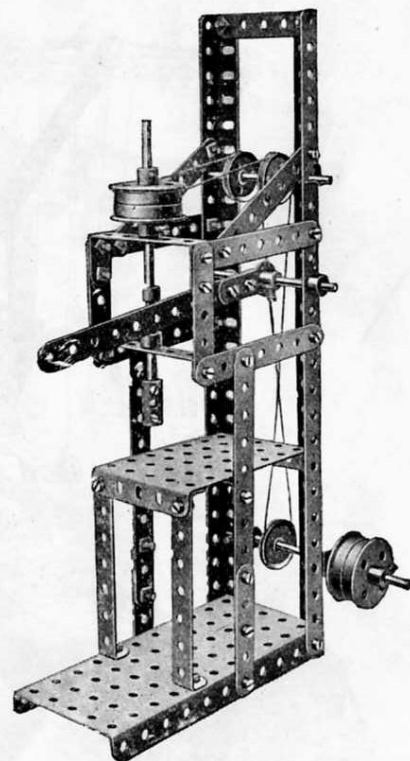


Model No. 327 Wire Rope Maker

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 Hand Punch



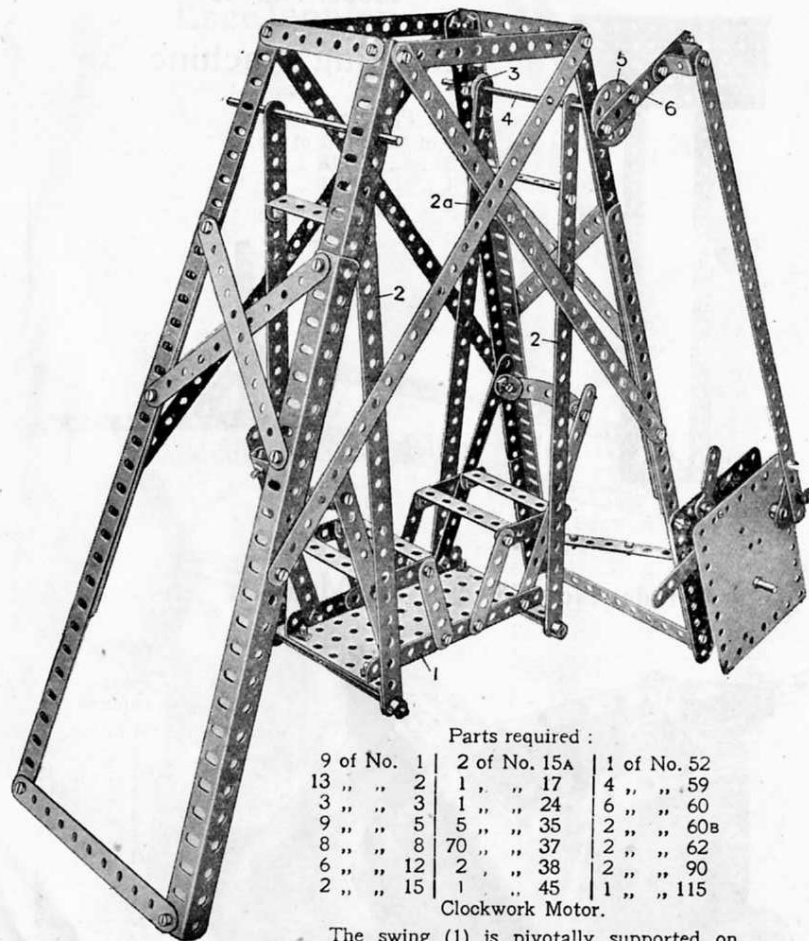
Parts required :

3 of No. 2	4 of No. 20	1 of No. 53
6 " " 3	1 " " 22	4 " " 59
5 " " 5	2 " " 22A	2 " " 60
2 " " 8	3 " " 35	2 " " 60B
2 " " 11	38 " " 37	1 " " 62
2 " " 15	1 " " 46	1 " " 63
2 " " 16	1 " " 52	

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

51

Model No. 328 Lawn Swing



Parts required :

9 of No. 1	2 of No. 15A	1 of No. 52
13 " " 2	1 " " 17	4 " " 59
3 " " 3	1 " " 24	6 " " 60
9 " " 5	5 " " 35	2 " " 60B
8 " " 8	70 " " 37	2 " " 62
6 " " 12	2 " " 38	2 " " 90
2 " " 15	1 " " 45	1 " " 115

Clockwork Motor.

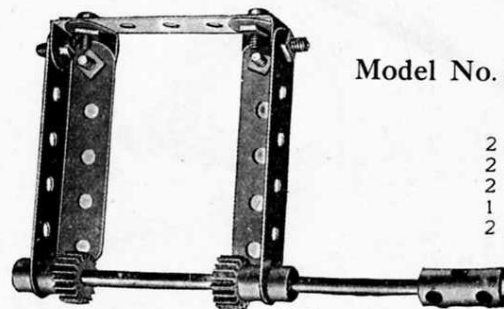
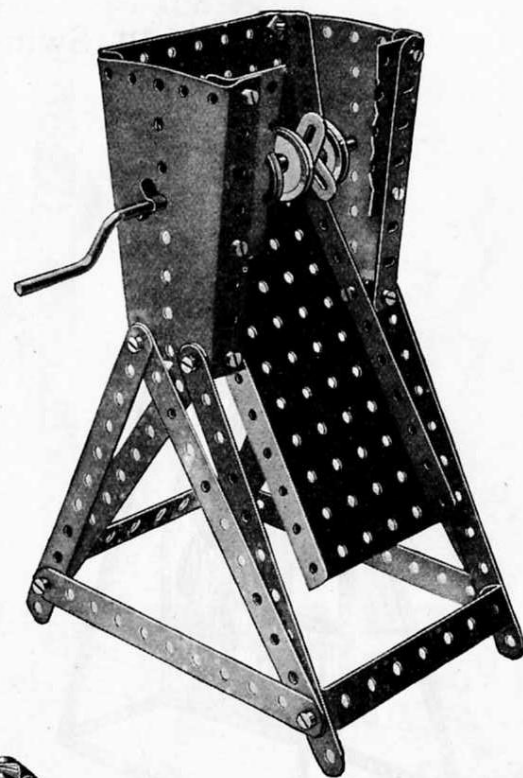
The swing (1) is pivotally supported on four strips (2), the far strip (2a) is connected at the top to a crank (3) which is bolted to a rod (4) and at the front end of this rod is a wheel (5) to which is bolted a strip (6) to the motor spindle.

Model No 329

Oil Cake Chopper

Parts required :

10 of No. 2
4 " " 10
2 " " 12
1 " " 19
4 " " 22
2 " " 35
20 " " 37
1 " " 52
2 " " 53
2 " " 54
2 " " 60B



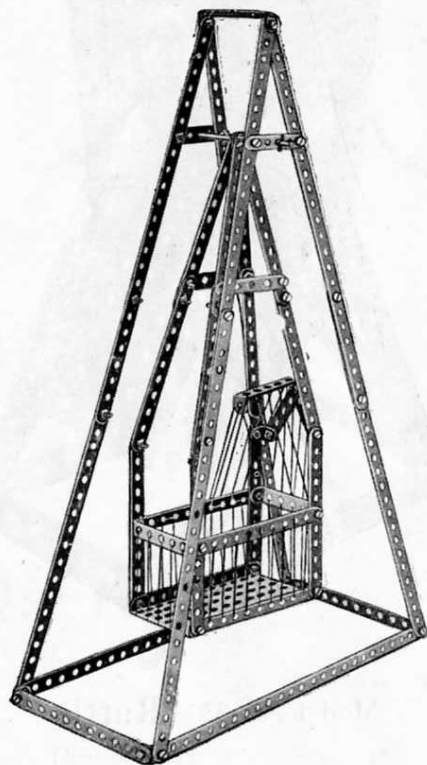
Model No. 330 Rattle

Parts required :

2 of No. 4	6 of No. 37
2 " " 5	2 " " 59
2 " " 12	1 " " 60
1 " " 15	1 " " 63
2 " " 26	

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

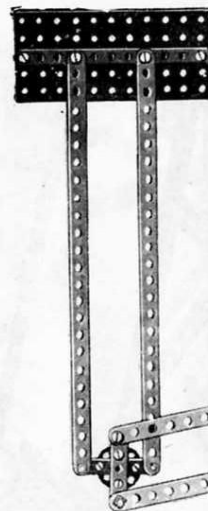
Model No. 331 Swinging Cot



Parts
required :
10 of No. 1
16 " " 2
6 " " 5
6 " " 12
1 " " 15A
4 " " 35
45 " " 37
1 " " 52
4 " " 60

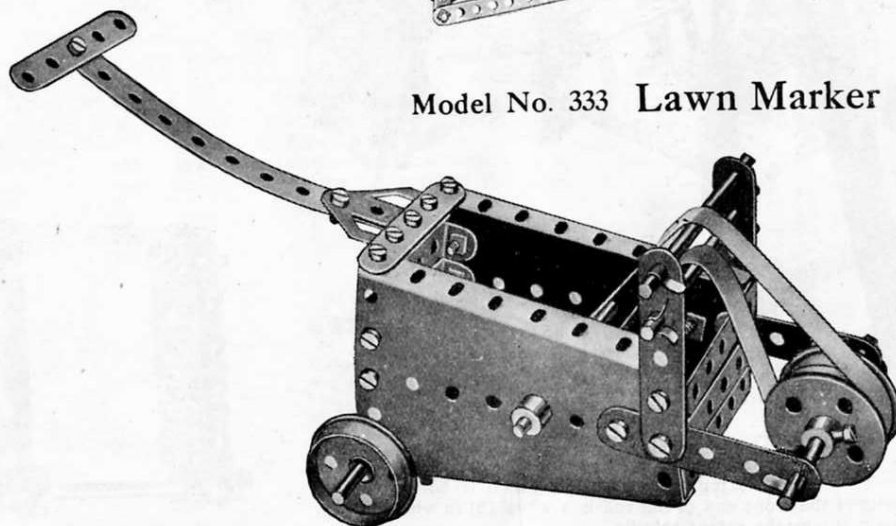
Model No. 332

Drafting Machine



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

Model No. 333 Lawn Marker



Parts
required :
1 of No. 2
6 " " 5
1 " " 15A
4 " " 16
4 " " 20
6 " " 35
21 " " 37
1 " " 53
2 " " 54
2 " " 59
4 " " 60
1 " " 126A

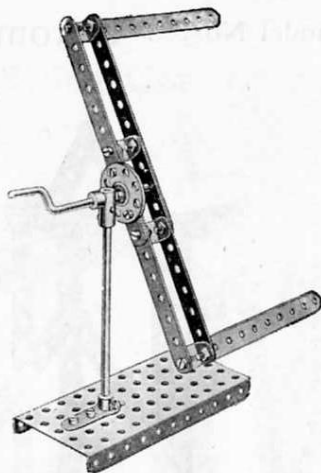
These Models can be made with MECCANO Outfit No. 3, or No. 2 and No. 2A

53

Model No. 334 LaceJennier

Parts
required:

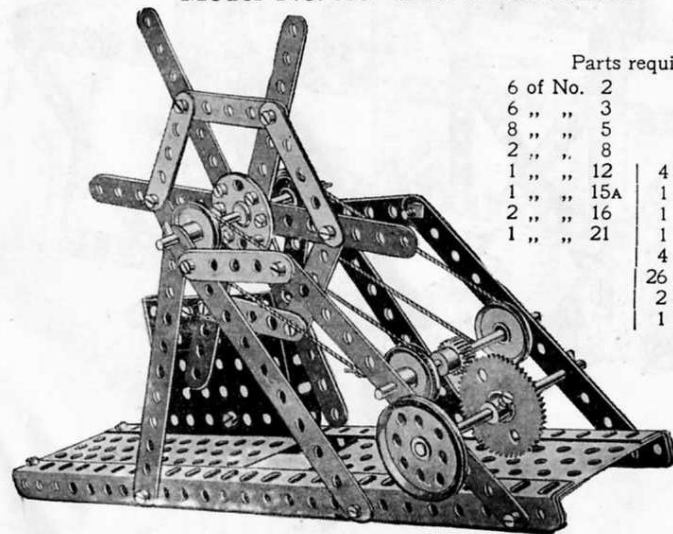
8 of No.	2
4 "	11
1 "	15
1 "	19
1 "	24
14 "	37
1 "	52
1 "	59
1 "	62
1 "	63



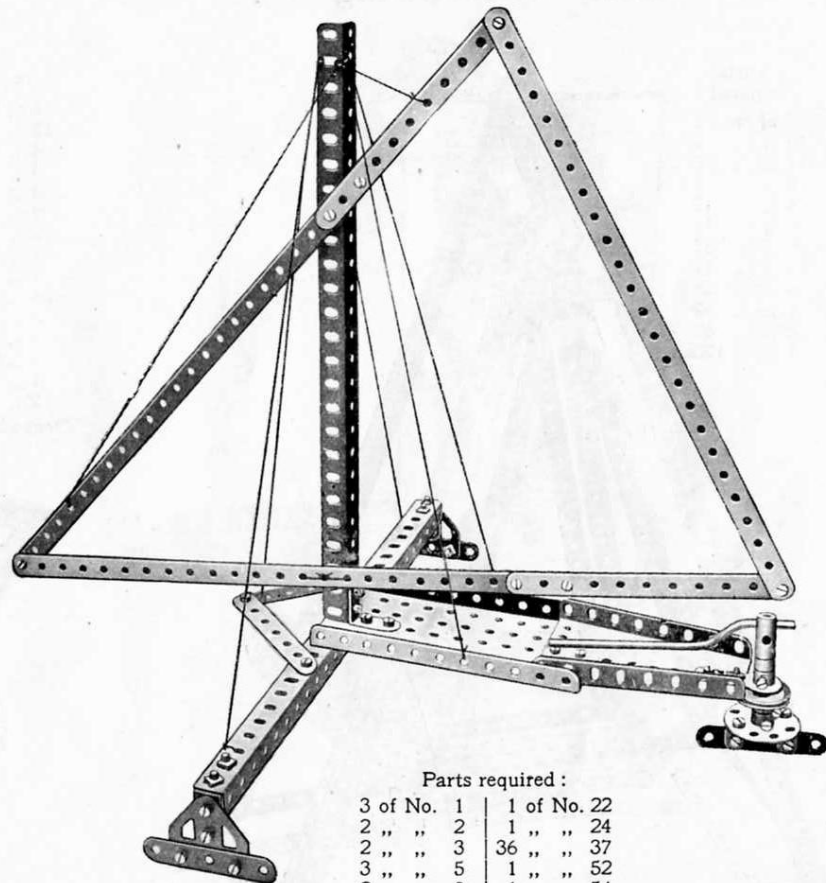
Model No. 335 Flax Cleaner

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. 336 Ice Boat



Parts required:

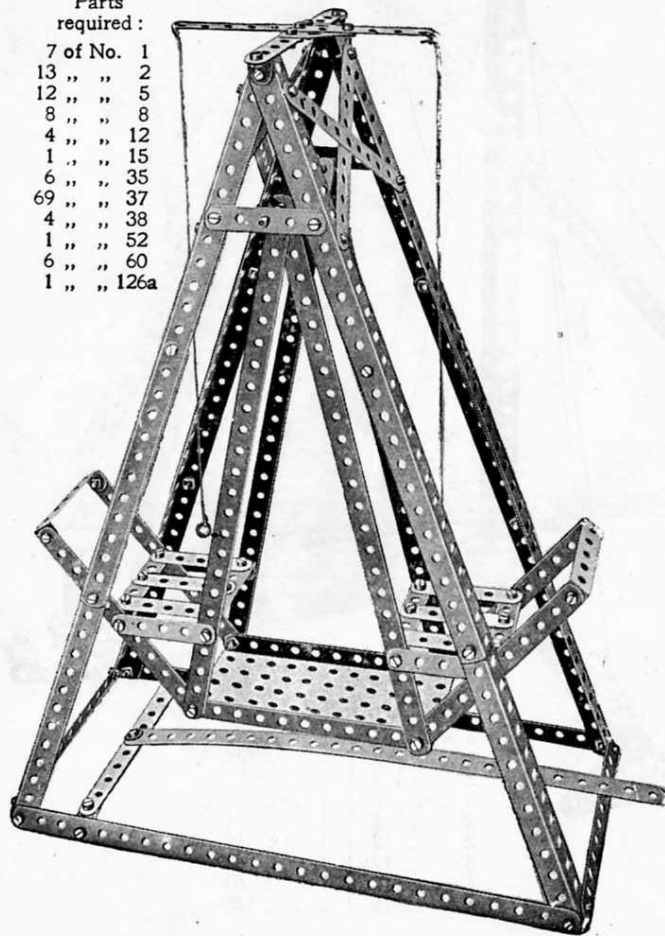
3 of No.	1	1 of No.	22
2 "	2	1 "	24
2 "	3	36 "	37
3 "	5	1 "	52
2 "	8	1 "	54
2 "	12	1 "	59
3 "	12A	1 "	62
1 "	17	1 "	63
1 "	19	2 "	126A

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

Model No. 337 Swing

Parts
required :

7 of No.	1
13 " "	2
12 " "	5
8 " "	8
4 " "	12
1 " "	15
6 " "	35
69 " "	37
4 " "	38
1 " "	52
6 " "	60
1 " "	126a

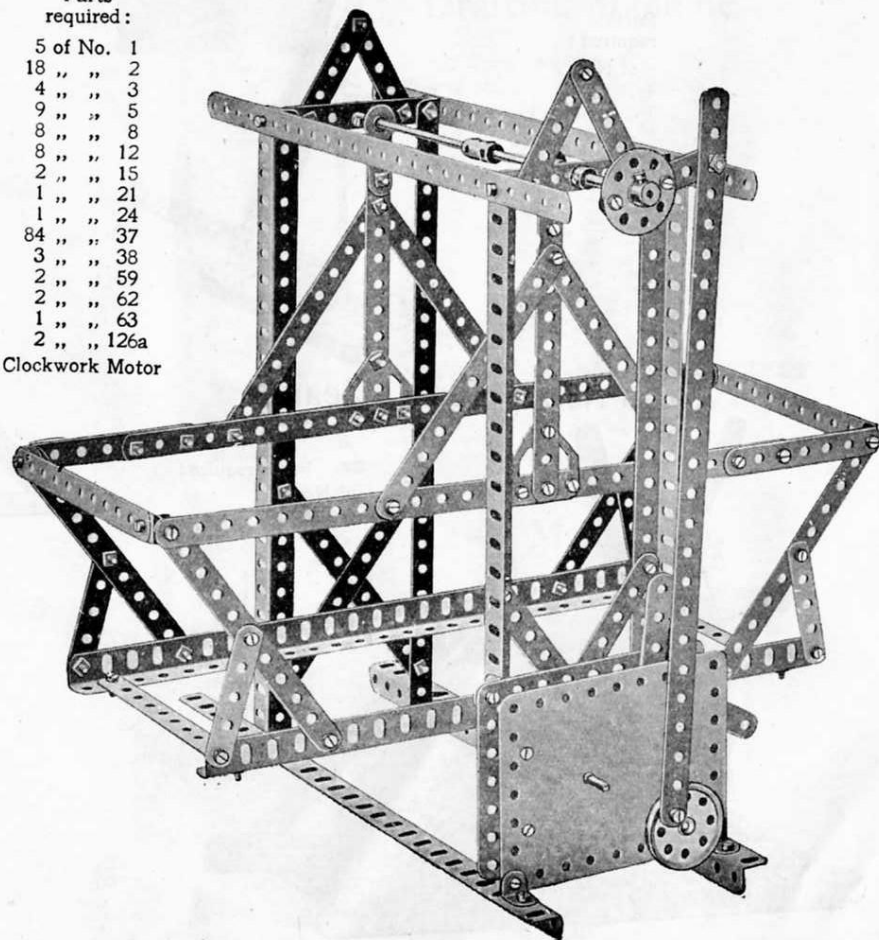


Model No. 338 Automatic Swing Boat

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

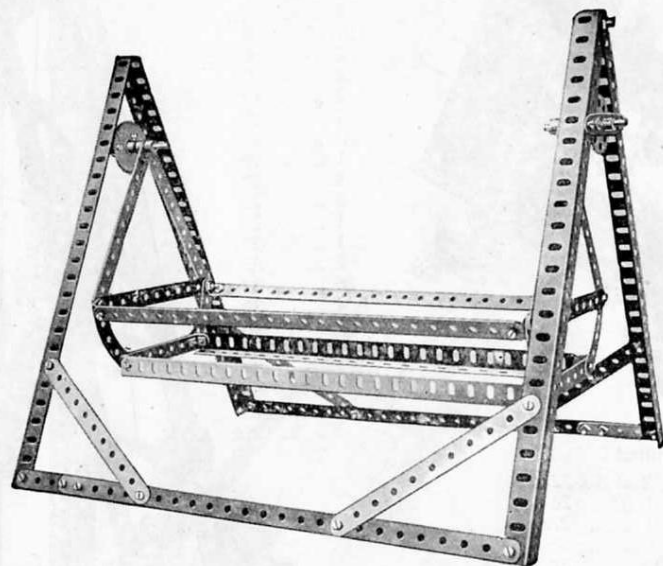
Clockwork Motor



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

55

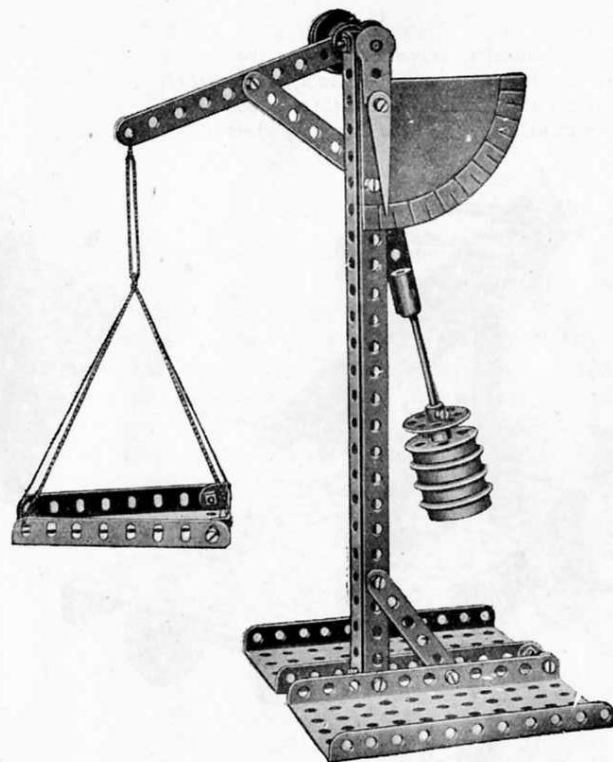
Model No. 339 Swing Cot



Parts required :

4 of No. 1	1 of No. 27a
10 " " 2	42 " " 37
4 " " 5	4 " " 38
6 " " 8	4 " " 59
4 " " 12	2 " " 60b
2 " " 17	4 " " 90
1 " " 24	

Model No. 340 Scales

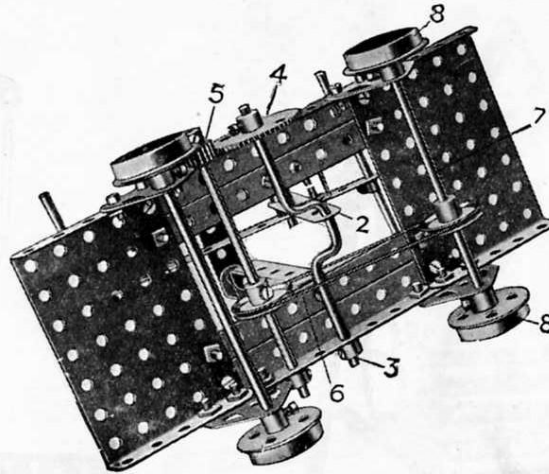
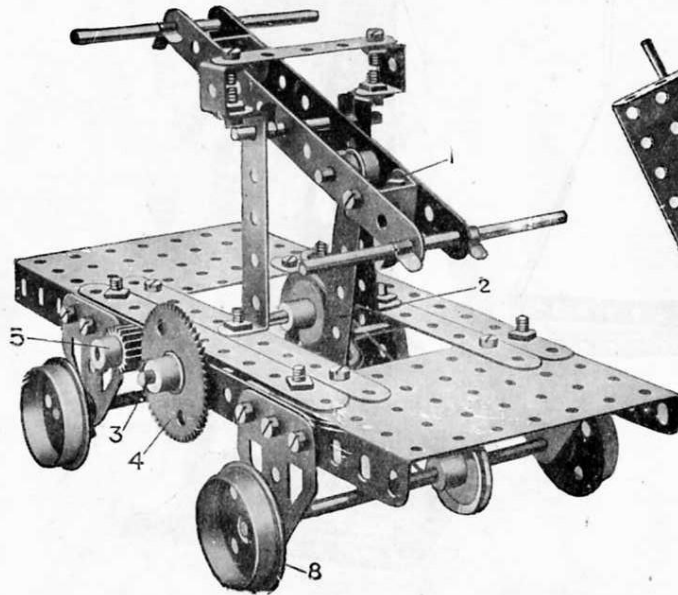


Parts required :

2 of No. 2	1 of No. 15	2 of No. 52
1 " " 3	1 " " 17	1 " " 54
2 " " 4	4 " " 20	1 " " 60
1 " " 5	1 " " 22	2 " " 62
2 " " 8	1 " " 24	1 " " 63
1 " " 11	15 " " 37	1 " " 90

Model No. 341 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) and which meshes a pinion (5) on a rod coupled by a cord (6) to an axle rod (7) of the travelling wheels (8).



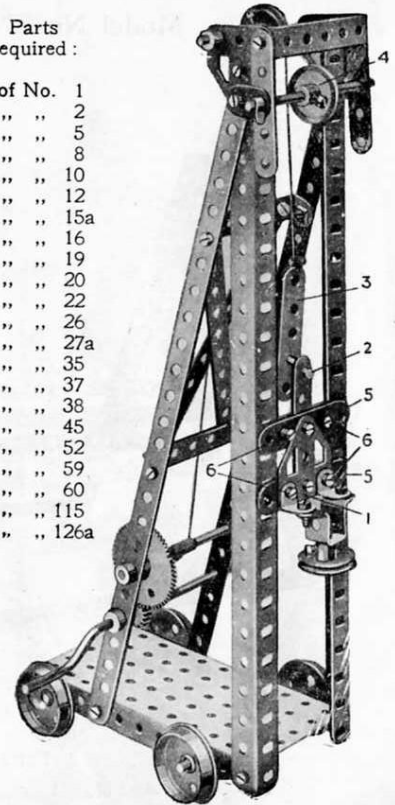
Parts required :

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 " " 53
1 " " 17	4 " " 59
1 " " 18a	2 " " 60
4 " " 20	4 " " 126a
1 of No. 134	

Model No. 342 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
1 " " 52
4 " " 59
3 " " 60
1 " " 115
3 " " 126a



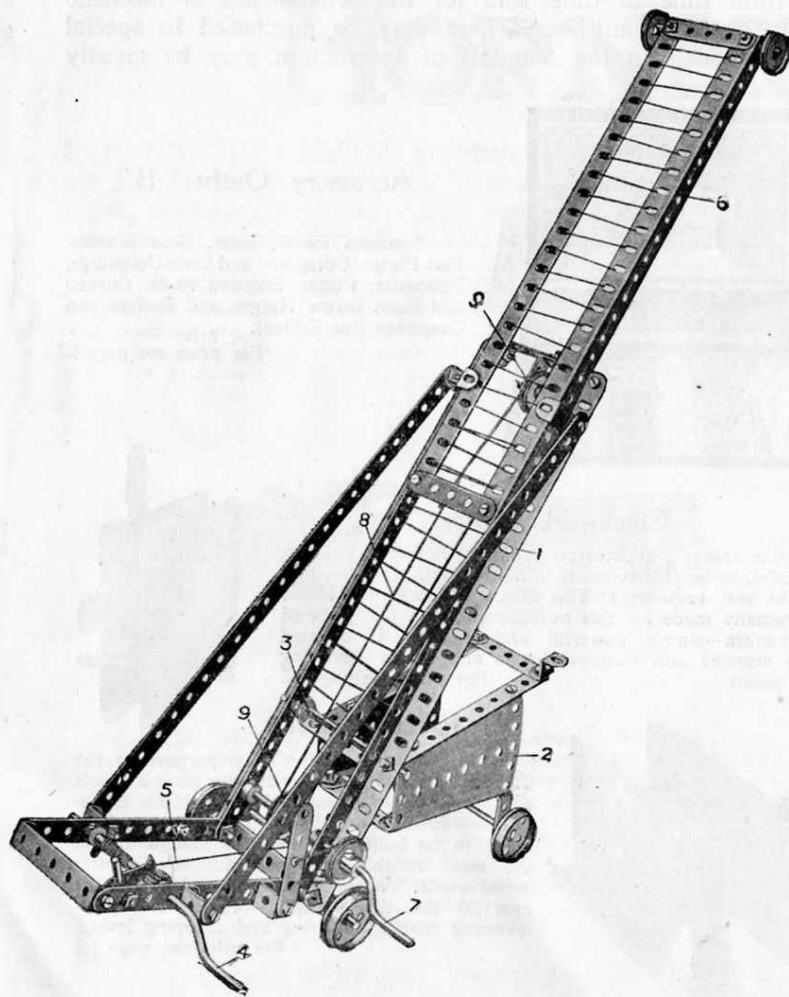
The driving head (1) is raised by means of a threaded pin (2) on two $2\frac{1}{2}$ " strips (3), the pin engaging in the first hole of the driving head. As the head is raised, the strip (3) makes contact with a pulley (4) and the latter pushes the strip rearwardly, disengaging the pin from the hole 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.

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

57

Model No. 343 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 in order 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 rising ladder.



Parts required :

2 of No. 1	4 of No. 16	7 of No. 35
4 " " 2	1 " " 18A	45 " " 37
1 " " 3	2 " " 19	1 " " 44
6 " " 5	4 " " 20	2 " " 54
4 " " 8	4 " " 22	3 " " 59
3 " " 11	1 " " 22A	3 " " 60
10 " " 12	1 " " 26	1 " " 115
2 " " 12A	1 " " 33	4 " " 125
1 " " 15A		

MECCANO INVENTOR'S ACCESSORY OUTFITS

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



Accessory Outfit "A"

This Outfit contains large 3" Pulley Wheels, Gear Wheels, Washers, Sprocket Wheels, Sprocket Chain, and Meccano Braced Girders.

For price see page 62



Accessory Outfit "B"

Contains Bevel Gears, Gear Wheels, Flat Plates, Octagonal and Strip Couplings, Triangular Plates, Screwed Rods, Curved and Rack Strips, Hinges, and Buffers and Couplings (for Trains).

For price see page 62

Electrical Outfits

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 to it a further charm, and the joys of model-building are now increased by the fascinating pastime of carrying out delightful electrical experiments.

The Meccano Electrical Outfit contain a number of specially designed electrical parts which may be used in conjunction with any of the regular Outfits.

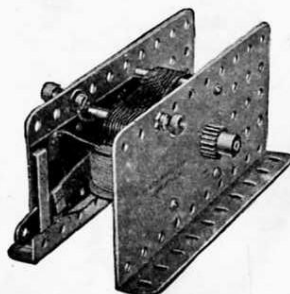


For prices see page 62

Clockwork Motor

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

For price see page 62



Electric Motor

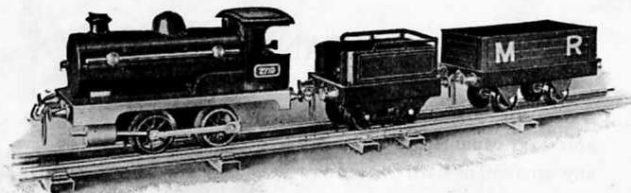
This Motor serves the same purpose as the Clockwork Motor and may be run from a 4-volt accumulator or—by employing a suitable transformer—direct from the main. It is specially made to be built into Meccano models and is the most reliable and powerful toy electric motor made. When suitably geared it will lift over 30-lbs. dead weight. It is fitted with reversing motion, starting and stopping levers.

For price see page 62

HORNBY CLOCK WORK TRAINS

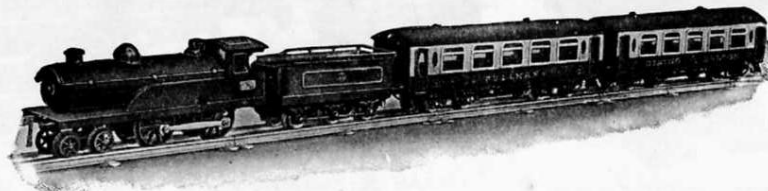
THE HORNBY TRAINS are manufactured by Meccano Ltd., and they are built on the Meccano principle. All the parts are standardised and Engines, Tenders, Coaches and Wagons may be taken entirely to pieces and rebuilt. If one of the parts is lost or damaged you may fit a new one yourself. *A Hornby Train lasts for ever!* The Hornby Train is a beautiful piece of workmanship, with perfect clockwork mechanism, ensuring smooth running. Each Train is guaranteed by Meccano Ltd.

No. 1 PASSENGER SET.—Gauge 0. Each Set contains Loco, Tender and two Coaches, with Rails for a 2 ft. diameter circle and two straights. The Loco is fitted with reversing gear, brake, and governor. In four colours to represent L. & N.W., G.N., Midland, and Caledonian rolling stock. Complete in brown leather-finished gold-embossed box. *For price see page 62*



No. 1 GOODS SET.—Gauge 0. This Set is similar in every way to No. 1 Passenger Set, except that it contains Loco, Tender and one Wagon. Complete in strong attractive gold-embossed box. *For price see page 62*

No. 2 PULLMAN SET.—This Set includes Loco and Tender of a larger type, measuring 17" in length. A superior mechanism has been adopted, making this the most attractive and satisfactory clockwork train yet produced. The Coaches are beautiful, both in colour and finish. Each Set includes Loco, Tender, one Pullman and one Dining Coach, as illustrated, with set of Rails making a 4 ft. diameter circle. Gauge 0. In four colours to represent L. & N.W., G.N., Midland, and Caledonian rolling stock. The Loco is fitted with reversing gear, brake and governor. Complete in gold-embossed box. *For price see page 62*



No. 2 GOODS SET.—Similar to Passenger Set No. 2 but two Wagons in place of Coaches. Complete in Gold-embossed box
SEND FOR SPECIAL LIST OF RAILS, POINTS AND CROSSINGS (*See page 61.*)

ZULU CLOCKWORK TRAINS

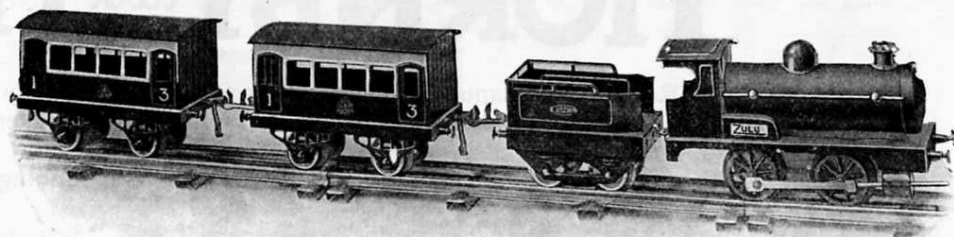
Fine and durable mechanism and strength of construction of all parts are the main characteristics of this new type of clockwork train. The Zulu is a well designed and efficient train and will give excellent and long service. Richly enamelled and highly finished; fitted with brake and governor; non-reversing.

Each Set contains Loco, Tender, two Passenger Coaches and Set of Rails, including a 2 ft. diameter circle and two straights. Gauge 0. In black only.

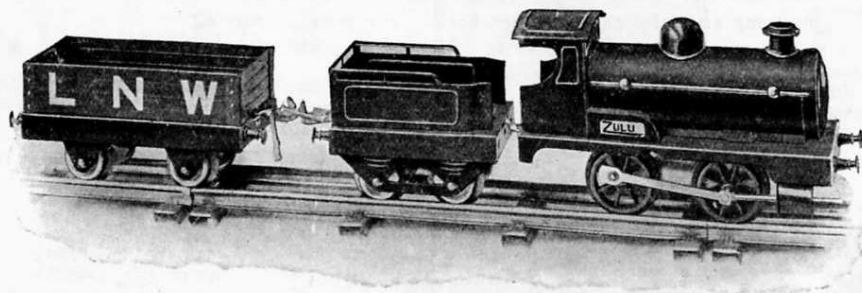
For price see page 62

Zulu Goods Set as above but containing one wagon in place of passenger coaches.

For price see page 62



ZULU PASSENGER SET



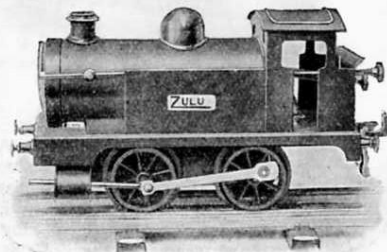
ZULU GOODS SET

ZULU 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 black only.

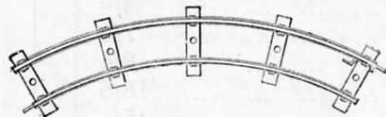
For price see page 62



ZULU TANK LOCO

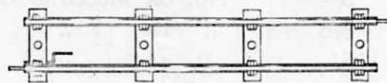
MECCANO RAILS, POINTS AND CROSSINGS

The range of Meccano Rails, Points and Crossings is now very comprehensive and a special leaflet is published (price 4d. post free) showing some of the combinations of rail designs to which Meccano Rails, etc., lend themselves. The curved rails are made in both 1-ft. and 2-ft. radius (to form circles of 2-ft. and 4-ft. diameter respectively). For those interested in electric railways these rails are also made with a third rail. Send for the latest list and prices.

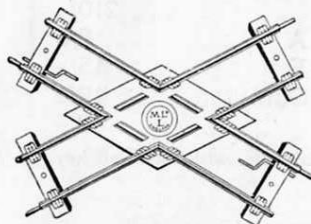


Curved Rails.

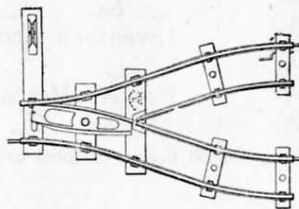
(Also made in half and quarter lengths)



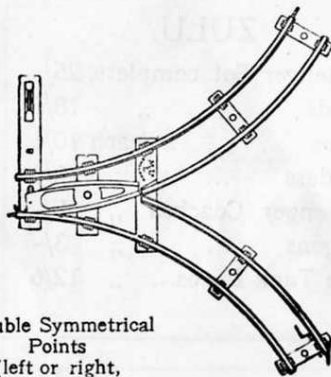
Straight Rails.



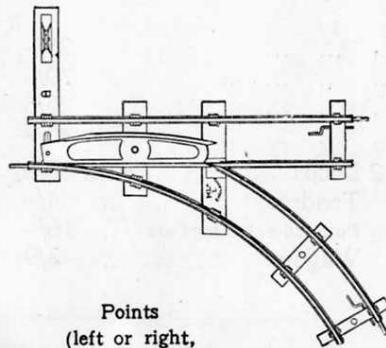
Acute Angle Crossing.



Parallel Points (left or right).



Double Symmetrical Points
(left or right,
in either 1 ft. or 2 ft. radius).



Points
(left or right,
in either 1 ft. or 2 ft. radius).

TRAIN ACCESSORIES.

Gauge 0.



BRAKE VANS

Finished in colour to represent L. & N. W. system.
Each 4/-



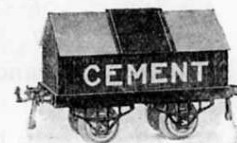
PETROL TANK WAGONS

Finished in red, lettered gold.
Each 3/6



BRAKE VANS

Finished in colour to represent G.N. system.
Each 4/-



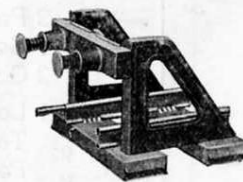
CEMENT WAGONS.

Enamelled in colour.
Each 4/6



GUNPOWDER VANS

Finished red. Each 4/-



SPRING BUFFER STOPS

Enamelled in colour.
Each 2/-

MECCANO PRICE LIST

MECCANO OUTFITS

No. 0 Meccano Outfit	...	...	...	...	5/-
" 1	"	"	...	...	8/6
" 2	"	"	...	...	15/-
" 3	"	"	...	...	22/6
" 4	"	"	...	...	40/-
" 5 *	"	"	(Carton)	...	55/-
" 5 *	"	"	Presentation Outfit	...	85/-
" 6	"	"	Presentation Outfit	...	140/-
" 7	"	"	"	...	370/-
Meccano Clockwork Motor	...	...	...	...	9/-
" Electric Motor	...	...	...	...	12/6

ACCESSORY OUTFITS

No. 0A Meccano Outfit	...	...	...	...	4/-
" 1A	"	"	...	...	7/6
" 2A	"	"	...	...	8/6
" 3A	"	"	...	...	18/6
" 4A	"	"	...	...	15/-
" 5A *	"	"	(Carton)	...	50/-
" 5A *	"	"	(Wood)	...	80/-
" 6A	"	"	"	...	210/-
Inventor's Accessory Outfit A	...	...	...	...	8/6
" B	...	...	...	...	15/-
No. X1 Meccano Electrical Outfit	...	...	...	...	12/6
" X2	"	"	"	...	42/-

* Outfits Nos. 5 and 5A are supplied in neat and well-made cardboard boxes (cartons) or in superior oak cabinets, with lock and key.

Clockwork Train Price List.

HORNBY.

No. 1 Passenger Set complete	...	...	...	...	...	35/-
" 2 Passenger	"	"	...	...	...	70/-
" 1 Goods	"	"	...	...	...	25/6
" 2 Goods	"	"	...	...	...	45/-
No. 1 Locos	...	...	...	...	each	16/-
" Tenders	...	...	"	3/6		
" Passenger Coaches	"	6/6				
" Wagons	...	...	"	3/9		
No. 2 Locos	...	...	...	...	each	30/-
" Tenders	...	...	"	4/-		
" Pullman or Dining Cars	"	16/-				
" Wagons	...	...	"	3/9		

ZULU.

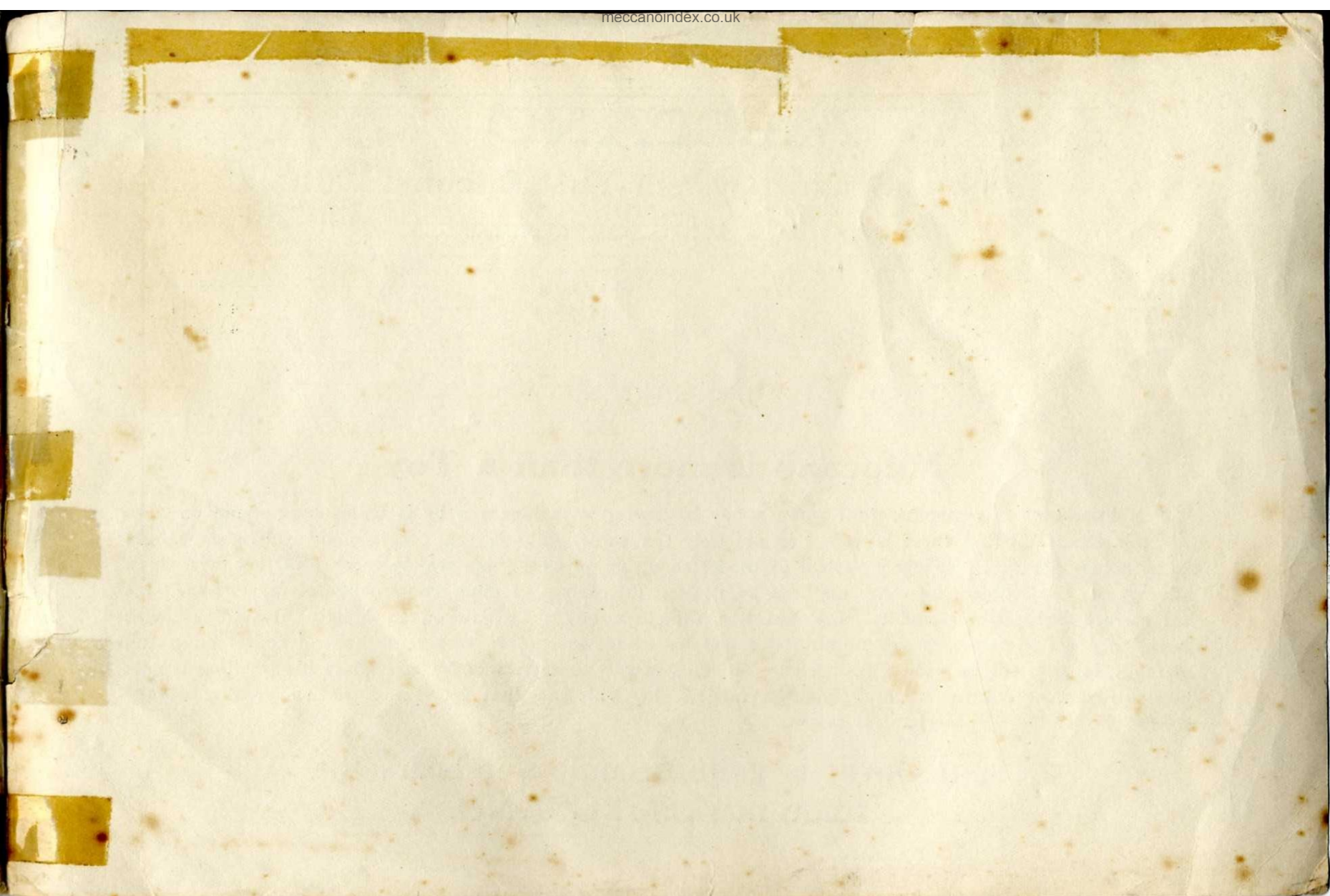
Passenger Set complete,	25/-
Goods	" " 18/6
Locos	... .. each 10/6
Tenders	... .. " 2/6
Passenger Coaches	" 5/-
Wagons	... .. " 3/-
Zulu Tank Locos...	" 12/6

Contents of Outfits.

[illegible]

Contents of Outfits—continued

[illegible]



MECCANO

Hornby's Original System First Patented 1901

PATENTS AND DESIGNS, GREAT BRITAIN:

139,125	177,430	671,484	680,416	683,011	22,962/13
145,357	577,207	671,485	682,208	686,112	3,869/14
153,234	577,272	671,534	682,209	21,117/12	4,183/14
154,130	648,958	671,790	682,934	20,535/13	4,564/15
170,785	671,212				

PATENTED THROUGHOUT THE WORLD.

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 the corresponding elements would do in actual practice. No other system of model construction can, therefore, be correct. Other toys which attempt the same object by other methods must avail themselves of other constructive elements which are not correct engineering elements. Consequently, though a boy may succeed in building playthings with them, they are merely toys and nothing else and his mind, as regards proper mechanical construction and methods, is distorted instead of instructed. He thus learns wrong principles and when his ambition tempts him to invent or construct more elaborate models, he will 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.