MECCANO

(TRADE MARK REG. U.S. PAT. OFF.)

INSTRUCTIONS

FOR OUTFITS Nos. 0 to 3

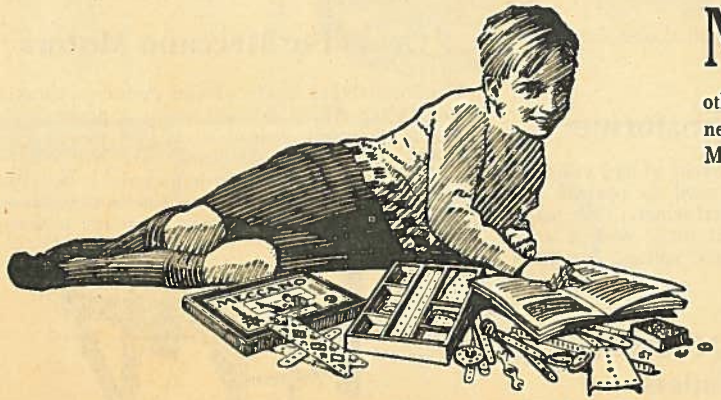
Price 35 Cents

MECCANO COMPANY
INCORPORATED

No. 56A ELIZABETH, NEW JERSEY AMERICAN EDITION

Bn—082570

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. His Outfit is his passport into a great new land of pleasure and fun—Meccanoland, where happy boys live. He has joined the great fraternity of boys who like to make things, and his fun increases with every new Meccano model that he builds. Time never hangs heavily on his hands, for with his Meccano Outfit he can make an endless variety of toys and copy any machine or structure that he cares to.

We are at all times glad to hear from Meccano boys and to correspond with them and help them with their models. Sometimes a little difficulty may be experienced in building a particular model, or some help required in designing new ones. We want all Meccano boys to get the utmost pleasure from their Outfits and we like to have them write to us and tell us what they are doing.

How to Build with Meccano

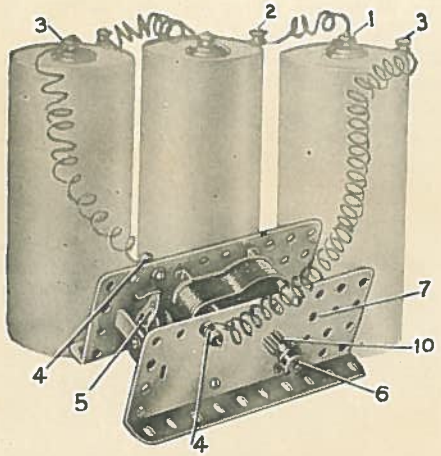
Follow the instructions closely at first, and build the models just as you see them. Then take each model and try to improve our design. Every model can be made in a dozen different ways. Screw up all the nuts and bolts firmly and you will find that you can play with the trucks, cranes, signals, etc.,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

Meccano is sold in different sized outfits, (see page 63). All parts are of the same high quality and finish, the larger outfits containing a greater quantity and variety of parts.

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

How to Use the Meccano Electric Motor

The Meccano Electric Motor has been specially designed for running Meccano Models and may be operated efficiently by good dry cells or a storage battery giving approximately 4 volts. If two or three dry cells are used, they should be connected together as illustrated below, the central or positive terminal (1) of the first being connected to the outside or negative terminal (2) of the next, etc. The two remaining terminals (3) should be connected to the motor terminals (4). The connecting of the second motor terminal to the battery sets the



one-way motor in motion. Insulated copper bell wire is recommended for making the connections and can be obtained at any electrical supply store.

The reversing motor has a control lever (5). When this lever is in the central position, as illustrated, the current is off and the motor is "dead." To start the motor move the lever to the right or left according to the motion desired, either forward or reverse.

A little light oil should be applied occasionally to the bearings of the motor.

The Meccano Transformer

When alternating electric current of 110 volts, 60 cycles is available it can be used to operate the motor through a Meccano transformer. (See page 62.) This transformer is well made and is very efficient; it delivers just the right voltage for Meccano Motors.

Attaching the Motor to Meccano Models

The sides and flanged base of the motor are pierced with the Meccano standardized holes, so it is a simple matter to build the motor right into the model. The illustration shows the motor attached to Model No. 122—Drop Stamp. The motor is bolted to the flanged plate and a cord is run around the motor pulley (6) and the pulley wheel (8) on the crank handle.

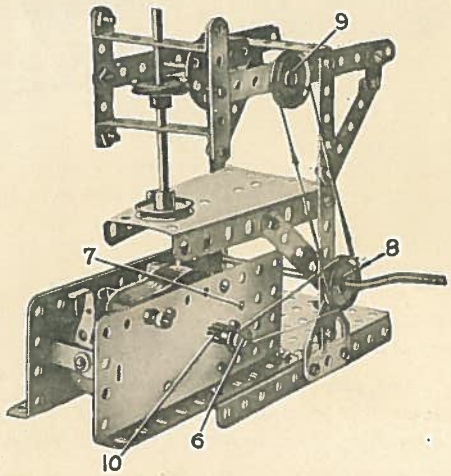
Thus the model can be operated either by hand or by motor, as desired. The crank handle and pulley (8) could also be removed and the motor fixed directly under the table. The cord could then be connected from the motor pulley (6) to the pulley (9) on the upper arm of the model. This would make a more compact and neater model.

When connecting the cord between two pulleys do not make it too tight nor too loose—a little experimenting will be necessary to get the proper tension. Meccano Spring Cord (part No. 58) is ideal for use with pulleys as it automatically adjusts itself to the proper tension. It can be purchased separately at any time.

Be sure that the model operates freely before attempting to drive it with the motor.

Gears for Meccano Motors

To the driving shaft of the motor is secured a pinion (10) which is used when a positive shaft drive is required instead of a belt drive. A 57-toothed gear wheel (Meccano part No. 27a), secured to a rod passed through hole 7, will mesh with the pinion on the driving shaft, and this gear wheel will rotate much slower than the pinion be-

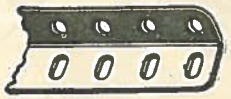


cause it is a great deal larger. However, although the speed of the second shaft is only about 1/5th the speed of the first shaft, it has about five times the power.

This is known as gear reduction and the procedure may be repeated by using a Meccano pinion on the other end of the rod which goes through hole 7. This pinion can be made to mesh with a gear wheel in the model.

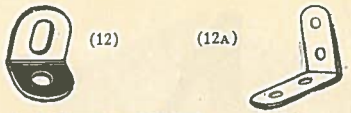
Particulars and Prices of Meccano Parts

No.		Price
1	Perforated Strips, 12½" long	½ doz. .45
1A	" " 9½" "	" .35
1B	" " 7½" "	" .30
2	" " 5½" "	" .25
2A	" " 4½" "	" .20
3	" " 3½" "	" .20
4	" " 3" "	" .20
5	" " 2½" "	" .15
6	" " 2" "	" .15
6A	" " 1½" "	" .15



7	Angle Girders, 24½"long	each .25
7A	" " 18½" "	" .20
8	" " 12½" "	½ doz. .60
8A	" " 9½" "	" .55
8B	" " 7½" "	" .50
9	" " 5½" "	" .45
9A	" " 4½" "	" .40
9B	" " 3½" "	" .35
9C	" " 3" "	" .35
9D	" " 2½" "	" .30
9E	" " 2" "	" .25
9F	" " 1½" "	" .25

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



12	Angle Brackets, ½"x½"	doz. .12
12A	" " 1"x1"	each .05
12B	" " 1"x½"	" .05

13	Axle Rods, 11½" long	each .10
13A	" " 8" "	" .10
14	" " 6½" "	" .05
15	" " 5" "	" .05
15A	" " 4½" "	" .05
16	" " 3½" "	" .05
16A	" " 2½" "	" .03
16B	" " 3" "	" .04
17	" " 2" "	" .02
18A	" " 1½" "	" .02
18B	" " 1" "	" .02

19	Crank Handles	each .10

No.		Price
19A	Wheels, 3" diam., with set screw	each .45
20	Flanged Wheels	" .25

Pulley Wheels

19B	3" dia. with centre boss and set screw,	each .25
20A	2" " " " " " " "	" .20
21	1½" " " " " " " "	" .20

22	1" dia. with center boss and set screw,	each .10
23A	½" " " " " " " "	" .10
22A	1" without " " " " " "	" .05
23	½" " " " " " " "	" .05

24	Bush Wheels	each .15
25	Pinion Wheels, ¾" diam	" .25
26	" " ½" "	" .15

Gear Wheels

27	50 teeth (to gear with ¾" pinion)	each .30
27A	57 " " " ½" "	" .35
27B	133 " " " 1" "	" .65
28	Contrate Wheels, 1½" diam	" .50
29	" " ¾" "	" .30

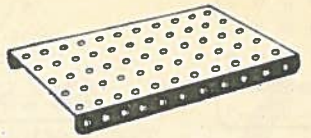
No.		Price
30	Bevel Gears	each .55
31	Gear Wheels, 1", 38 teeth	" .65

32	Worm Wheels	each .25
33	Pawls (complete)	" .15
33A	Pivot Bolts with Nuts	" .06
34	Spanners	" .10
34B	Box Spanners	" .20

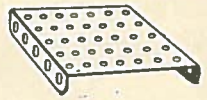
35	Spring Clips	per box (doz.) .15
36	Screw Drivers	each .10
36A	" " Extra Long	" .50
37	Nuts and Bolts	per box (doz.) .15
37A	Nuts	" " .05
37B	Bolts	" " .10
38	Washers	" .05
40	Hanks of Cord	each .05
41	Propeller Blades	per pair .15
43	Springs	each .05

44	Cranked Bent Strips	each .05
45	Double Bent Strips	" .05

46	Double Angle Strips, 2½"x1"	each .05
47	" " " 2½"x1½"	" .06
47A	" " " 3"x1½"	½ doz. .36
48	" " " 1½"x1½"	" .18
48A	" " " 2½"x1½"	" .20
48B	" " " 3½"x1½"	" .25
48C	" " " 4½"x1½"	" .35
48D	" " " 5½"x1½"	" .36
50	Eye Pieces	each .05



No.		Price
52	Perforated Flanged Plates, 5½"x2½"	each .25
52A	Flat Plates, 5½"x3½"	" .15



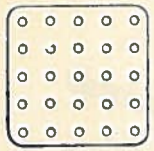
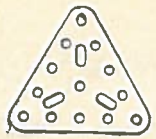
53	Perforated Flanged Plates, 3½"x2½"	each .20
53A	Flat Plates, 4½"x2½"	" .12
54	Perforated Flanged Sector Plates	" .20

55	Perforated Strips, Slotted, 5½" long	each .05
55A	" " " 2" "	" .03
56A	Instruction Manuals, No. 0-3	" .35
56B	" " " 4-6	" .45
57	Hooks	" .02
57A	" (scientific)	" .02
57B	" (loaded)	" .15
58	Spring Cord	per length .30
59	Collars with Set Screws	each .05
60	This Part Number has been changed to 48A	
60B	This Part Number has been changed to 48B	
61	Windmill Sails	each .10

62	Cranks	each .15
62A	Threaded Cranks	" .15
63	Couplings	" .15
63A	Octagonal Couplings	" .20
63B	Strip Couplings	" .20

63C	Threaded Couplings	each .20
64	Threaded Bosses	" .06
65	Centre Forks	" .10
66	Weights, 50 gramme	" .20
67	" 25 "	" .15
68	Woodscrews, ½"	doz. .10
69	Set Screws	" .10
69A	Grub Screws, 5-32"	" .10
69B	" " 7-32"	" .10

Particulars and Prices of Meccano Parts (Continued)

No.		Price
70	Flat Plates, 5½"x2½" ..... each	.15
72	" " 2½"x2½" ..... "	.10
76	Triangular Plates, 2½" ..... "	.05
77	" " 1" ..... "	.04

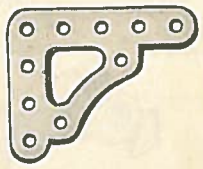
78	Screwed Rods, 11½" ..... each	.25
79	" " 8" ..... "	.25
79A	" " 6" ..... "	.20
80	" " 5" ..... "	.15
80A	" " 3½" ..... "	.12
80B	" " 4½" ..... "	.12
81	" " 2" ..... "	.10
82	" " 1" ..... "	.05

89	Curved Strips, 5½" ..... each	.05
90	" " 2½" ..... ½ doz.	.25
94	Sprocket Chain ..... per yard	.25

95	Sprocket Wheels, 2" diam. ..... each	.25
95A	" " 1½" " ..... "	.25
95B	" " 3" " ..... "	.40
96	" " 1" " ..... "	.20
96A	" " ¾" " ..... "	.15

97	Braced Girders, 3½"long ..... ½ doz.	.20
98	" " 2½" " ..... "	.15
99	" " 12½" " ..... "	.75
99A	" " 9½" " ..... "	.60
100	" " 5½" " ..... "	.50
101	Healds, for Looms ..... doz.	.45
102	Single Bent Strips ..... each	.05
103	Flat Girders, 5½"long ..... "	.10
103A	" " 9½" " ..... "	.12
103B	" " 12½" " ..... "	.15
103C	" " 4½" " ..... "	.10
103D	" " 3½" " ..... "	.10
103E	" " 3" " ..... "	.08
103F	" " 2½" " ..... "	.08
103G	" " 2" " ..... "	.06
103H	" " 1½" " ..... "	.05
103K	" " 7½" " ..... "	.12

No.		Price
104	Shuttles, for Looms ..... each	1.20
105	Reed Hooks, for Looms ..... "	.10
106	Wooden Rollers ..... "	.40
106A	Sand Rollers ..... "	.45
107	Tables for Designing Machines ..... "	.25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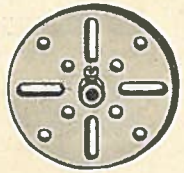
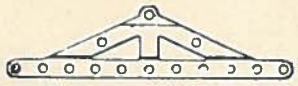

(109)

108	Architraves ..... each	.09
109	Face Plates, 2½" diam. ..... "	.20

110	Rack Strips, 3½" ..... each	.10

111	Bolts, ¾" ..... each	.02
111A	" ½" ..... "	.01
111B	" 7-32" ..... doz.	.10



113	Girder Frames ..... each	.10


(114)


(115)

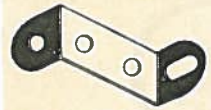
114	Hinges ..... per pair	.20
115	Threaded Pins ..... each	.05
116	Fork Pieces ..... "	.10
117	Steel Balls, ⅜" diam. ..... "	.02
118	Hub Discs, 5½" diam. ..... "	.50
119	Channel Segments (8 to circle, 11½" diam.) ..... "	.15


(120)

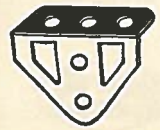
120	Buffers ..... each	.05
120A	Spring Buffers ..... per pair	.25



121	Train Couplings ..... each	.15
122	Miniature Loaded Sacks ..... ½ doz.	.30
123	Cone Pulleys ..... each	.50




124	Reversed Angle Brackets, 1" ..... ½ doz.	.25
125	" " " ½" ..... "	.20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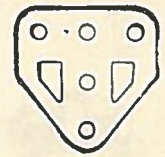
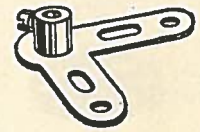

(126A)

126	Trunnions ..... each	.10
126A	Flat Trunnions ..... "	.06


(127)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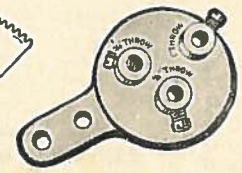
127	Simple Bell Cranks ..... each	.10
128	Boss Bell Cranks ..... "	.15


(129)



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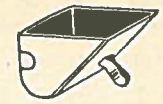
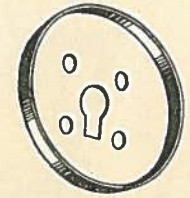
129	Rack Segments, 3" diam. ..... each	.20
130	Triple Throw Eccentrics ..... "	.45



No.		Price
131	Dredger Buckets ..... each	.15


132	Flywheel, 2¾" diam. ..... each	.75
133	Corner Brackets ..... "	.10
134	Crank Shafts, 1" Stroke ..... "	.10
135	Theodolite Protractors ..... "	.06


136	Handrail Supports ..... each	.10
137	Wheel Flanges ..... "	.15
138	Ship's Funnels ..... "	.25


139 A

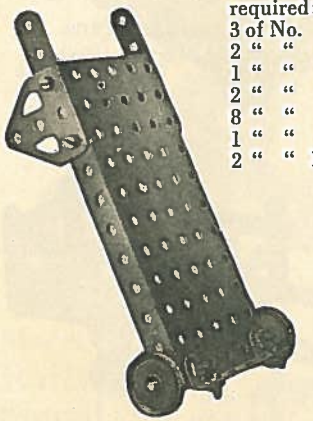
139	Flanged Brackets, (right) ..... each	.10
139A	" " (left) ..... "	.10
140	Universal Couplings ..... "	.30
142	Rubber Rings (for auto tires) ..... "	.10
143	Circular Girders, 5" diam. (over all) ..... "	.55
144	Dog Clutches ..... "	.30
145	Circular Strips, 7" diam. (over all) ..... "	.50
146	" Plates, 6" " " ..... "	.60
147	Ratchet Pawls ..... "	.10
148	" Wheels ..... "	.30
	Brushes for Electric Motor ..... "	.10
	Springs " " " ..... "	.10
	Caps " " " ..... "	.05

When ordering Brushes or Springs, please say whether they are required for motor on which the Brush-holders are outside of the sideplate, or inside.

These Models can be made with MECCANO Outfit No. 0

Trucks and Luggage Carts

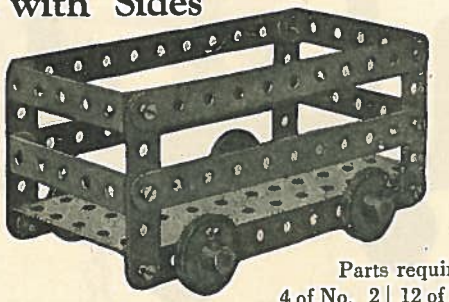
Model No. 1
Flat Truck



Parts required:

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

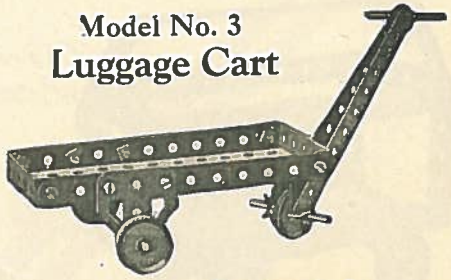
Model No. 2
Truck with Sides



Parts required:

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

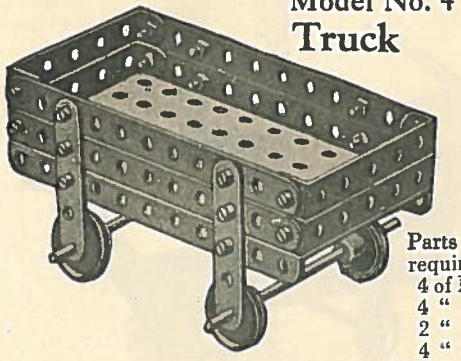
Model No. 3
Luggage Cart



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

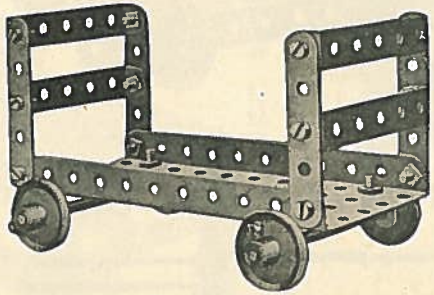
Model No. 4
Truck



Parts required:

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

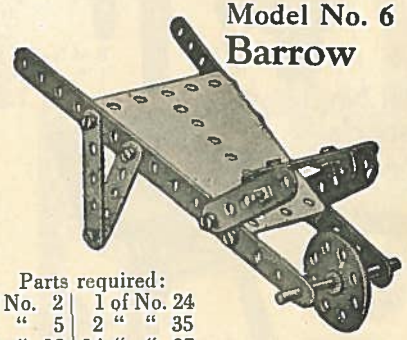
Model No. 5
Luggage Truck



Parts required:

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

Model No. 6
Barrow

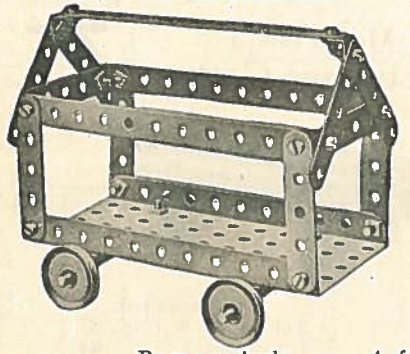


Parts required:

2	of No.	2	1	of No.	24
9	" "	5	2	" "	35
2	" "	12	14	" "	37
1	" "	17	1	" "	54

Trucks and Luggage Carts (*Continued*)

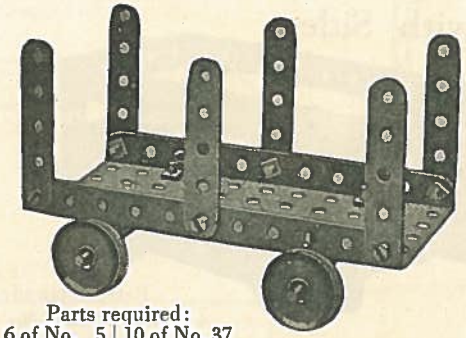
Model No. 7 Covered Truck



Parts required:

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

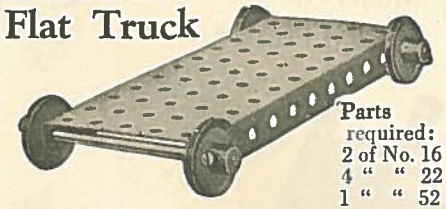
Model No. 8—Timber Truck



Parts required:

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

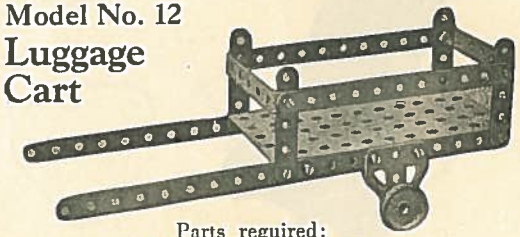
Model No. 9 Flat Truck



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

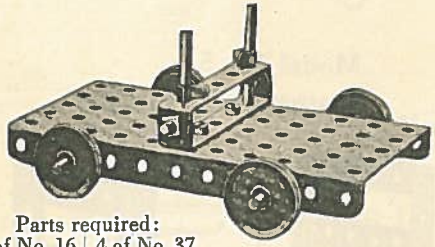
Model No. 10 Luggage Barrow

Parts required:

2 of No. 2

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

Model No. 11—Timber Truck



Parts required:

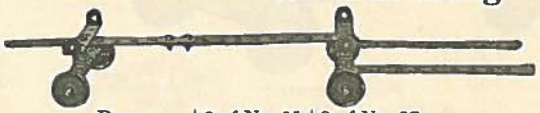
2 of No. 16	4 of No. 37
2 " " 17	1 " " 52
4 " " 22	2 " " 60
4 " " 35	

Model No. 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

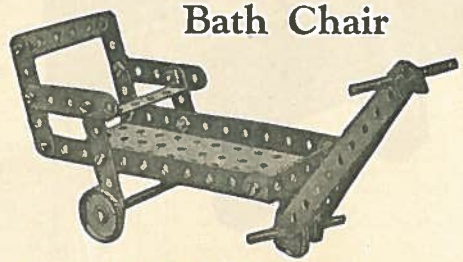
Model No. 14—Timber Drag



Parts required:

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

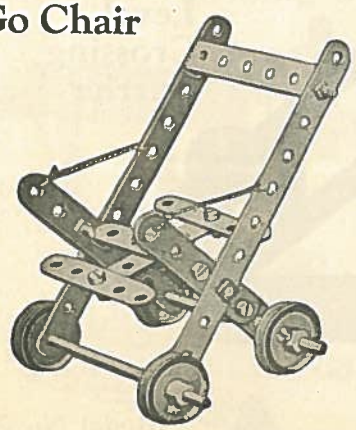
Model No. 15 Bath Chair



Parts required:

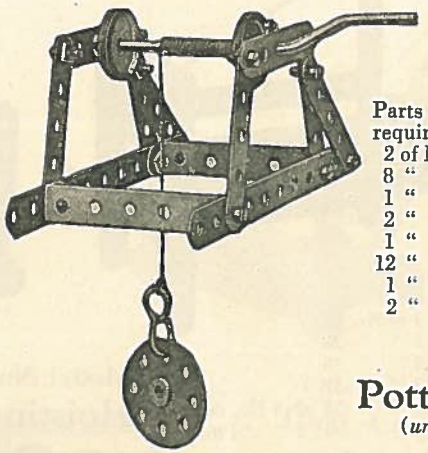
1 of No. 16	13 of No. 37	
2 " " 17	1 " " 44	
2 of No. 2	3 " " 22	1 " " 52
6 " " 5	4 " " 35	3 " " 60

Model No. 16
Go Chair



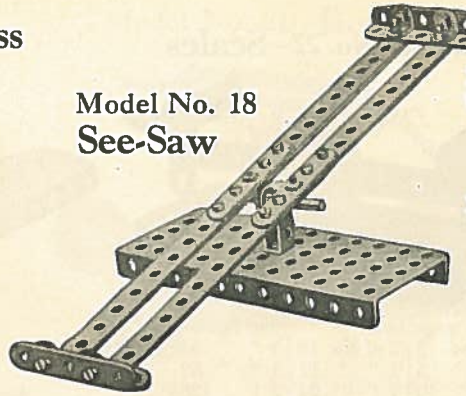
Parts required:
- 2 of No. 2
- 7 " " 5
- 2 " " 16
- 4 " " 22
- 11 " " 37
- 2 " " 60

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

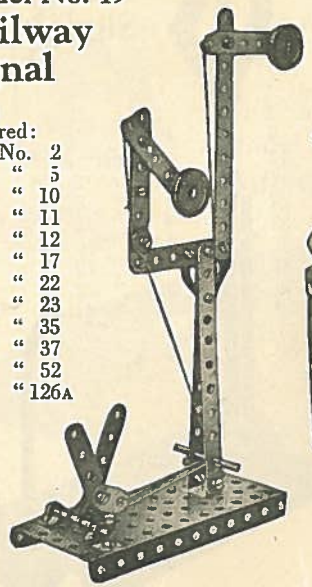
Model No. 18
See-Saw



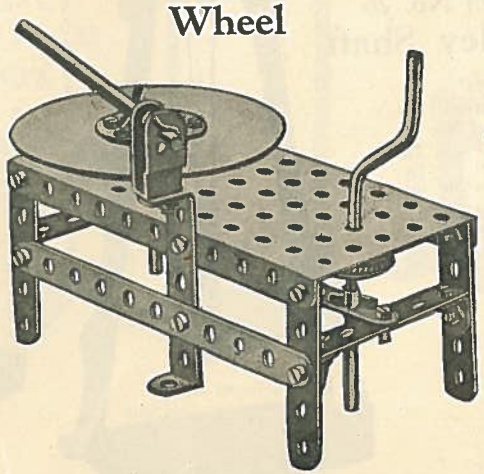
Parts required:
- 4 of No. 2
- 6 " " 5
- 6 " " 12
- 1 " " 17
- 15 " " 37
- 1 " " 44
- 1 " " 52

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)

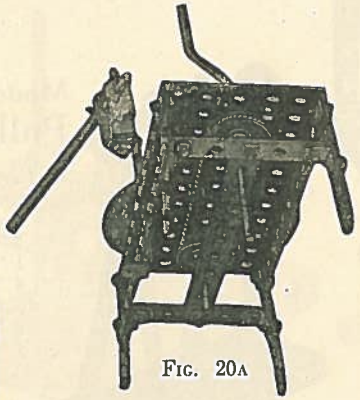
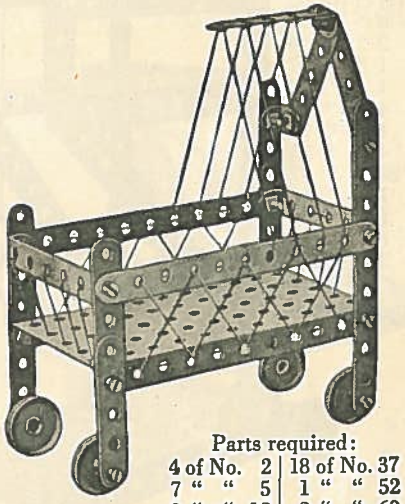


FIG. 20A

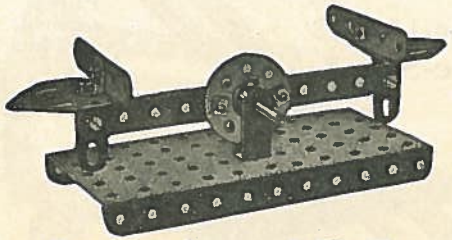
Parts required:
- 3 of No. 2
- 4 " " 5
- 1 " " 16
- 1 " " 19
- 2 " " 22
- 1 " " 24
- 2 of No. 35
- 17 " " 37
- 1 " " 44
- 1 " " 52
- 3 " " 60

Model No. 21
Cot



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

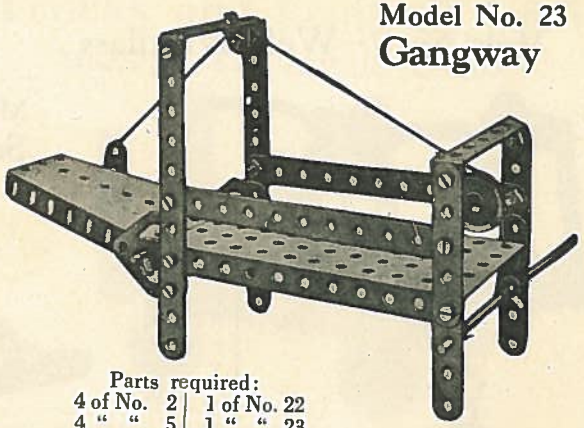
Model No. 22—Scales



Parts required:

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

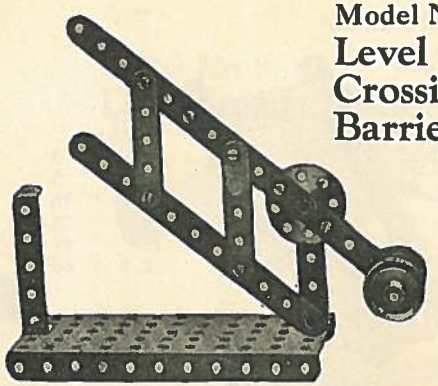
Model No. 23 Gangway



Parts required:

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

Model No. 24 Level Crossing Barrier



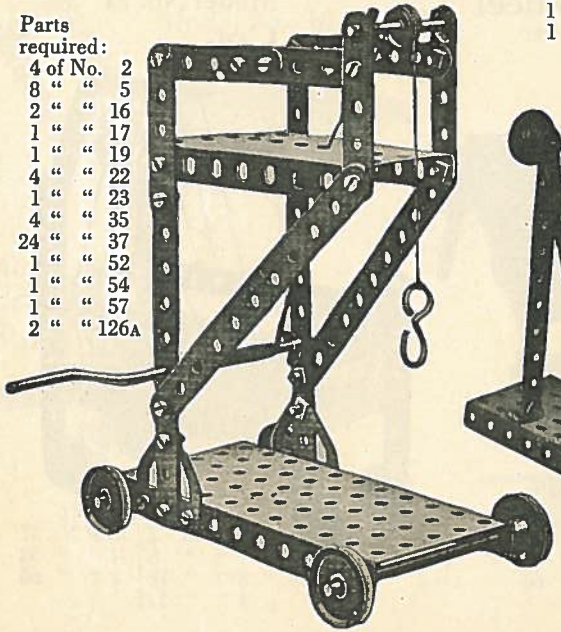
Parts required:

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

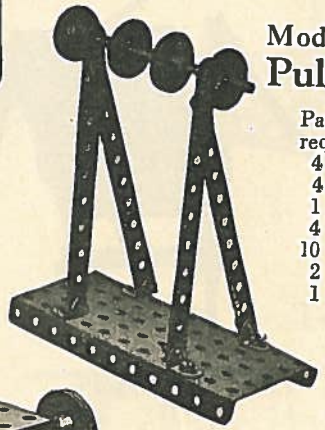
Model No. 25—Tower Wagon

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



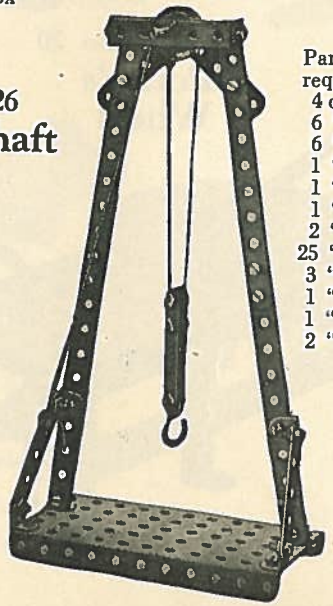
Model No. 26 Pulley Shaft



Parts required:

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

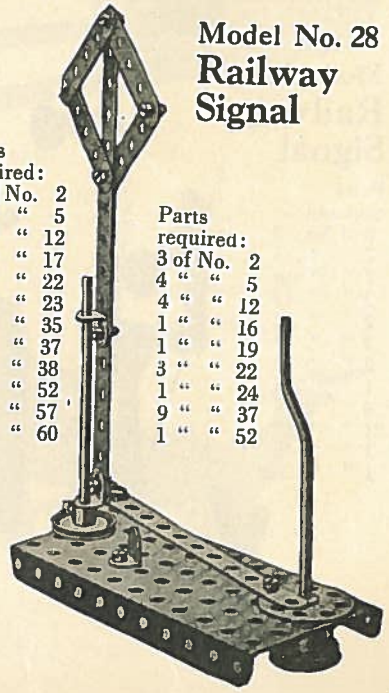
Model No. 27 Hoisting Block



Parts required:

4 of No.	2
6 " "	5
6 " "	12
1 " "	17
1 " "	22
1 " "	23
2 " "	35
25 " "	37
3 " "	38
1 " "	52
1 " "	57
2 " "	60

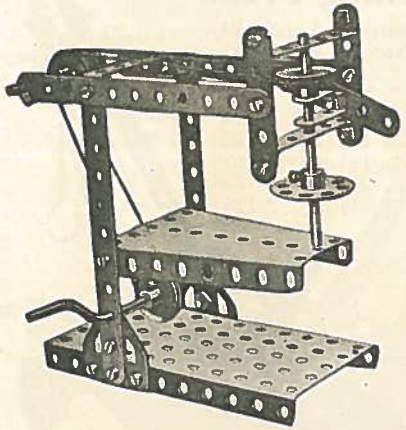
Model No. 28 Railway Signal



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
3 " "	5
1 " "	11
2 " "	16
1 " "	19
4 " "	22
1 " "	24
4 " "	35
19 " "	37
1 " "	44
1 " "	52
1 " "	54
3 " "	60
2 " "	126A

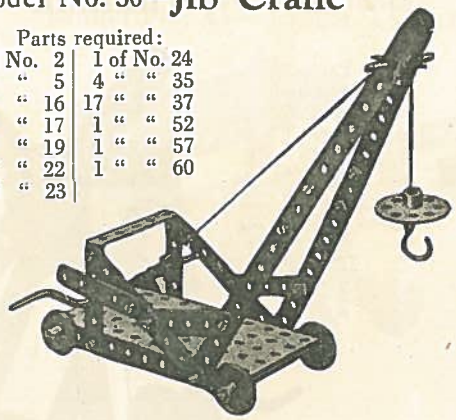
FIG. 29A

Detail of Drilling Machine.

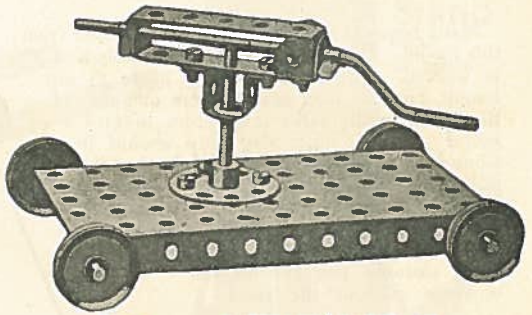
Model No. 30—Jib Crane

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		



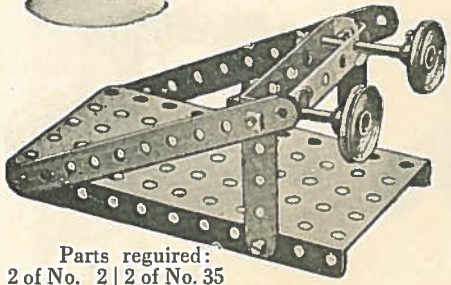
Model No. 31—Rock Drill



Parts required:

	1 of No.	19	4 of No. 37
	4 " "	22	1 " " 52
2 of No.	16	1 " " 24	2 " " 60
1 " "	17	2 " " 35	2 " " 125

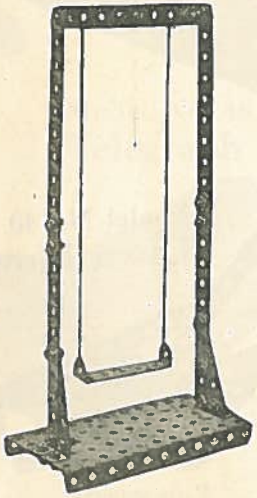
Model No. 32 Buffers



Parts reguired:

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

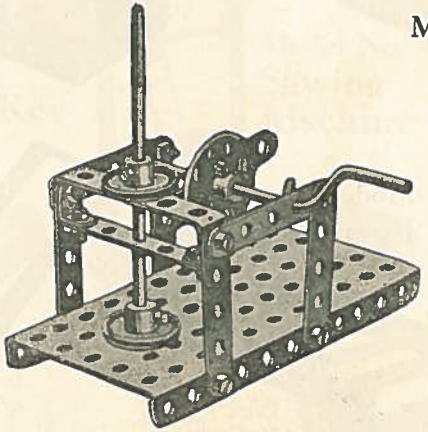
Model No. 33—Swing



Parts required:

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

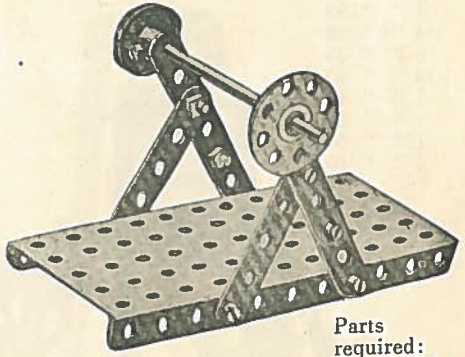
Model No. 34 Ore Crusher



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:

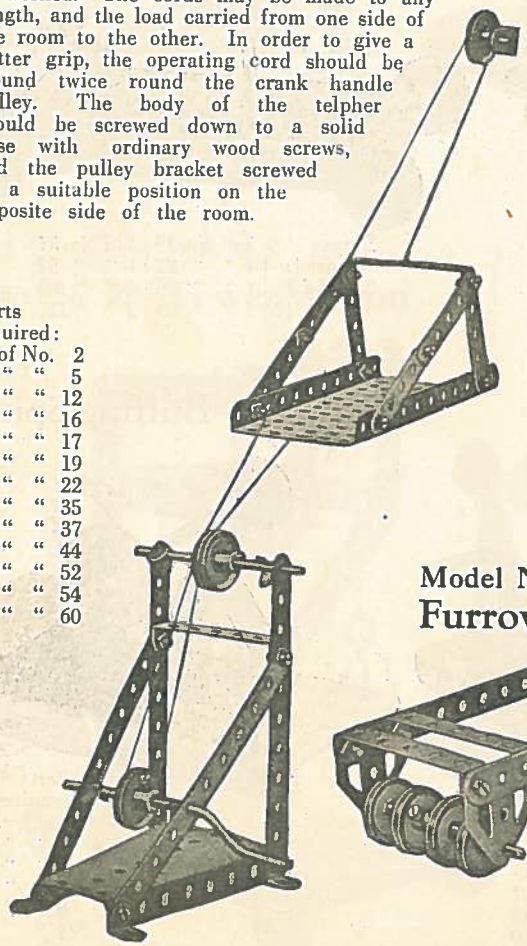
6 of No.	5
1 " "	16
1 " "	22
1 " "	24
8 " "	37
1 " "	52

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:

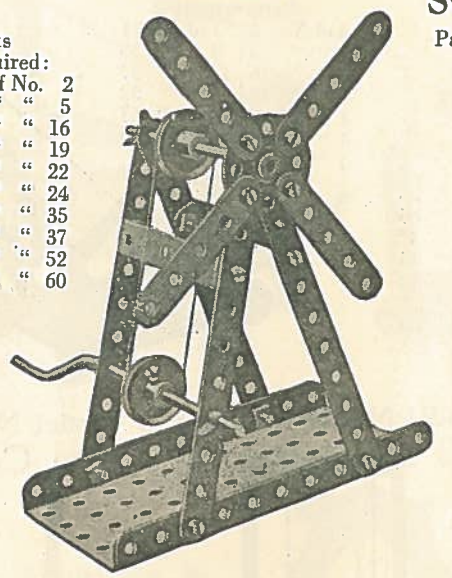
4 of No.	2
6 " "	5
4 " "	12
1 " "	16
1 " "	17
1 " "	19
4 " "	22
6 " "	35
14 " "	37
1 " "	44
1 " "	52
1 " "	54
2 " "	60



Model No. 37—Windmill

Parts required:

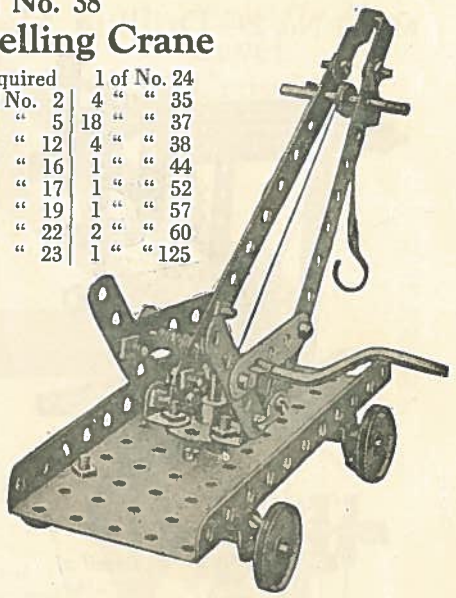
4 of No.	2
4 " "	5
1 " "	16
1 " "	19
2 " "	22
1 " "	24
4 " "	35
12 " "	37
1 " "	52
2 " "	60



Model No. 38
Swivelling Crane

Parts required

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

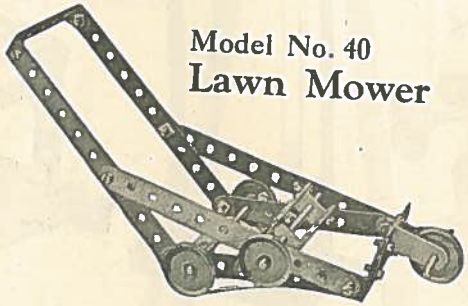


Model No. 39
Furrow Roller

Parts required:

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

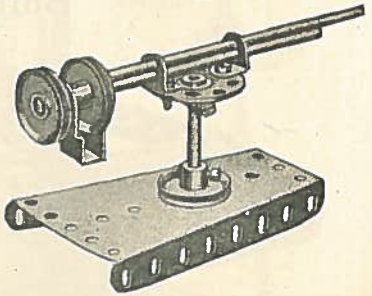
Model No. 40
Lawn Mower



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. 41
Quick-Firing Gun



Parts required:

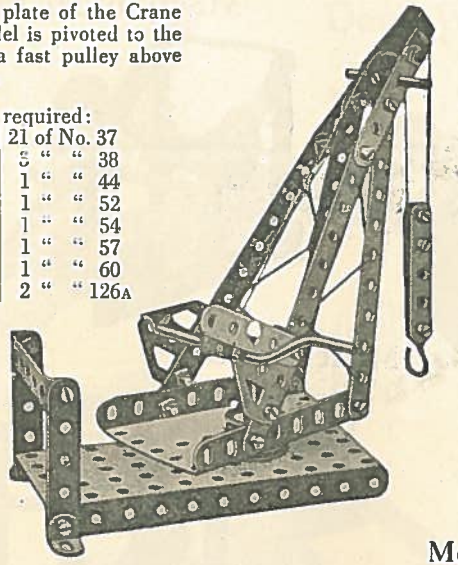
2 of No.	12	4 of No.	37
2 " "	16	1 " "	44
1 " "	17	1 " "	54
1 " "	24		

Model No. 42—Swivelling Crane

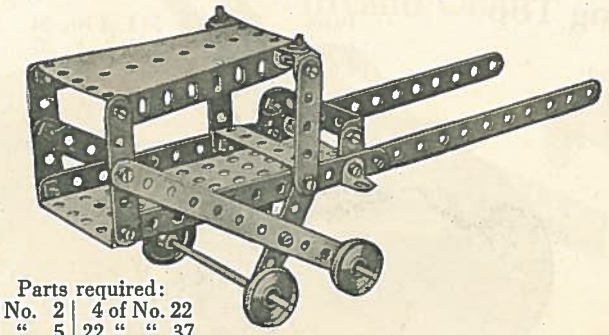
The sector plate of the Crane in this model is pivoted to the base with a fast pulley above and below.

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



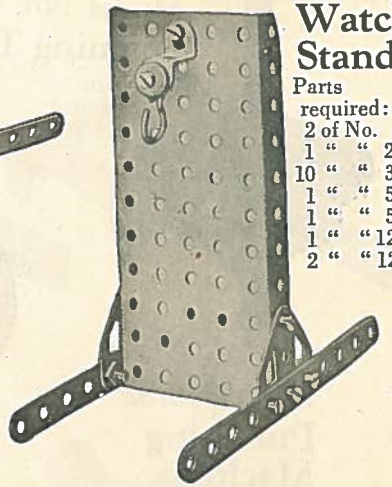
Model No. 43—Ticca Gharry



Parts required:

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

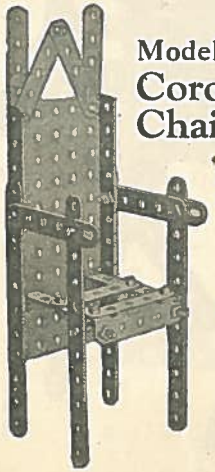
Model No. 44 Watch Stand



Parts required:

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

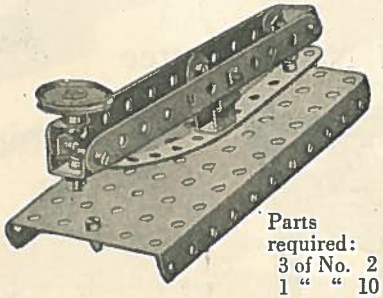
Model No. 45 Coronation Chair



Parts required:

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

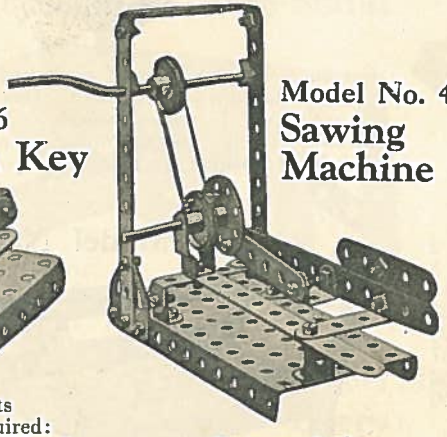
Model No. 46 Telegraph Key



Parts required:

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

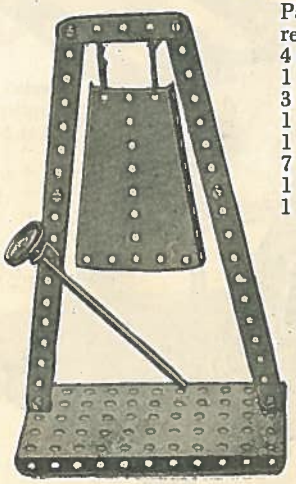
Model No. 47 Sawing Machine



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. 48 Gong



Parts required:

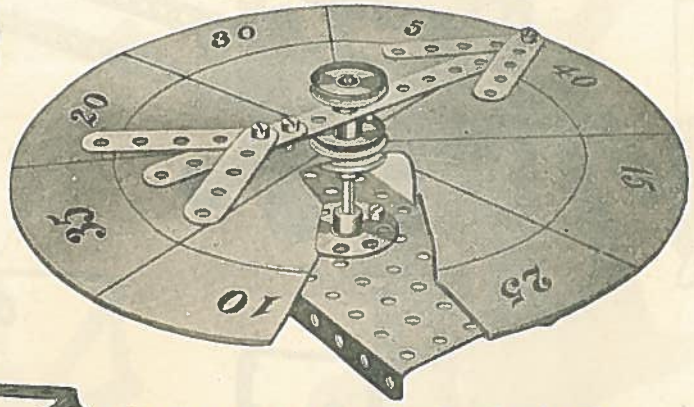
4 of No.	2
1 " "	5
3 " "	12
1 " "	16
1 " "	22
7 " "	37
1 " "	52
1 " "	54

Model No. 49
Spinning Top

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

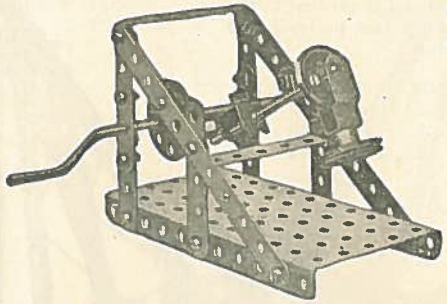
Model No. 50—Roulette Wheel

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



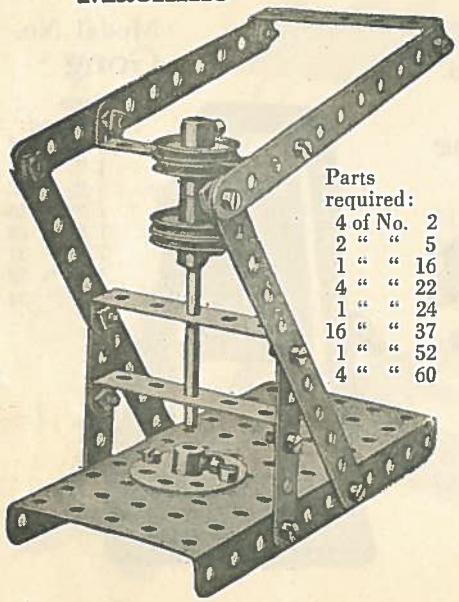
Cut out a circular piece of cardboard and mark as shown to form scoring board. This is clamped between two 1" pulley wheels. The pointer revolves freely on the upright spindle and is held in position by another 1" pulley wheel.

Model No. 51
Mechanical Hammer



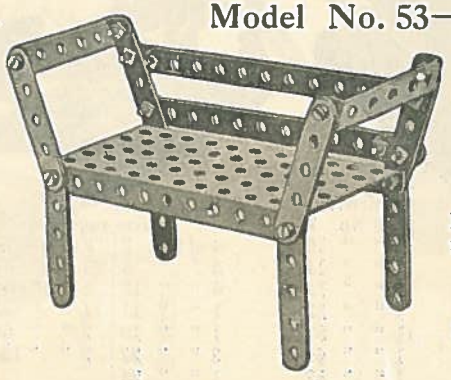
Parts required:
2 of No. 2
6 " " 5
1 " " 11
1 " " 12
1 " " 16
1 " " 19
2 " " 22
1 " " 24
4 " " 35
18 " " 37
1 " " 44
1 " " 52
3 " " 60

Model No. 52
Punching Machine



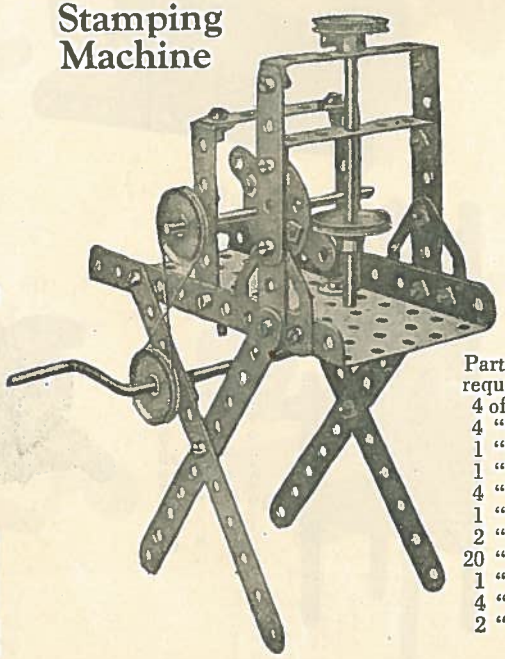
Parts required:
4 of No. 2
2 " " 5
1 " " 16
4 " " 22
1 " " 24
16 " " 37
1 " " 52
4 " " 60

Model No. 53—Settee



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

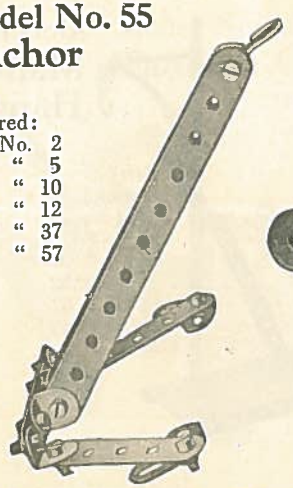
Model No. 54
Stamping Machine



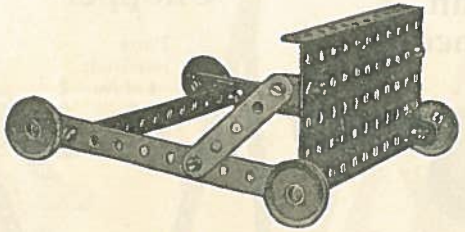
Parts required:
4 of No. 2
4 " " 5
1 " " 16
1 " " 19
4 " " 22
1 " " 24
2 " " 35
20 " " 37
1 " " 52
4 " " 60
2 " " 126A

Model No. 55
Anchor

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



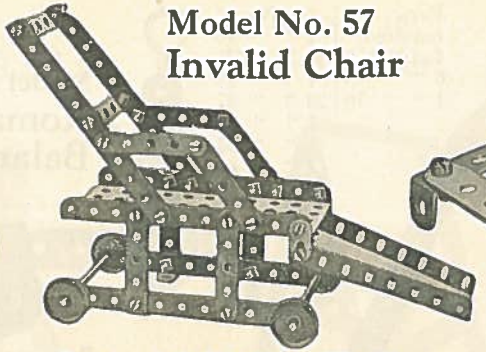
Model No. 56
Devil Wall



Parts required:

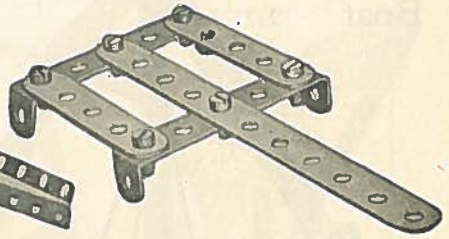
3 of No. 2	4 of No. 22
2 " " 5	18 " " 37
6 " " 12	1 " " 52

Model No. 57
Invalid Chair



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

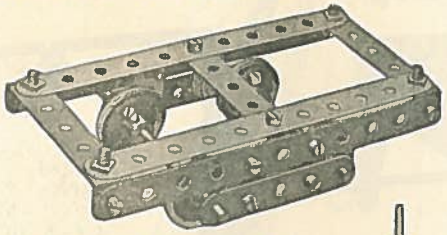
Model No. 58
Grill



Parts required:

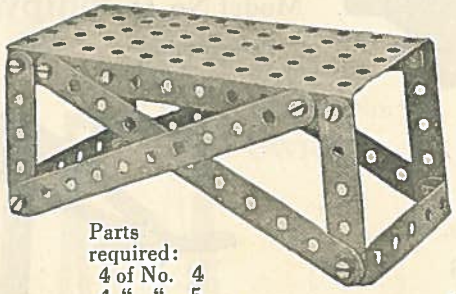
1 of No. 2	6 of No. 37
2 " " 5	2 " " 60

Model No. 59—Bogie Car



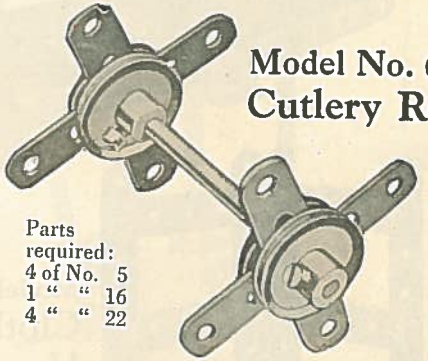
Parts required:
4 of No. 2
3 " " 5
4 " " 10
2 " " 16
4 " " 22
18 " " 37

Model No. 60—Fire Stand



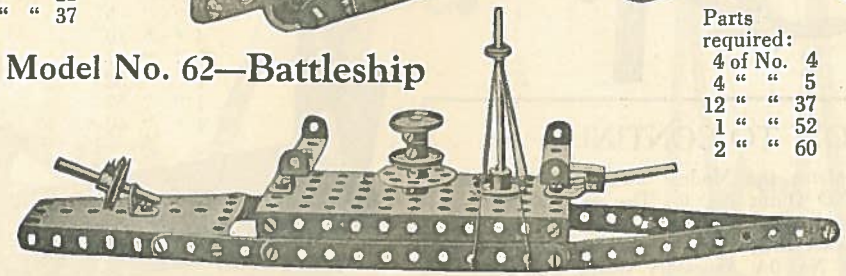
Parts required:
4 of No. 4
4 " " 5
12 " " 37
1 " " 52
2 " " 60

Model No. 61
Cutlery Rest



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

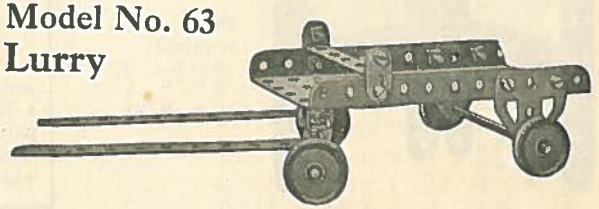
Model No. 62—Battleship



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. 63
Lurry

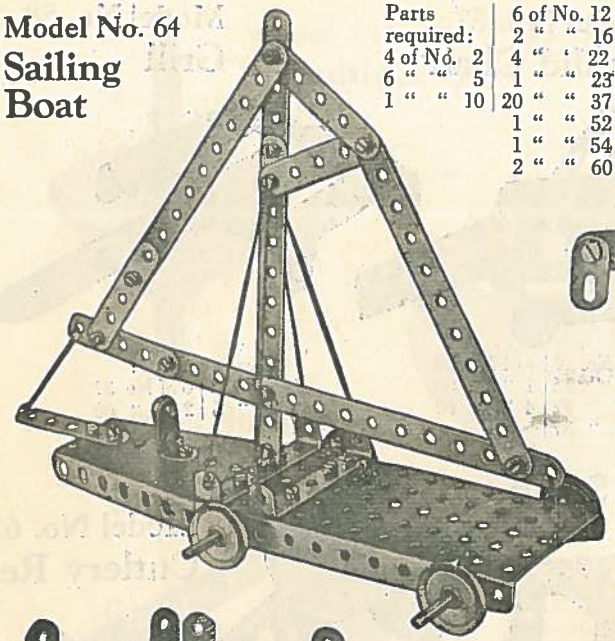


Parts required:

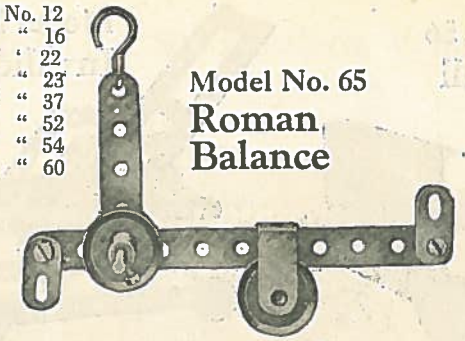
2 of No. 2	2 of No. 16	1 of No. 52
2 " " 10	4 " " 22	2 " " 60
1 " " 11	12 " " 37	2 " " 126A

Model No. 64 Sailing Boat

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



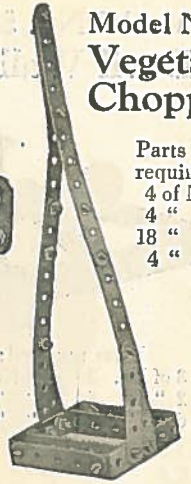
Model No. 65 Roman Balance



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

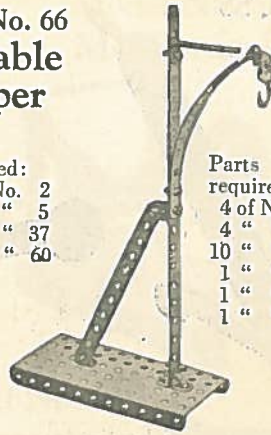
Model No. 66 Vegetable Chopper

Parts required:
4 of No. 2
4 " " 5
18 " " 37
4 " " 60



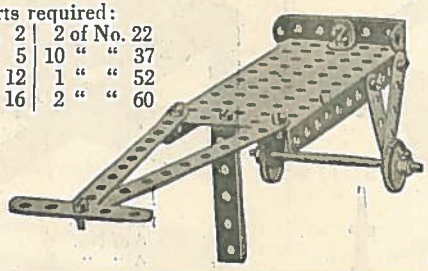
Model No. 67 Mail-Bag Hanger

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



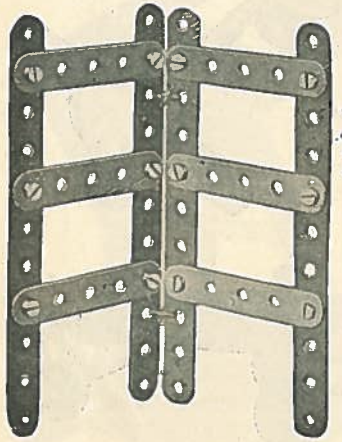
Model No. 68—Shipyard Bogie

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



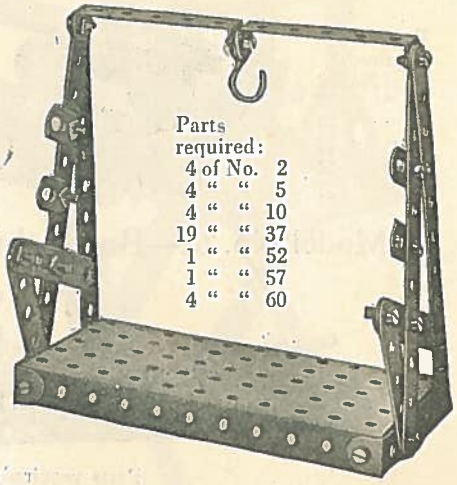
Model No. 69 Clothes Horse

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



Model No. 70—Pen Rack

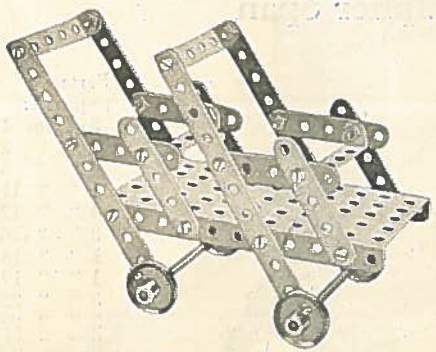
Parts required:
4 of No. 2
4 " " 5
4 " " 10
19 " " 37
1 " " 52
1 " " 57
4 " " 60



HOW TO CONTINUE

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

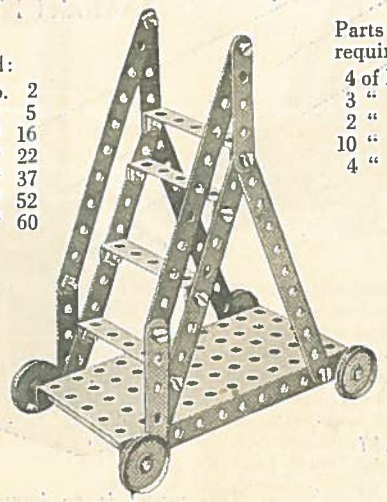
Model No. 101
Tandem Car



Parts required:

4 of No.	2	20 of No.	37
8 " "	5	1 " "	52
2 " "	16	4 " "	60
4 " "	22		

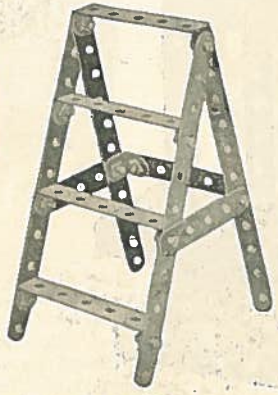
Model No. 102
Travelling Ladder



Parts required:

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

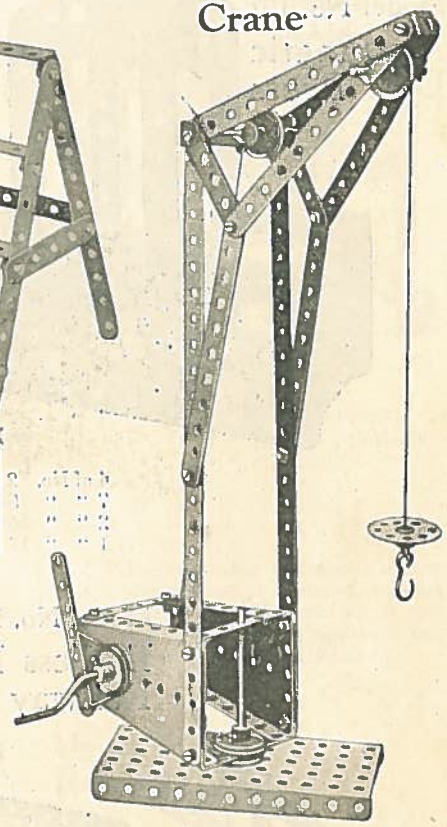
Model No. 103
Step Ladder



Parts required:

4 of No.	2
3 " "	5
2 " "	12
10 " "	37
4 " "	60

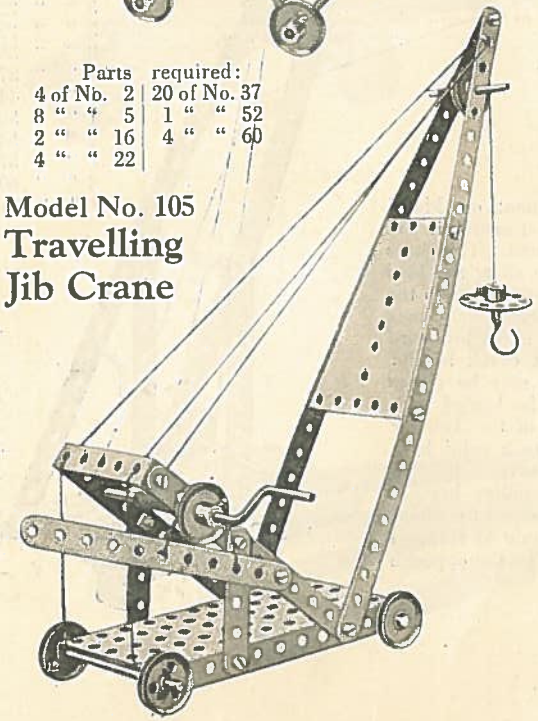
Model No. 104
Swivelling Crane



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

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. 106
Swing

Parts required:

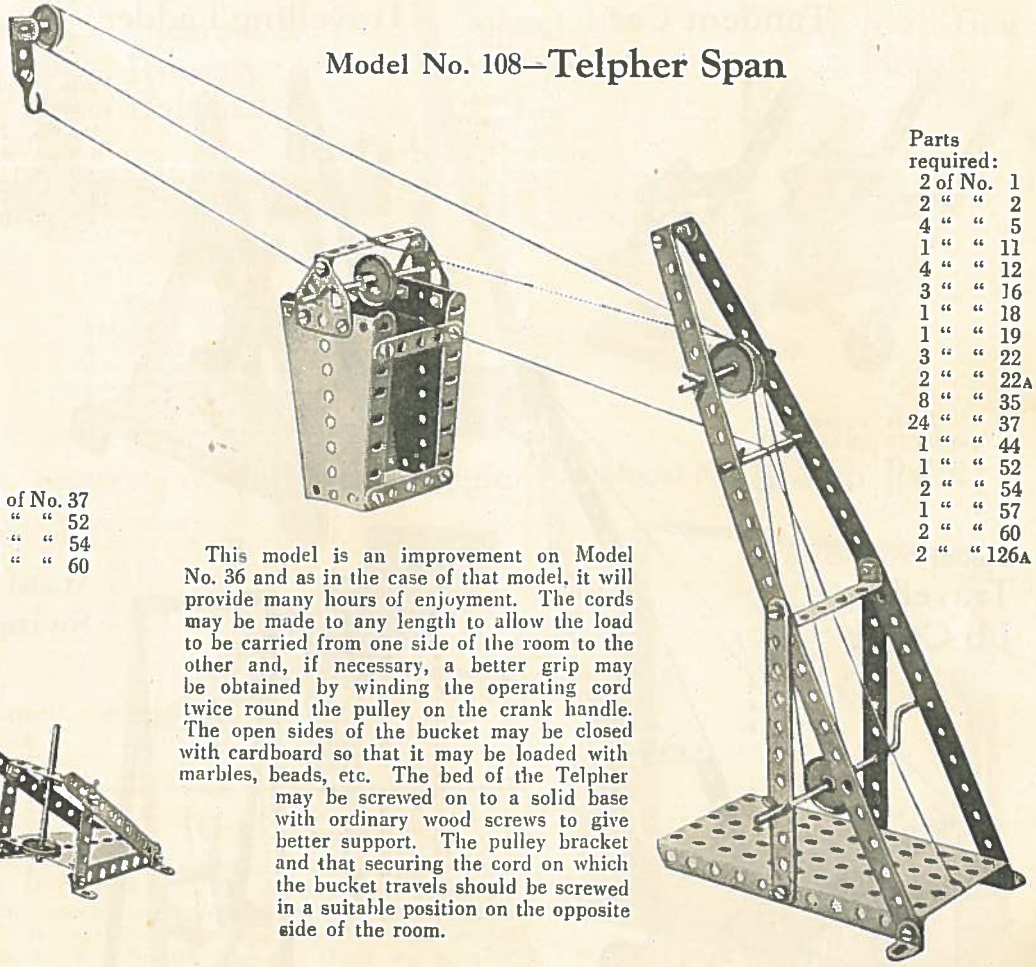
4 of No.	1
1 " "	2
6 " "	5
4 " "	12
12 " "	37
1 " "	52
3 " "	60

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		

Model No. 108—Telpher Span

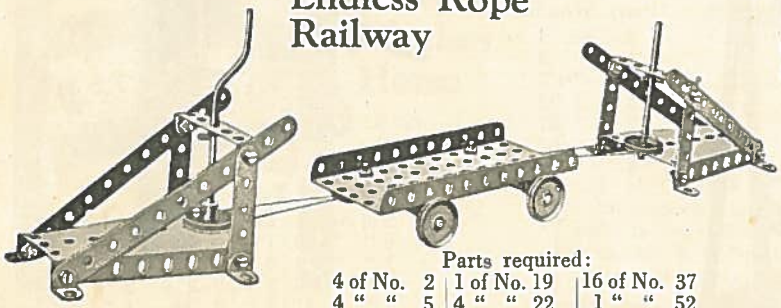


Parts required:

2 of No.	1
2 " "	2
4 " "	5
1 " "	11
4 " "	12
3 " "	16
1 " "	18
1 " "	19
3 " "	22
2 " "	22A
8 " "	35
24 " "	37
1 " "	44
1 " "	52
2 " "	54
1 " "	57
2 " "	60
2 " "	126A

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

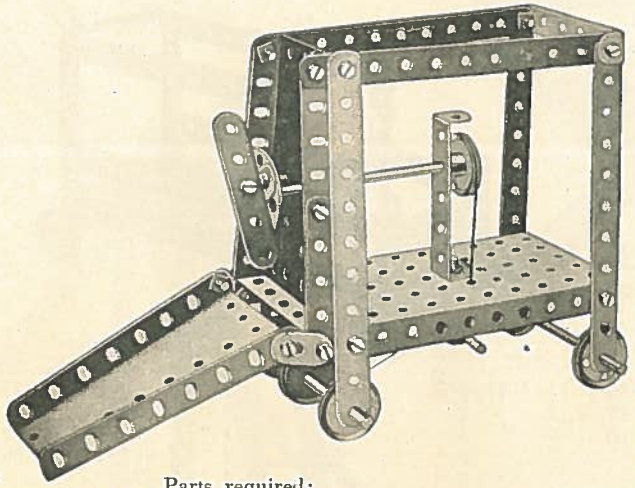
Model No. 109
Endless Rope Railway



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

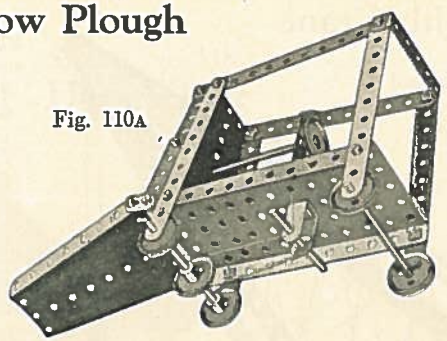
Model No. 110—Snow Plough



Parts required:

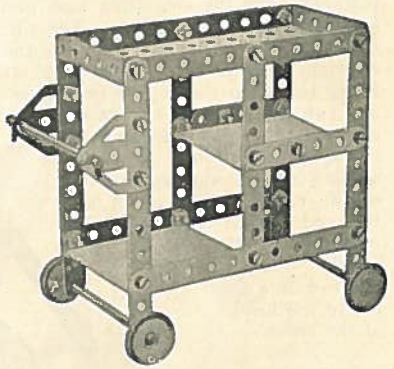
6 of No.	2	1 of No.	24
3 " "	5	4 " "	35
2 " "	10	19 " "	37
1 " "	12	1 " "	44
3 " "	16	1 " "	52
1 " "	17	2 " "	54
4 " "	22	2 " "	60
2 " "	22A		

Fig. 110A



The construction of the framework of this model presents no difficulty. The sector plate forming the plough is loosely pivoted on the bolts (1). The axle (2) is mounted in the front sector plate and the 2½" bent strip (3). A 2½" strip (4) is bolted by angle brackets to a bush wheel on the front of the axle and forms a dispersing propeller for the snow after it has risen up the inclined sector plate. A continuous cord (5) is passed around a 1" pulley (6) and round the short axle (7) and a 1" pulley on the propeller axle. In this way, as the plough is moved along the ground, the propeller is revolved.

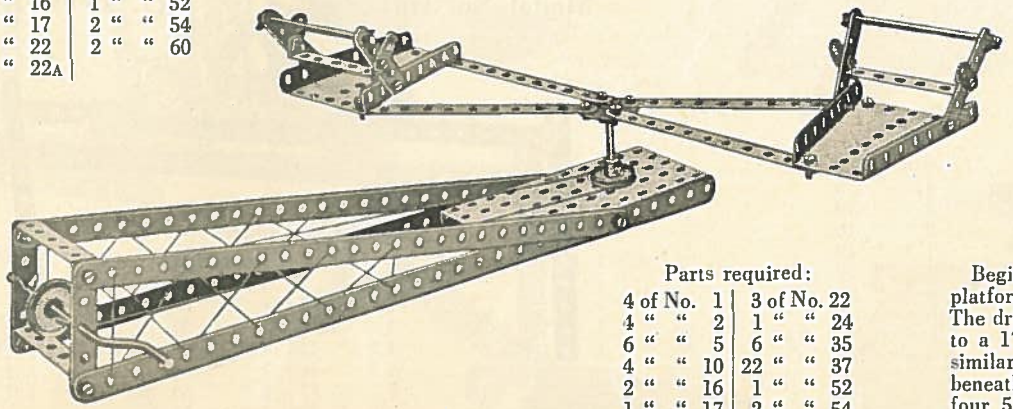
Model No. 111
Dinner Wagon



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 2½" bent strips and their inner edges on angle brackets.



Parts required:

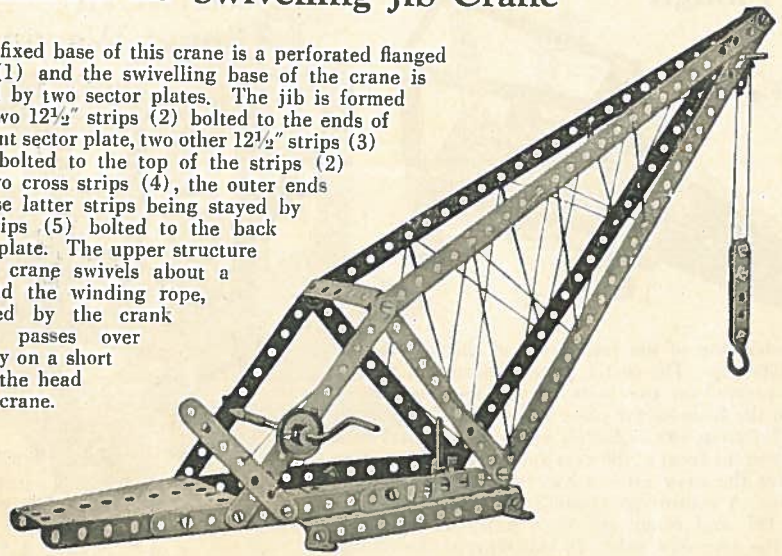
4 of No.	1	3 of No.	22
4 " "	2	1 " "	24
6 " "	5	6 " "	35
4 " "	10	22 " "	37
2 " "	16	1 " "	52
1 " "	17	2 " "	54
1 " "	19	4 " "	60

Model No. 112
Roundabout

Begin to build this model by making the platform from a flanged plate and 12½" 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 5½" strips and bolted to a bush wheel (1) fast on the spindle.

Model No. 113—Swivelling Jib Crane

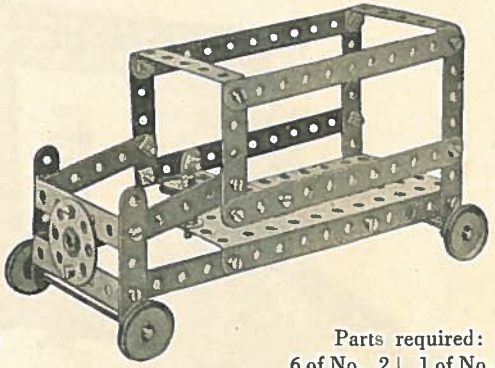
The fixed base of this crane is a perforated flanged plate (1) and the swivelling base of the crane is formed by two sector plates. The jib is formed from two 12½" strips (2) bolted to the ends of the front sector plate, two other 12½" strips (3) being bolted to the top of the strips (2) and two cross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

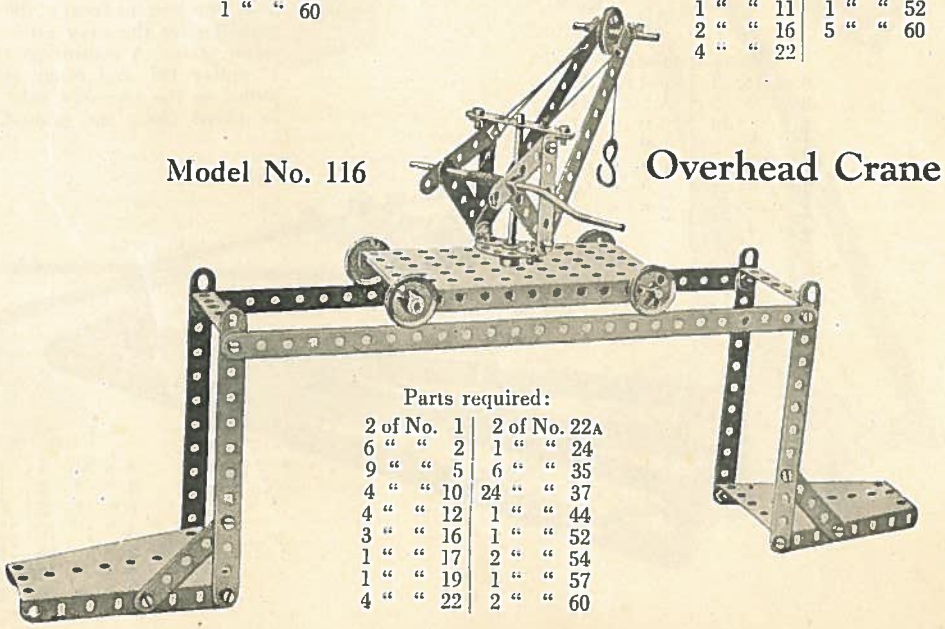
6	of No.	2	1	of No.	22A
1	" "	3	1	" "	24
9	" "	5	26	" "	37
1	" "	11	1	" "	52
2	" "	16	5	" "	60
4	" "	22			

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

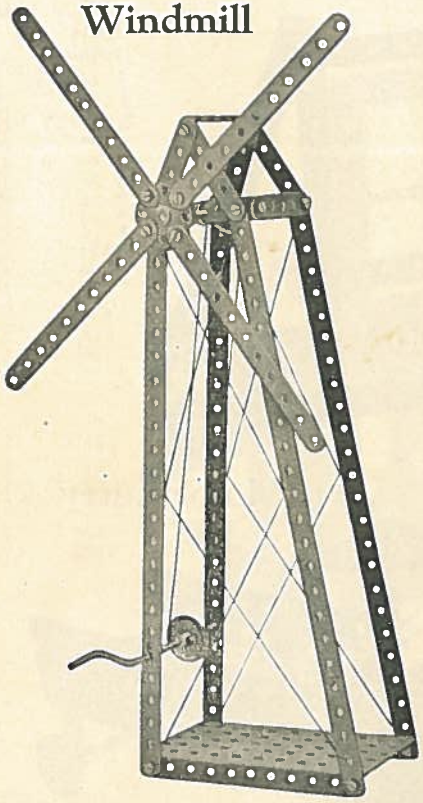
Model No. 116 Overhead Crane



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

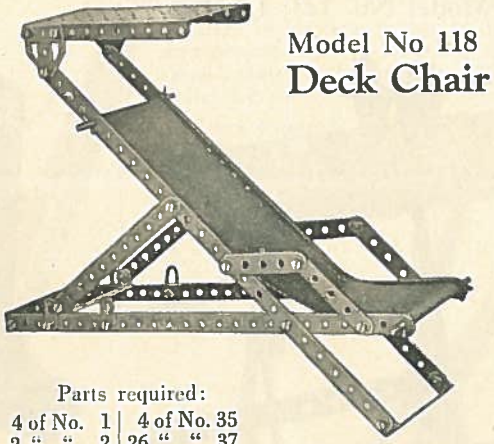
Model No 117
Windmill



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

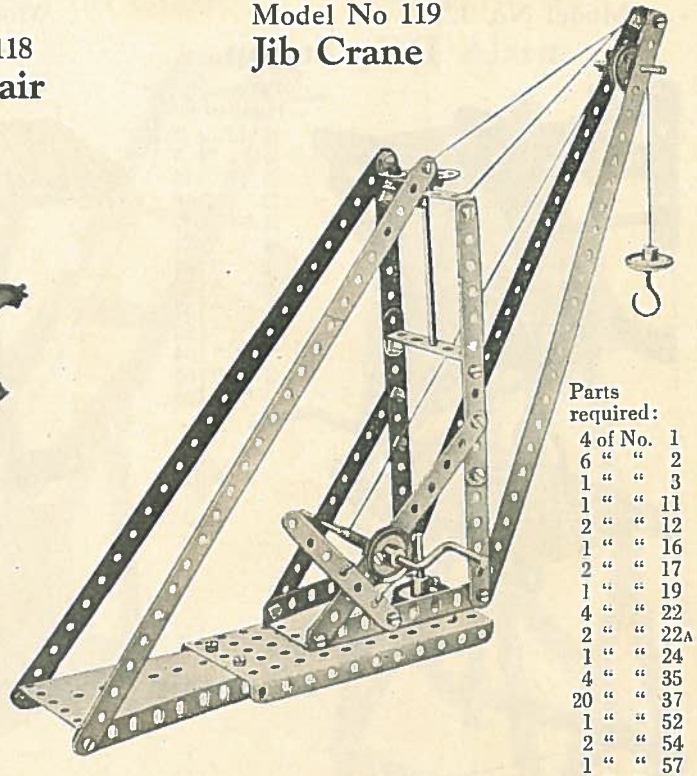
Model No 118
Deck Chair



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

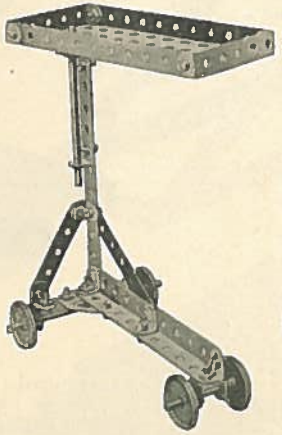
Model No 119
Jib Crane



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

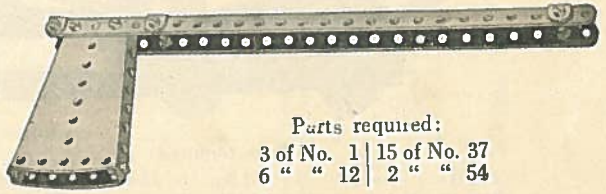
Model No 120—Bed Table



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

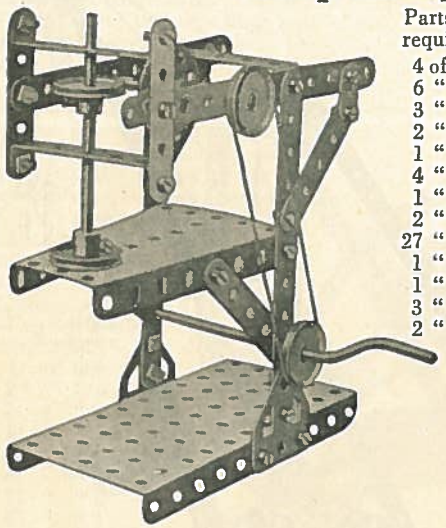
Model No. 121—Hatchet



Parts required:

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

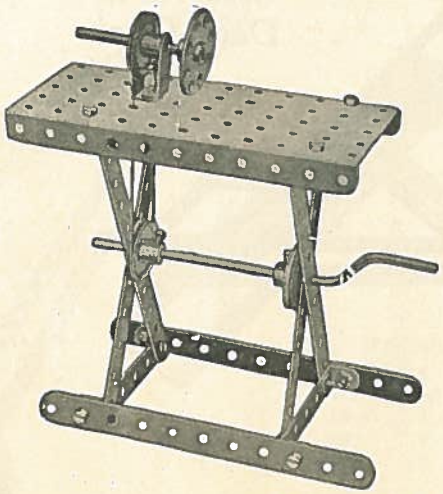
Model No. 122
Drop Stamp



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

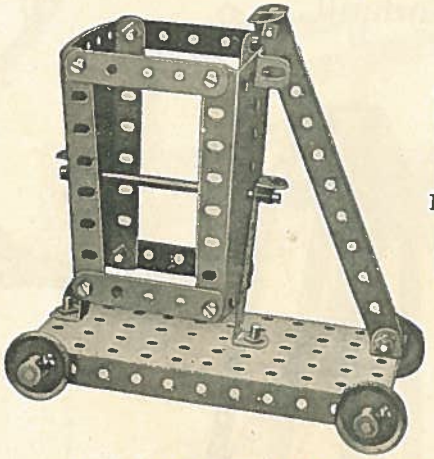
Model No. 123–Lathe



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

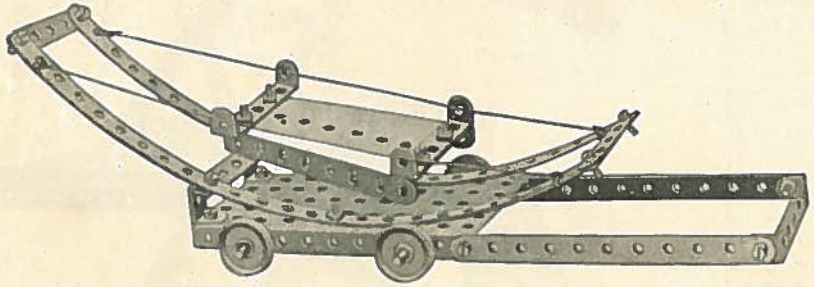
Model No. 124–Tip Wagon



Parts required:

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

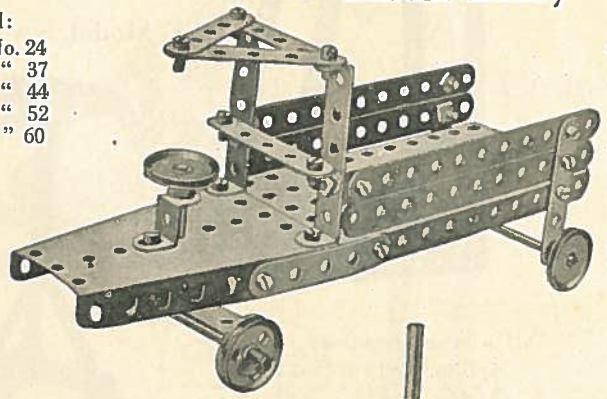
Model No 125
Mountain Transport



Parts required:

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

Model No. 126 Motor Lurry



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

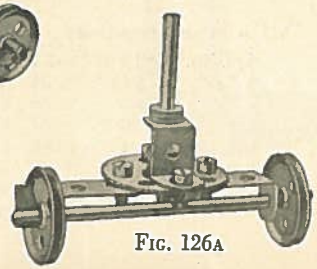
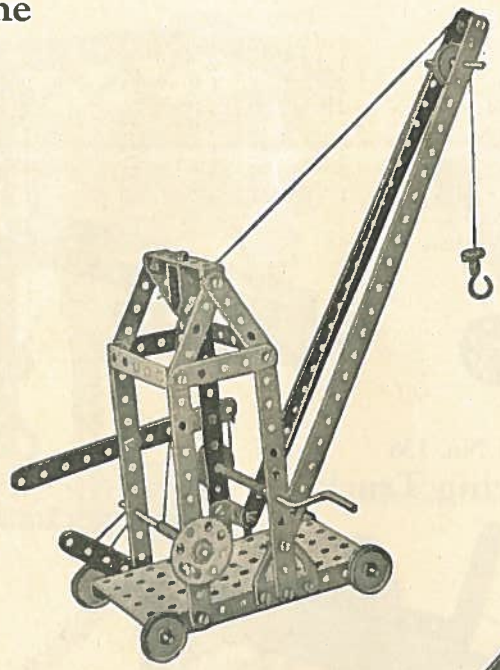


FIG. 126A

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

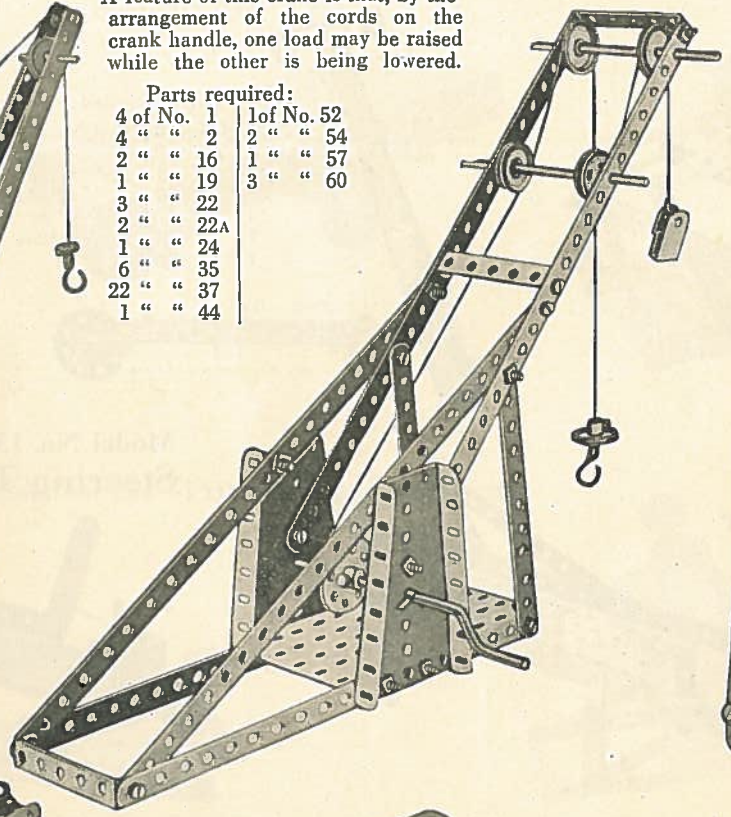


Model No. 128—Double Action Crane

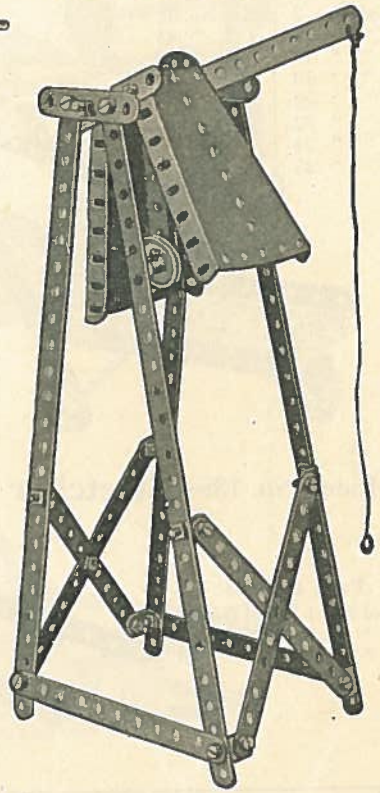
A feature of this crane is that, by the arrangement of the cords on the crank handle, one load may be raised while the other is being lowered.

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				



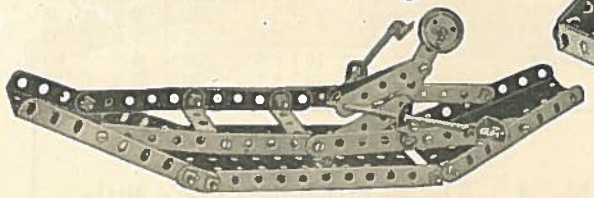
Model No. 129
Fire Alarm



Parts required:

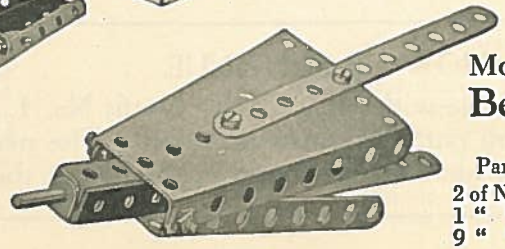
4	of No.	1		1	of No.	22	
7	"	"	2	1	"	"	24
1	"	"	3	4	"	"	35
3	"	"	5	27	"	"	37
8	"	"	12	2	"	"	54
1	"	"	16				

Model No. 130—Rowing Boat



Parts required:

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



Model No. 131
Bellows

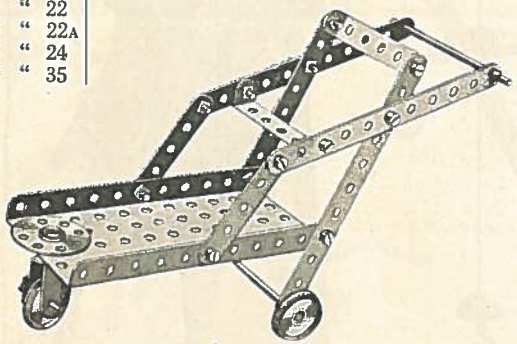
Parts required:

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

Model No. 132—Invalid Chair

Parts required:

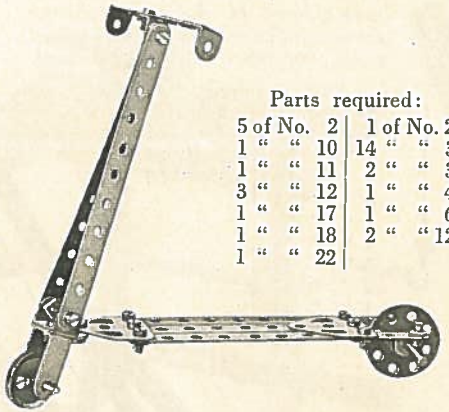
4	No. 2	13	No. 37
2	" " 5	1	" " 44
2	" " 16	1	" " 52
1	" " 18	2	" " 60
2	" " 22		
1	" " 22A		
1	" " 24		
4	" " 35		



Model No. 133—Foot Cycle

Parts required:

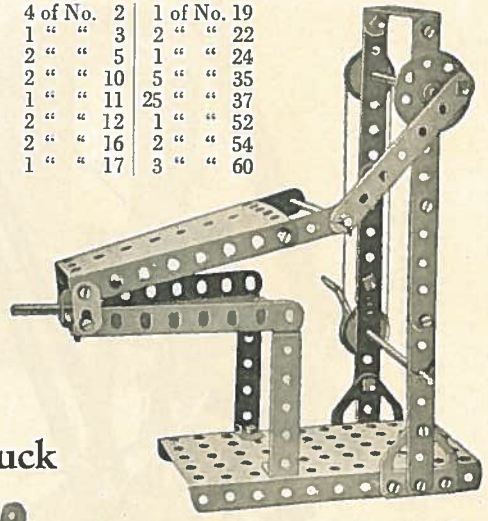
5	No. 2	1	No. 24
1	" " 10	14	" " 37
1	" " 11	2	" " 38
3	" " 12	1	" " 44
1	" " 17	1	" " 60
1	" " 18	2	" " 126A
1	" " 22		



Model No. 134—Forge Bellows

Parts required:

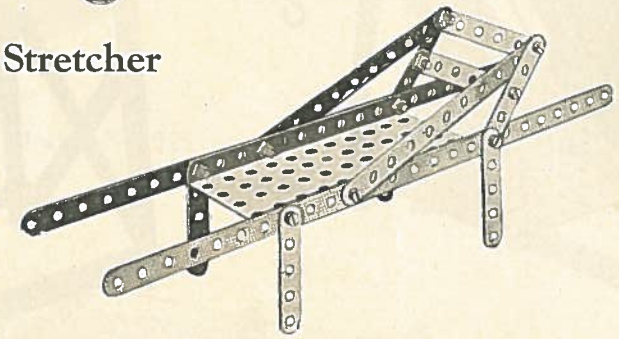
4	No. 2	1	No. 19
1	" " 3	2	" " 22
2	" " 5	1	" " 24
2	" " 10	5	" " 35
1	" " 11	25	" " 37
2	" " 12	1	" " 52
2	" " 16	2	" " 54
1	" " 17	3	" " 60



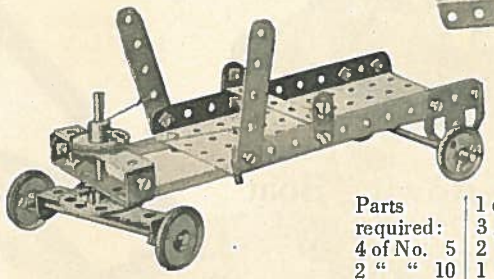
Model No. 135—Stretcher

Parts required:

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



Model No. 136
Steering Truck



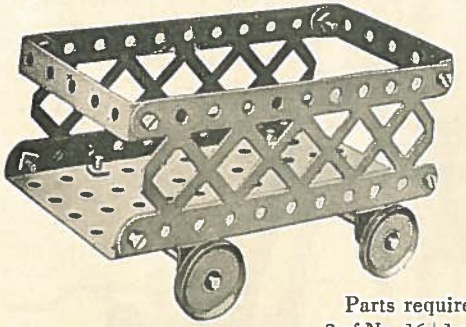
Parts required:

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

HOW TO CONTINUE

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

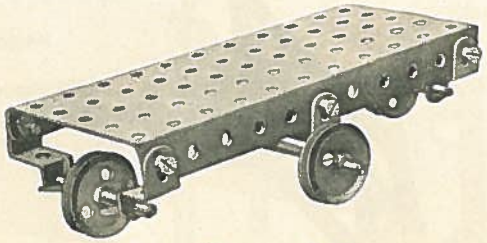
Model No. 201
Truck



Parts required:

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

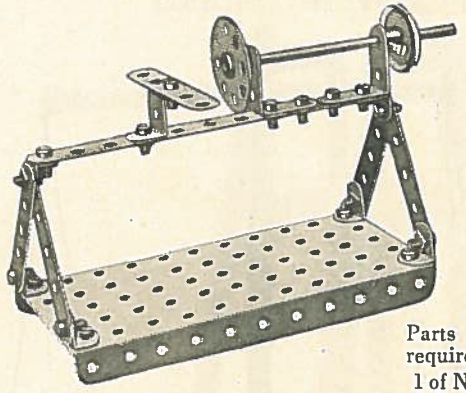
Model No. 202
Revolving Truck



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

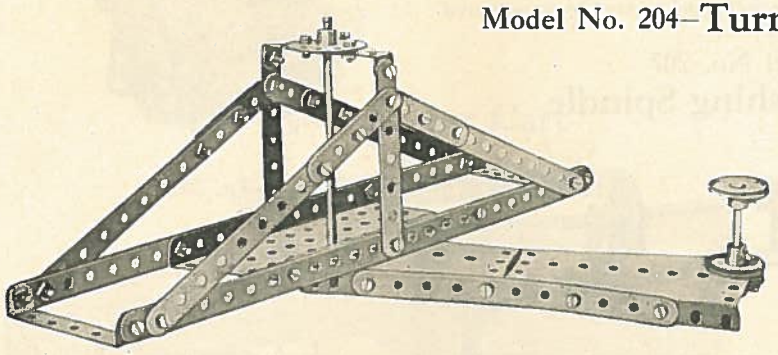
Model No. 203—Lathe



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

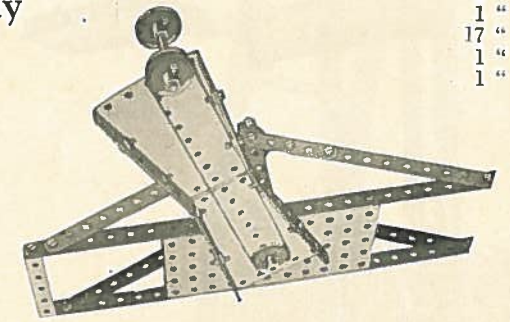
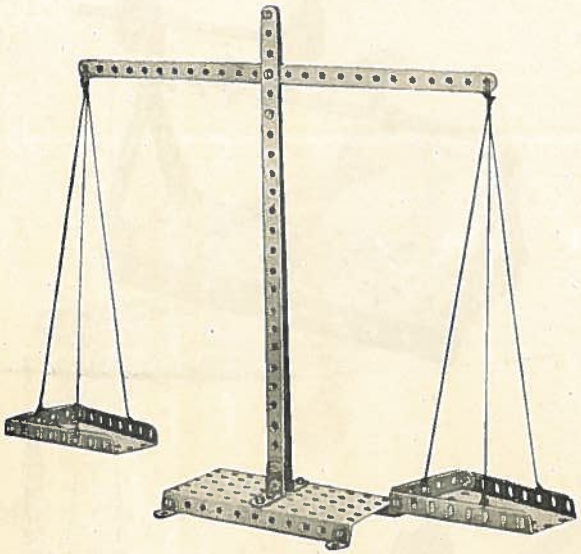


FIG. 204A
(underneath view)

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.

Model No. 205—Scales

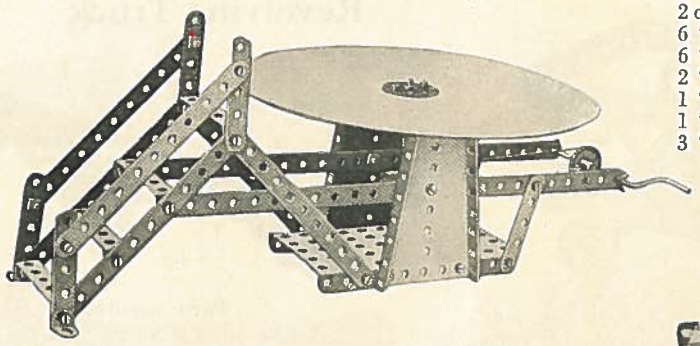


Parts required:

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 inserting 2 washers in 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



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

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.

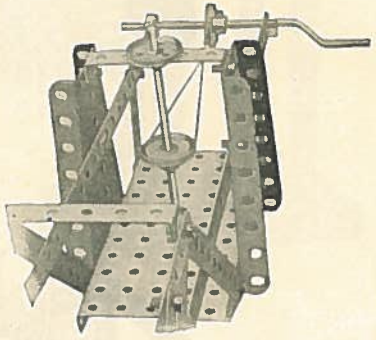
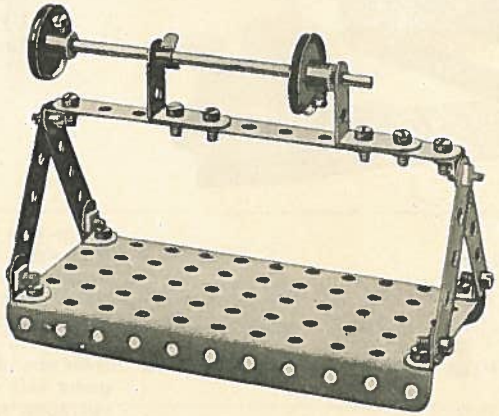


FIG. 206A

Model No. 207
Polishing Spindle

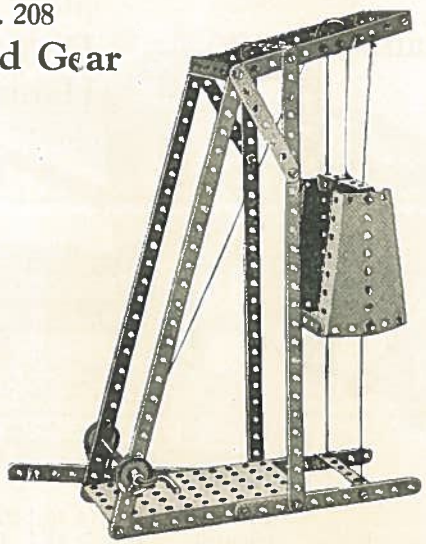


Parts required:

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

Model No. 208

Pit Head Gear

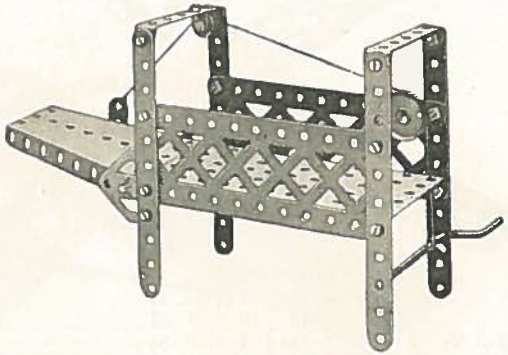


Parts required:

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

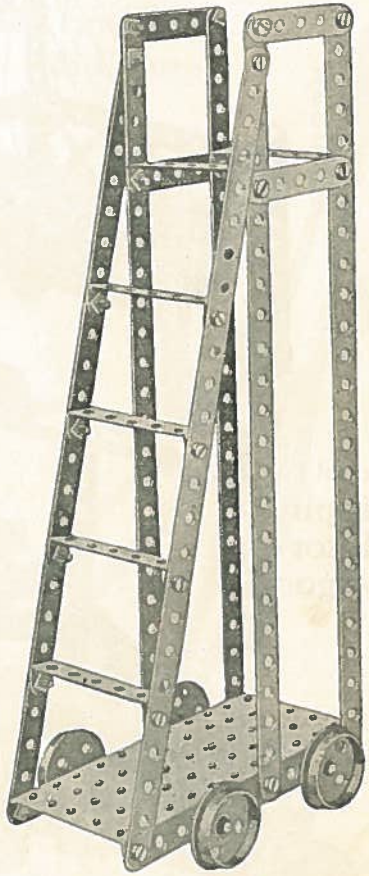


Parts required:

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. 210

Ladder on Wheels

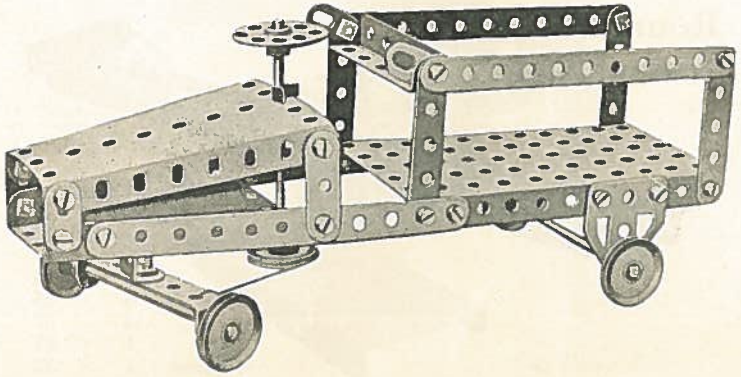


Parts required:

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

Model No. 211—

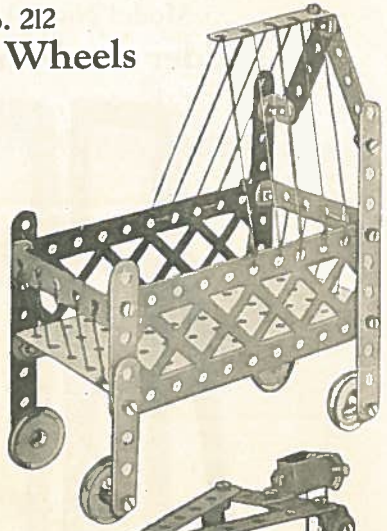
Motor Cart



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

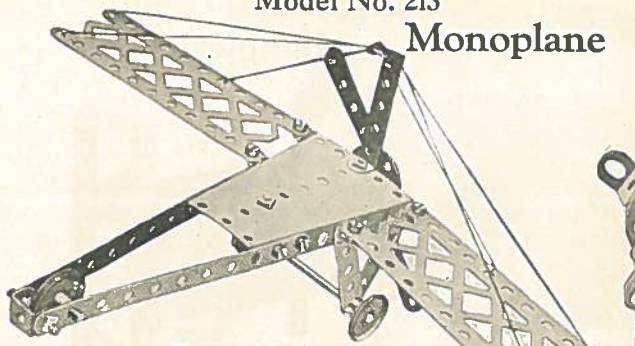
Model No. 212
Cot on Wheels



Parts required

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

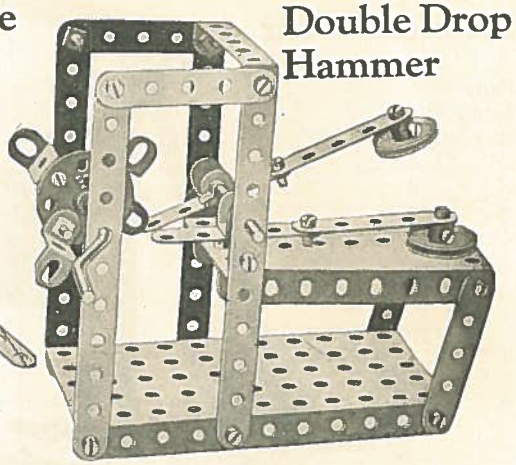
Model No. 213
Monoplane



Parts required:

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

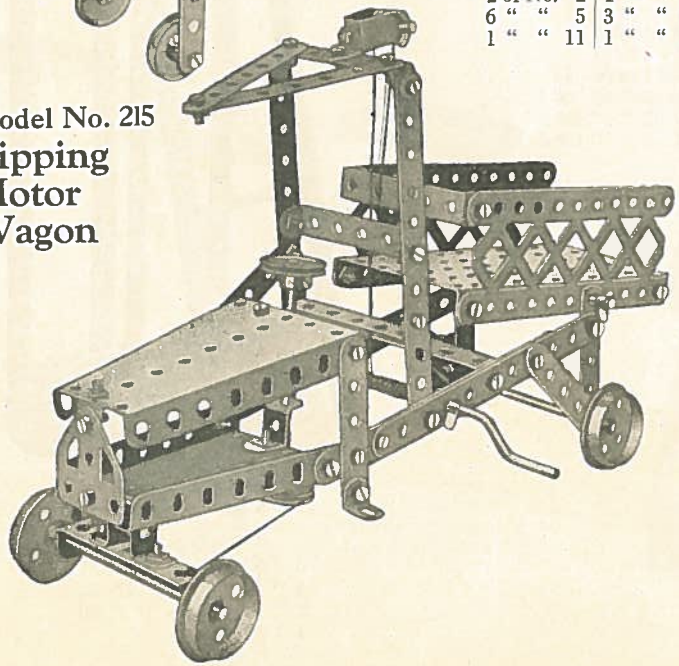
Model No. 214
Double Drop Hammer



Parts required:

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

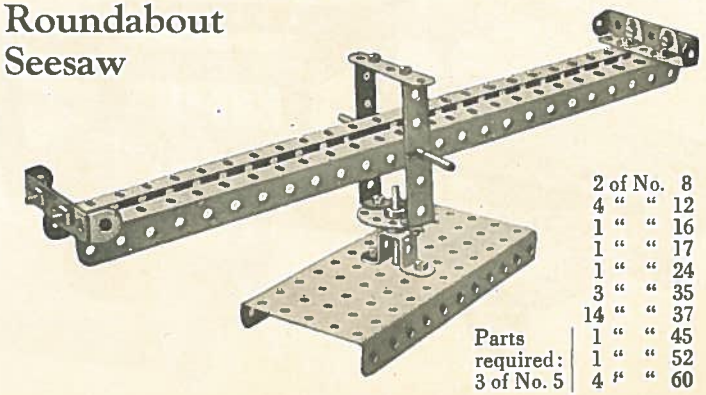
Model No. 215
Tipping Motor Wagon



Parts required:

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

Model No. 216
Roundabout Seesaw

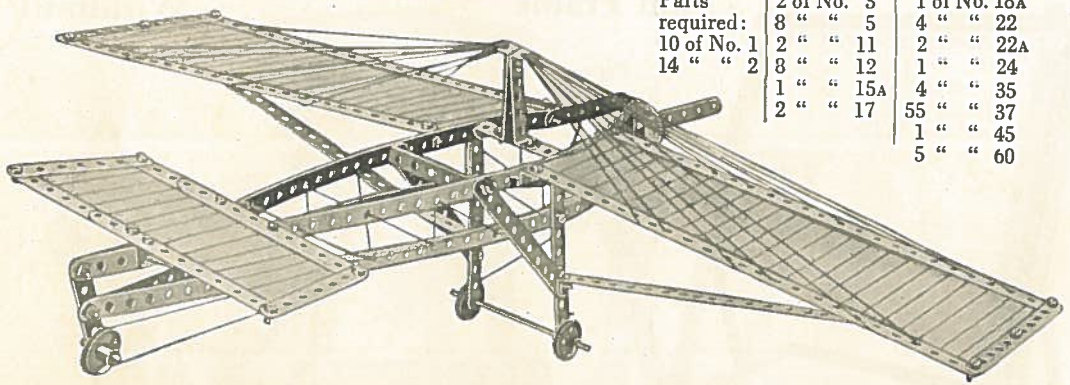


Parts required:

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

3 of No. 5

Model No. 217—Monoplane



Parts required:

2 of No.	3	1 of No.	18A
8 " "	5	4 " "	22
10 of No.	1	2 " "	22A
2 " "	11	1 " "	24
14 " "	2	8 " "	12
4 " "	35	1 " "	15A
55 " "	37	2 " "	17
1 " "	45		
5 " "	60		

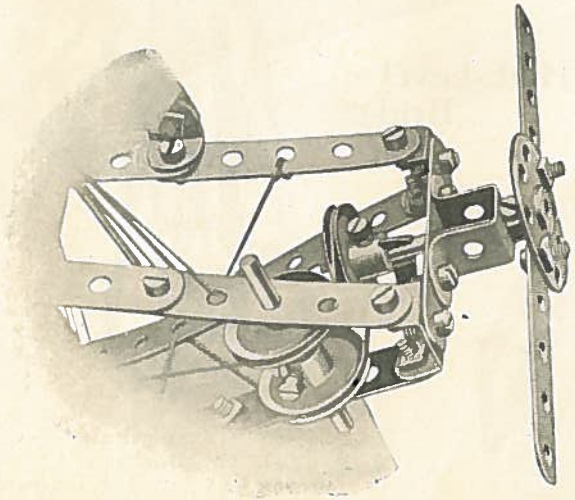
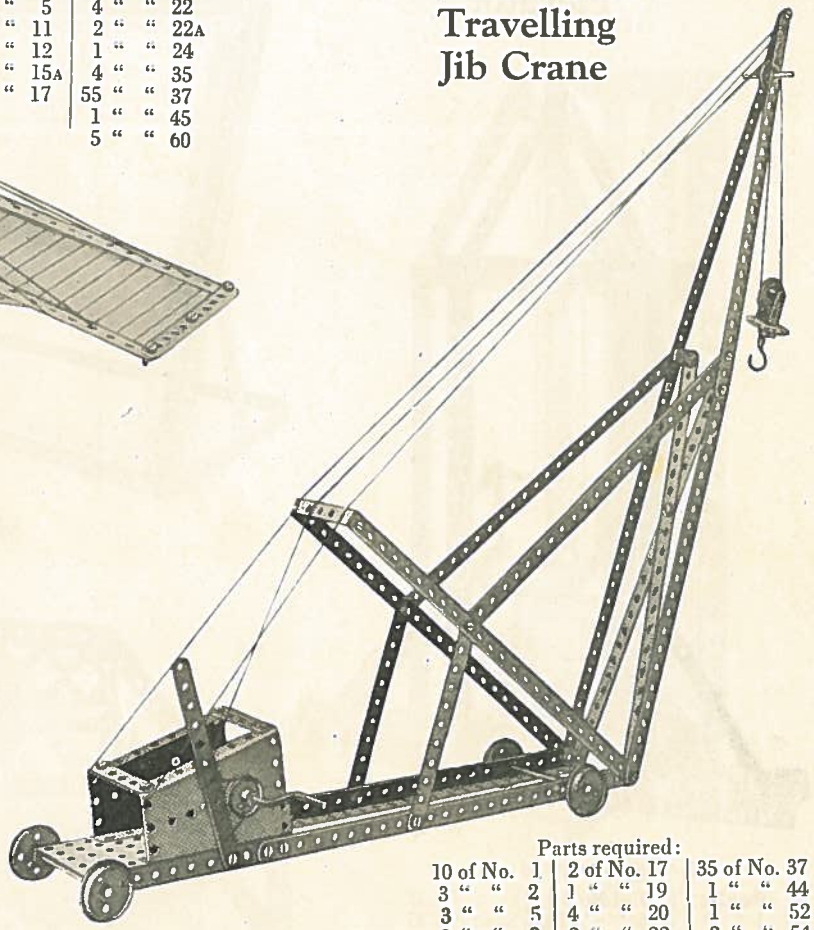


FIG. 217A

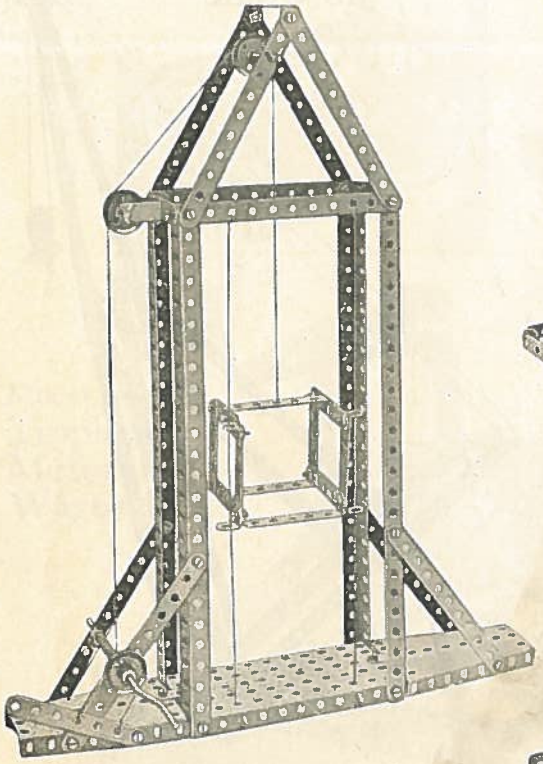
Model No. 218 Travelling Jib Crane



Parts required:

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

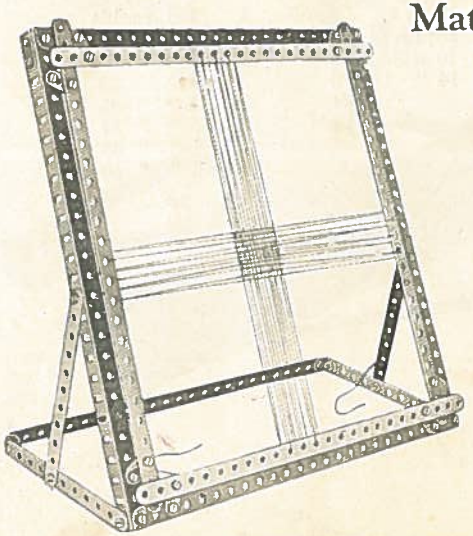
Model No. 219
Elevator



Parts required:

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

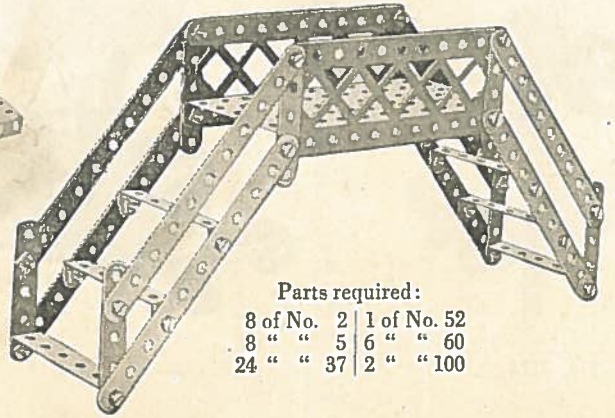
Model No. 220
Mat Frame



Parts required:

5 of No.	1
4 " "	2
4 " "	8
3 " "	10
2 " "	12
2 " "	12A
36 " "	37

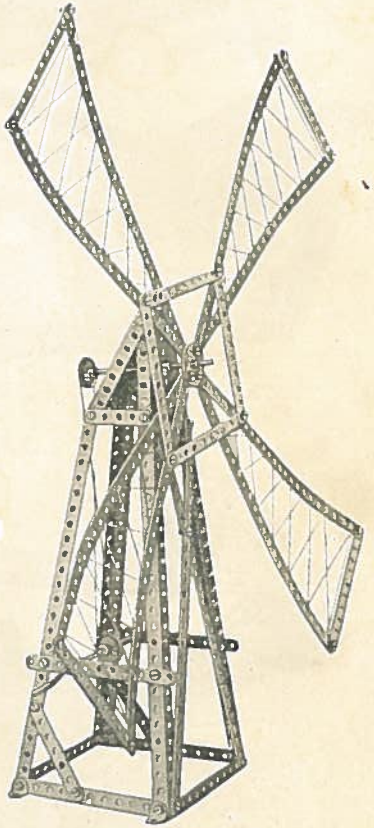
Model No. 222—High-Level Bridge



Parts required:

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

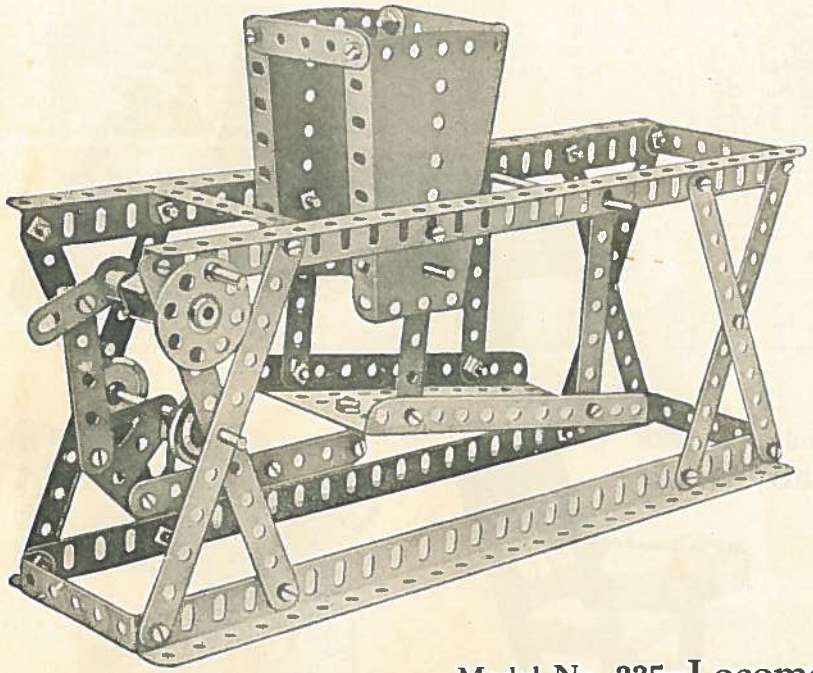
Model No. 221
Windmill



Parts required:

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

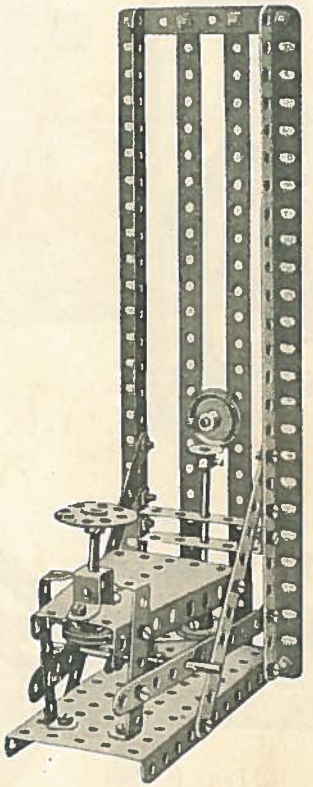
Model No. 223—Coal Sifter



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

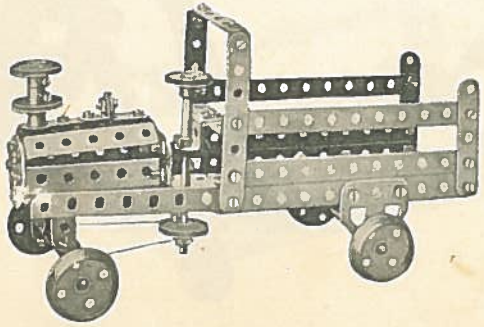
Model No. 224 Try-your-strength Machine



Parts required

2	of No.	1	1	of No.	17	12	of No.	38
5	" "	2	1	" "	18A	1	" "	45
2	" "	3	4	" "	22	1	" "	52
2	" "	8	1	" "	24	1	" "	54
1	" "	11	4	" "	35	4	" "	60
2	" "	16	30	" "	37	1	" "	126A

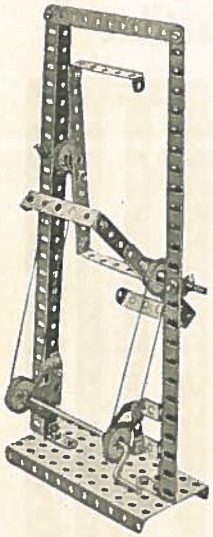
Model No. 225—Locomotive



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. 226—Candy Puller



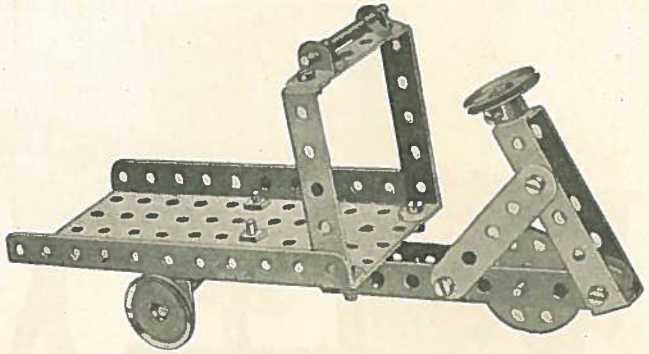
Parts required:

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

Model No. 227—Carrier Tricycle

Parts required:

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



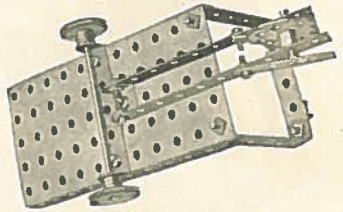
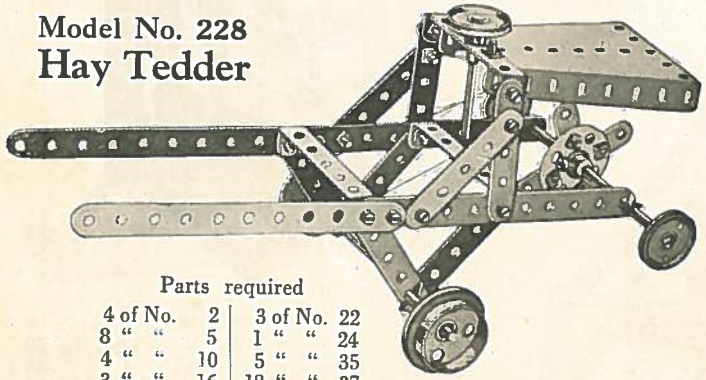


FIG. 227A

Carrier Tricycle, underneath view

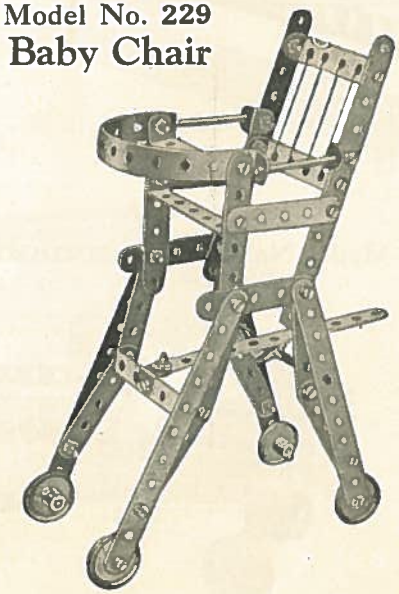
Model No. 228 Hay Tedder



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

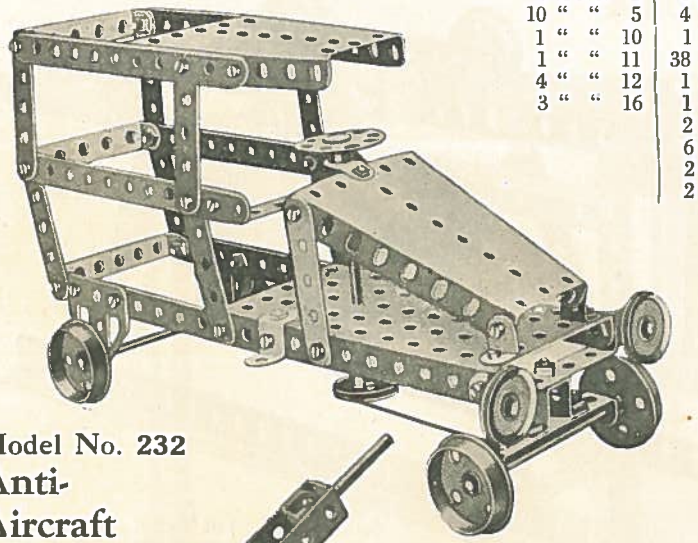
Model No. 229 Baby Chair



Parts required:

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

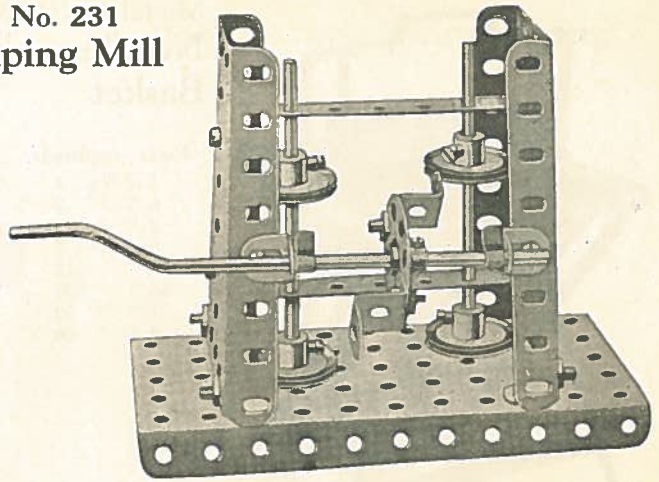
Model No. 230—Motor Van



Parts required:

6 of No.	2	4 of No.	20
10 " "	5	4 " "	22
1 " "	10	1 " "	24
1 " "	11	38 " "	37
4 " "	12	1 " "	44
3 " "	16	1 " "	52
		2 " "	54
		6 " "	60
		2 " "	125
		2 " "	126A

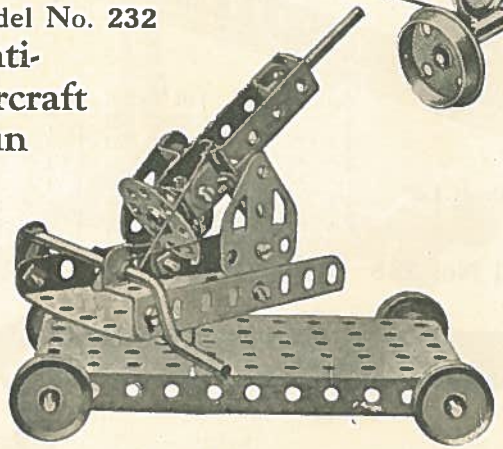
Model No. 231
Stamping Mill



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		

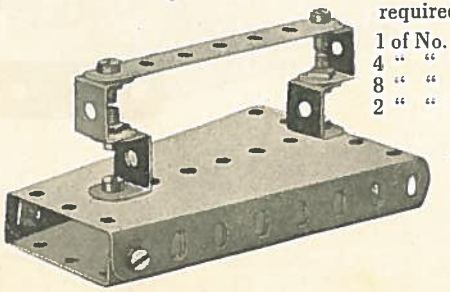
Model No. 232
Anti-Aircraft Gun



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		

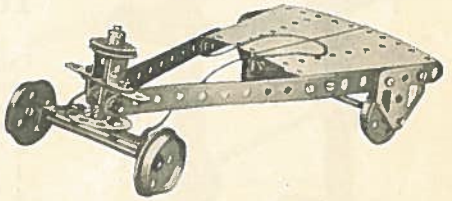
Model No. 233
Smoothing Iron



Parts required:

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

Model No. 234
Coaster



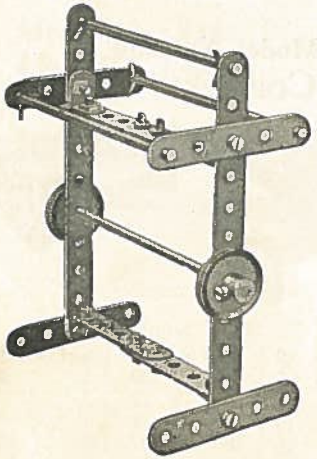
Parts required:

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

Model No. 235
Needlework Basket

Parts required:

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

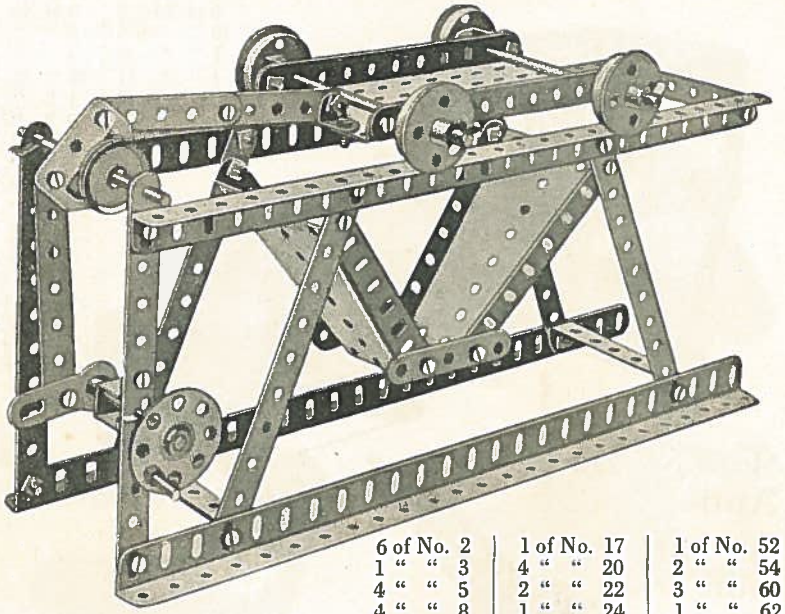


Model No. 237
Towel Rail

Parts required

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

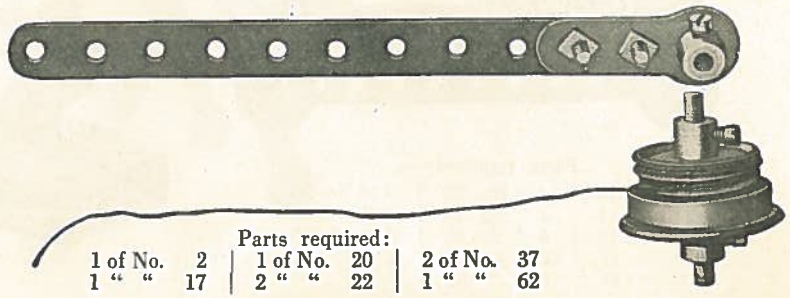
Model No. 236—Sifter



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

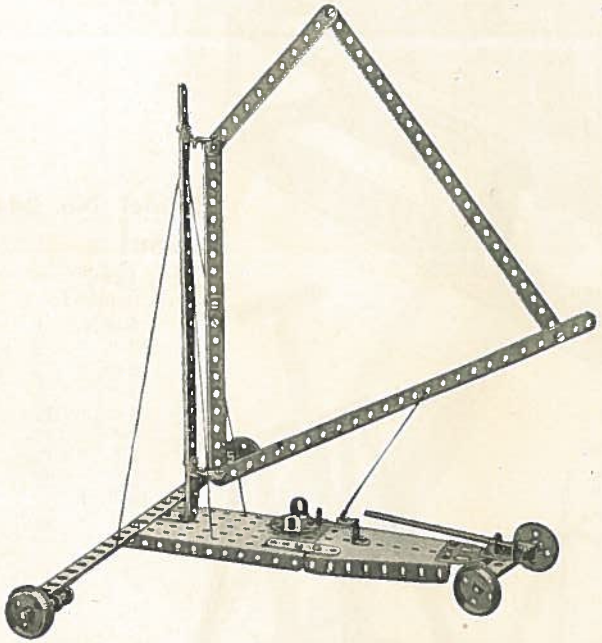
Model No. 238—Spinning Top



Parts required:

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

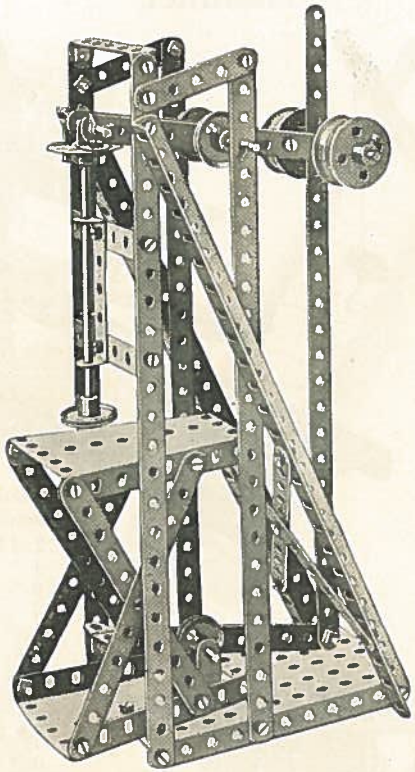
Model No. 239—Seashore Aeroplage



Parts required:

4	of No. 1	1	of No. 12A	33	of No. 37
3	" " 2	1	" " 15	1	" " 33
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

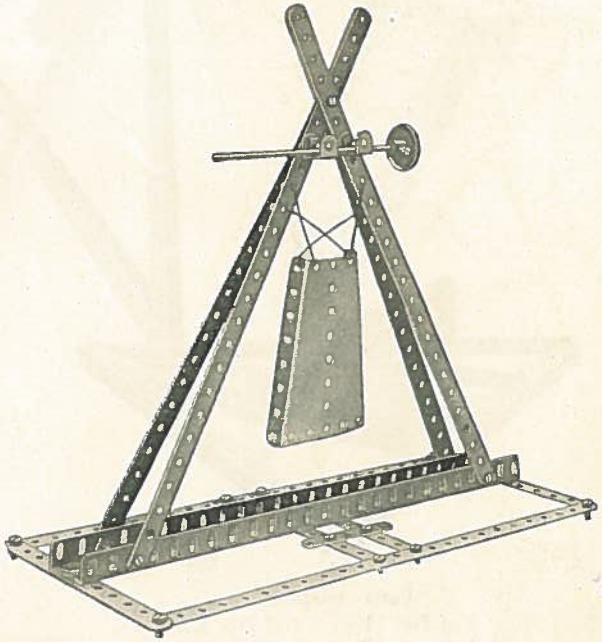
Model No. 240 Embossing Machine



Parts required:

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

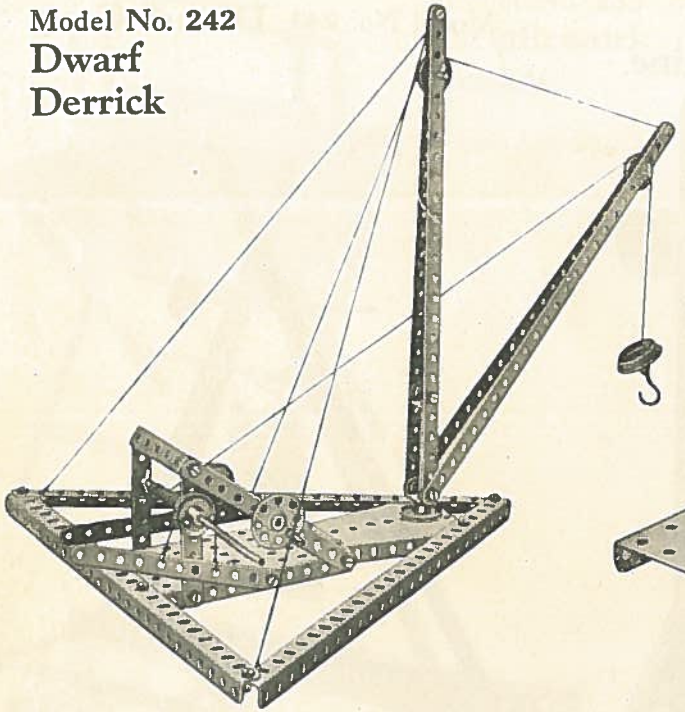
Model No. 241—Dinner Gong



Parts required:

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

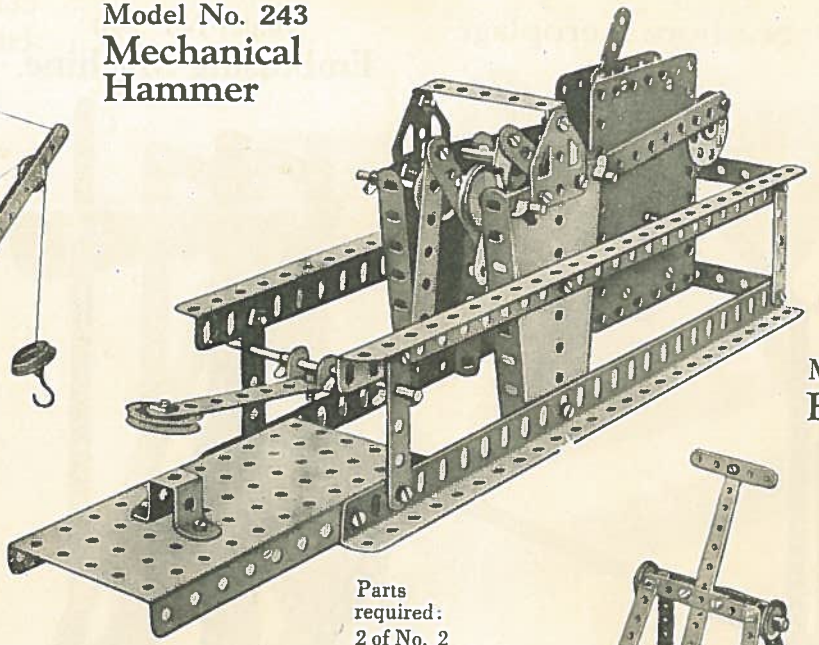
Model No. 242
Dwarf Derrick



Parts required:

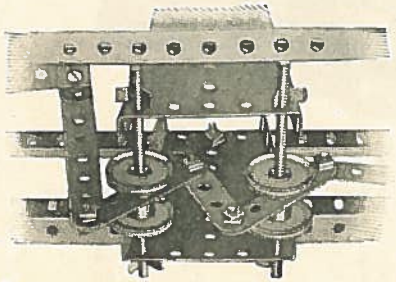
4	of	No. 1	2	of	No. 22A
4	"	" 2	1	"	" 24
2	"	" 3	6	"	" 35
3	"	" 8	23	"	" 37
2	"	" 11	4	"	" 33
2	"	" 16	1	"	" 52
2	"	" 18A	1	"	" 54
1	"	" 19	1	"	" 57
1	"	" 20	1	"	" 60
4	"	" 22	1	"	" 115

Model No. 243
Mechanical Hammer



Parts required:

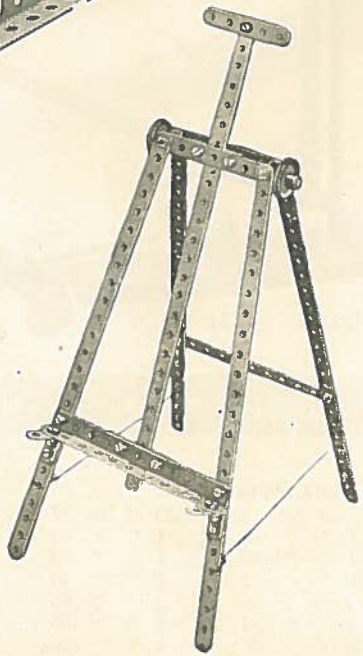
2	of No.	2
1	"	" 3
6	"	" 5
4	"	" 8
1	"	" 11
1	"	" 12
3	"	" 16
4	"	" 22
1	"	" 22A
1	"	" 24
8	"	" 35
32	"	" 37
1	"	" 45
1	"	" 52
2	"	" 54
3	"	" 60
2	"	"126A



Clockwork Motor

FIG. 243A

Model No. 244
Easel



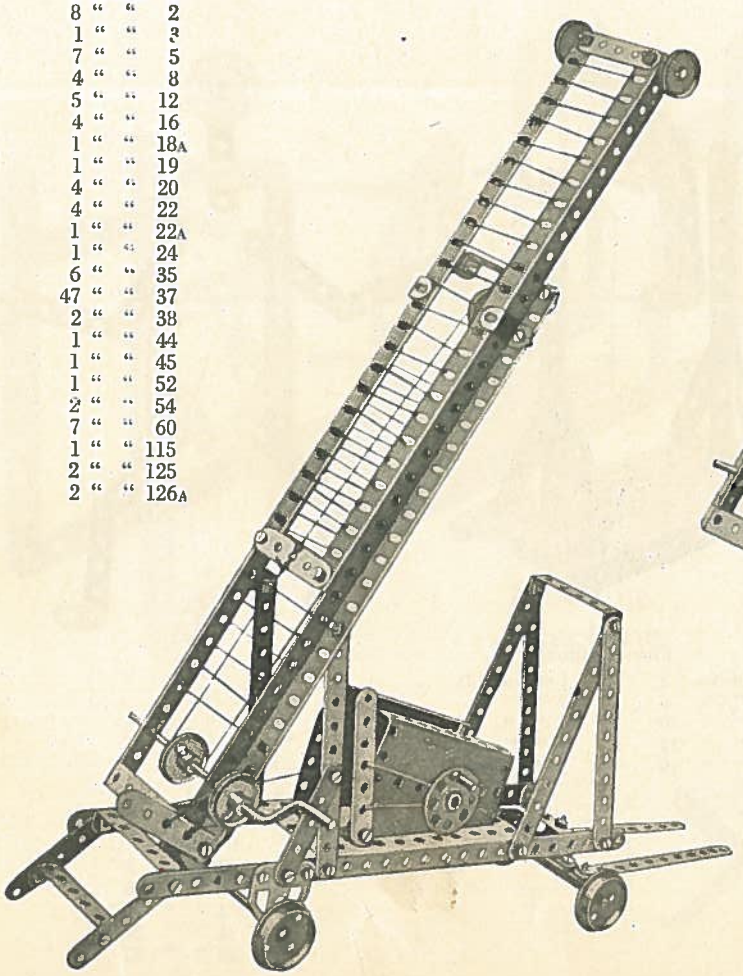
Parts required:

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

Model No. 245—Extending Ladder on Running Carriage

Parts required:

2	of No.	1
8	" "	2
1	" "	3
7	" "	5
4	" "	8
5	" "	12
4	" "	16
1	" "	18A
1	" "	19
4	" "	20
4	" "	22
1	" "	22A
1	" "	24
6	" "	35
47	" "	37
2	" "	38
1	" "	44
1	" "	45
1	" "	52
2	" "	54
7	" "	60
1	" "	115
2	" "	125
2	" "	126A



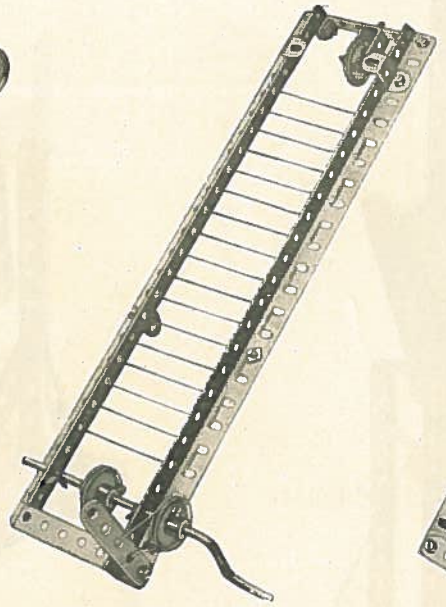


Fig. 245A

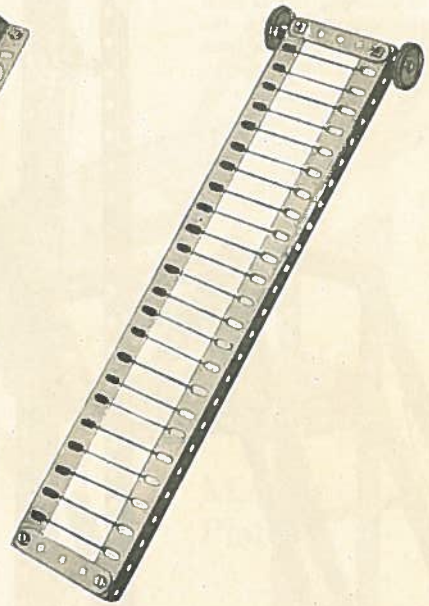
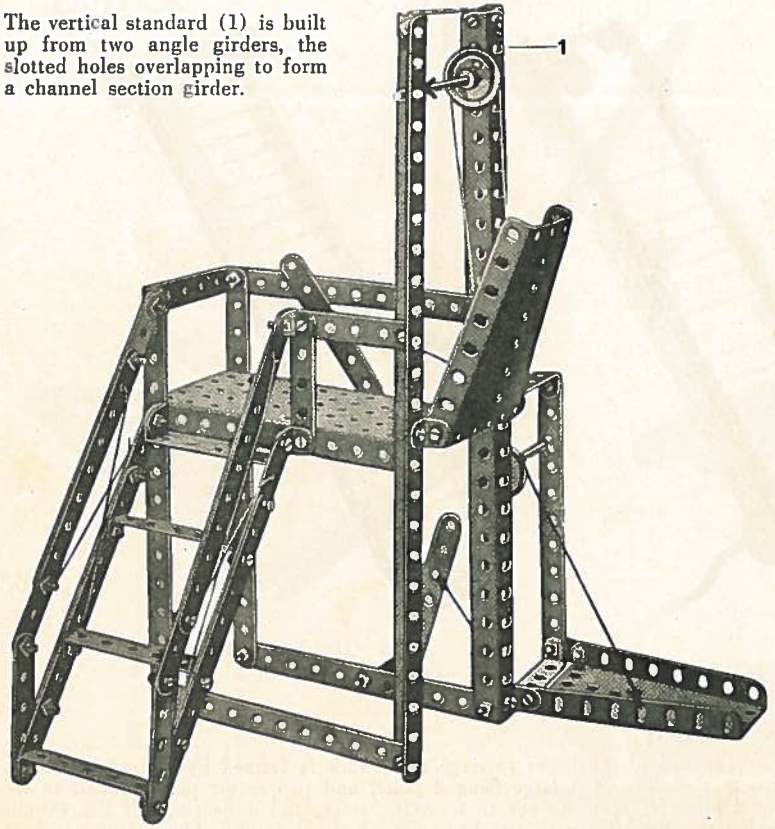


Fig. 245B

The bed of the lower carriage framework is formed by bolting two 12½" strips to the sides of a large flanged plate, and two sector plates bolted to the flanged plate by their flanges to form the sides, and a bearing for the spindle carrying the operating cord attached to the bottom of the ladder to raise it from a horizontal position, and the strips (1) form a support for the ladder when in this horizontal position. Angle brackets (2), Fig. 245A, form pivots for the lower part of the ladder, and are carried from the supports (3). The upper part of the ladder, Fig. 245, is 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. 246
Ferry Gangway

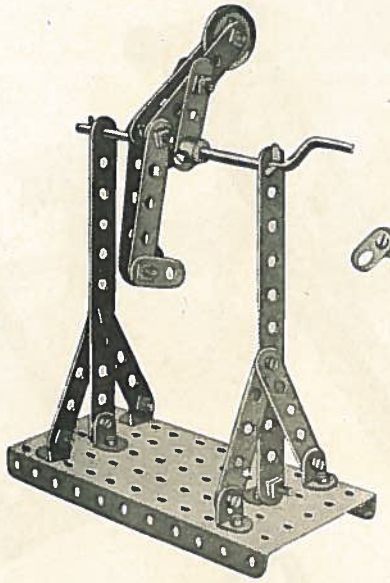
The vertical standard (1) is built up from two angle girders, the slotted holes overlapping to form a channel section girder.



Parts required:

14 of No.	2	6 of No.	12	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		

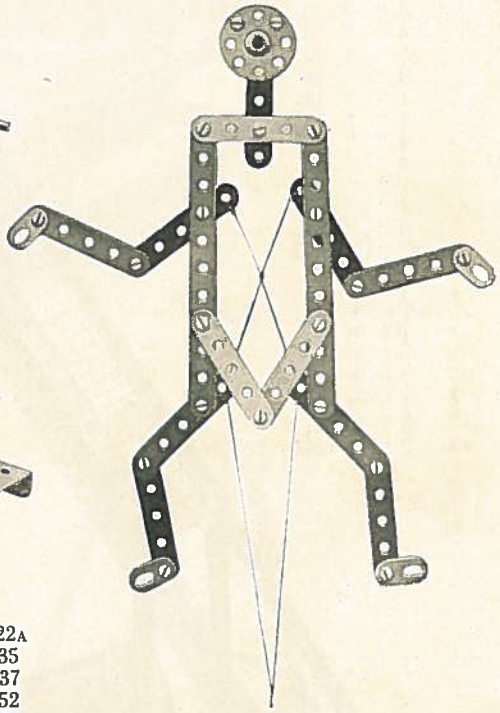
Model No. 247
The Acrobat



Parts required:

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

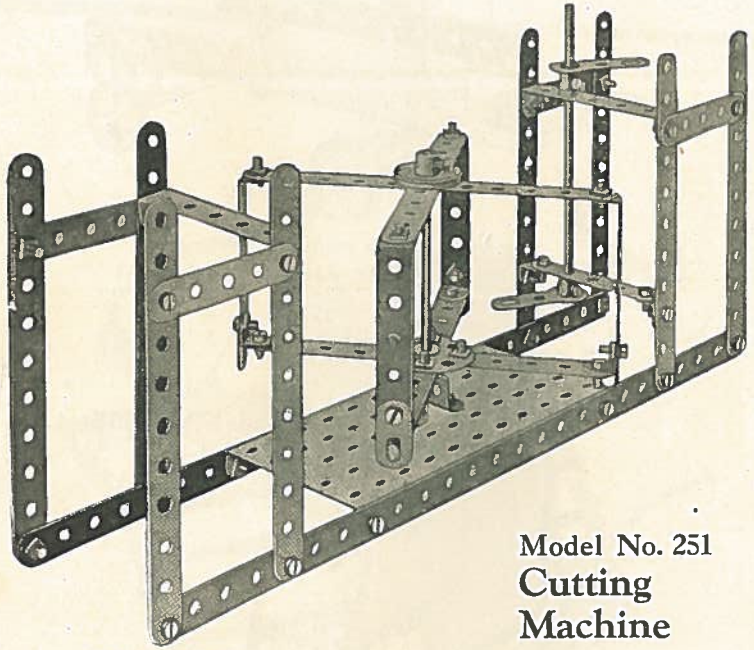
Model No. 248
Jumping Jack



Parts required:

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

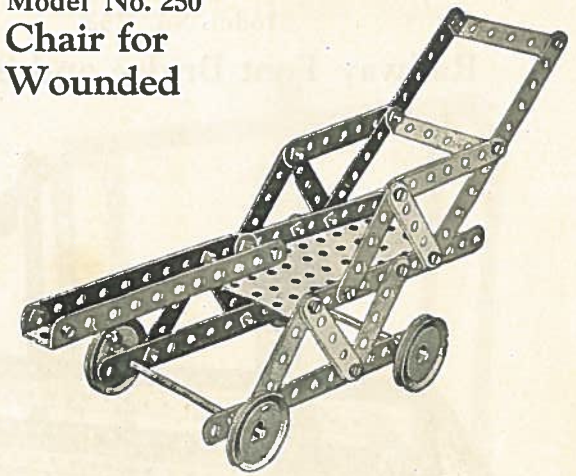
Model No. 249—Turnstile



Parts required:

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

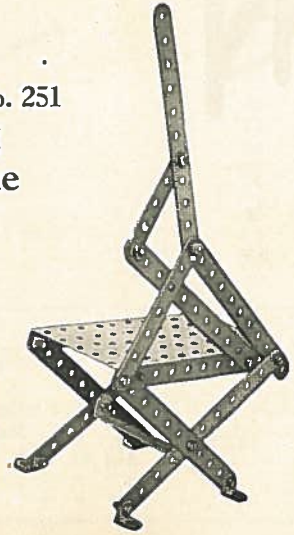
Model No. 250 Chair for Wounded



Parts required:

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

Model No. 251 Cutting Machine



Parts required

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

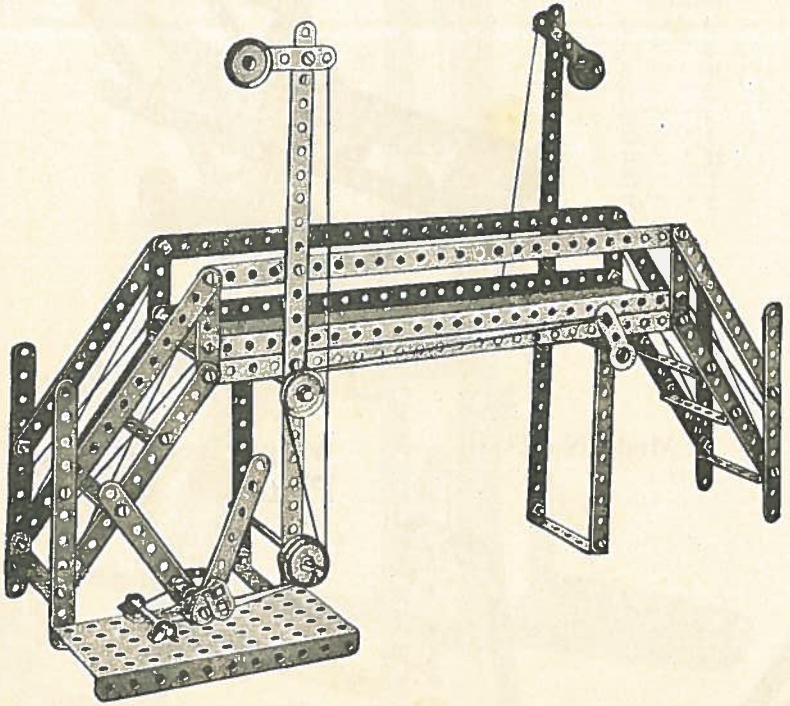
Model No. 252 Magic Sector Plates

Parts required:

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

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

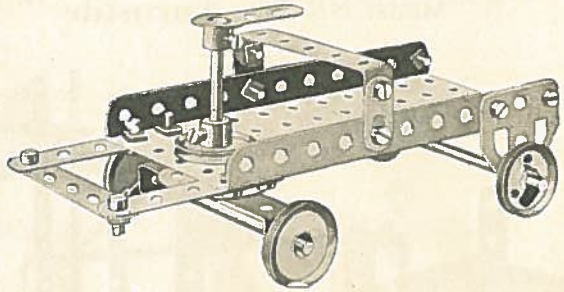
Model No. 253
Railway Foot Bridge and Signals



Parts required:

4 of No. 1	1 of No. 11	2 of No. 22A
14 " " 2	2 " " 12	6 " " 35
2 " " 3	1 " " 15A	50 " " 37
8 " " 5	2 " " 16	1 " " 52
2 " " 8	1 " " 17	8 " " 60
2 " " 10	3 " " 22	

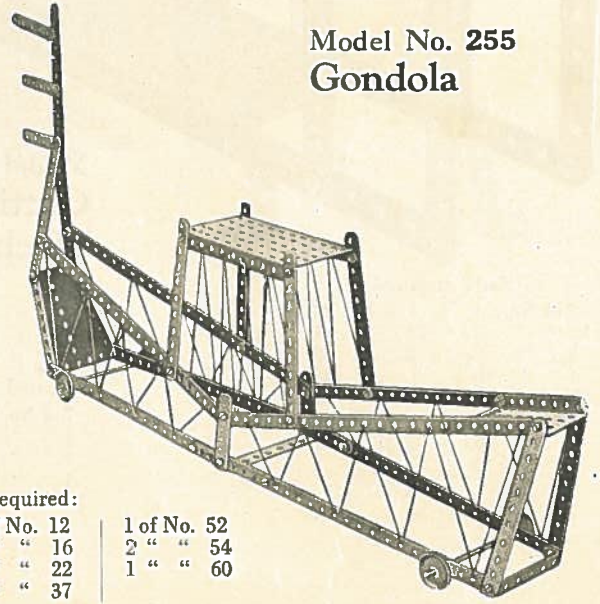
Model No. 254—Motor Van



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	

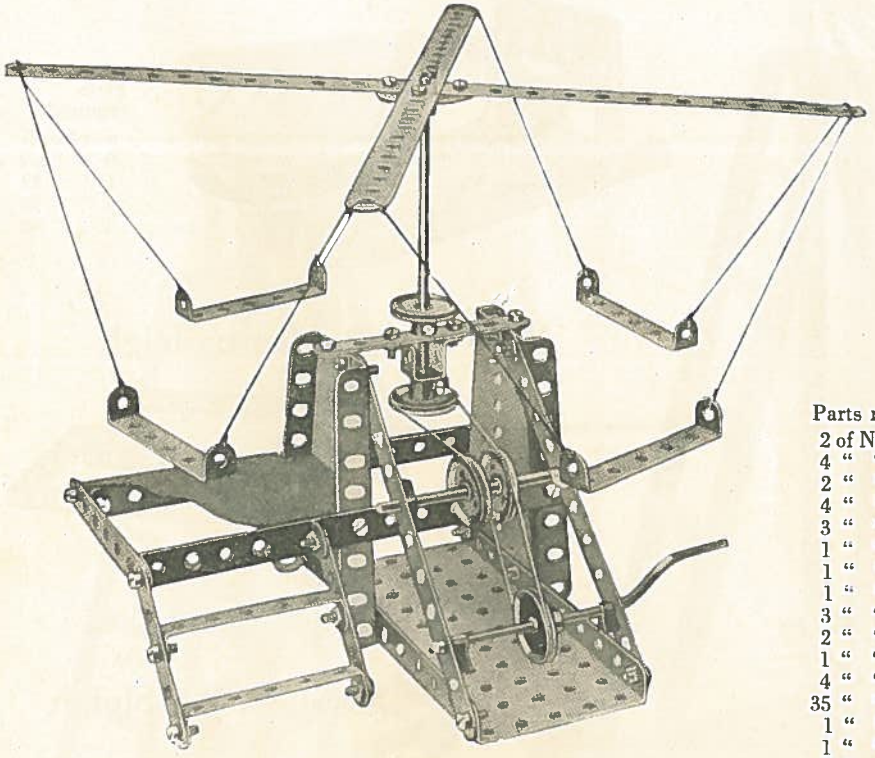
Model No. 255
Gondola



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	

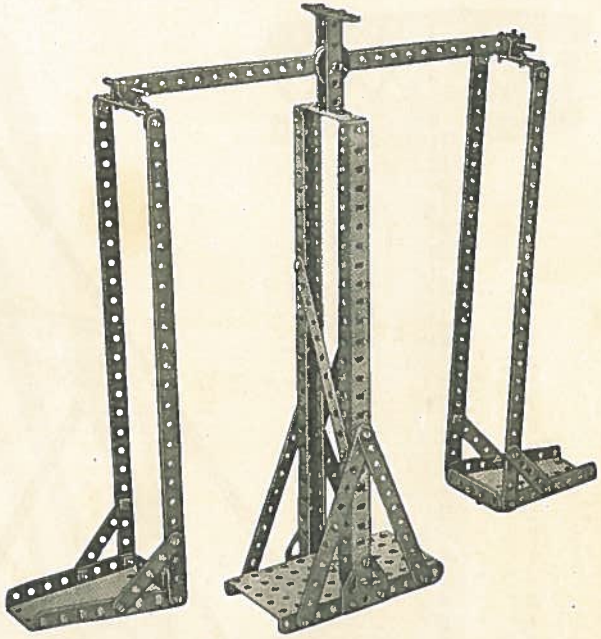
Model No. 256—Roundabout



Parts required:

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

Model No. 257—Beam Scales



Parts required:

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

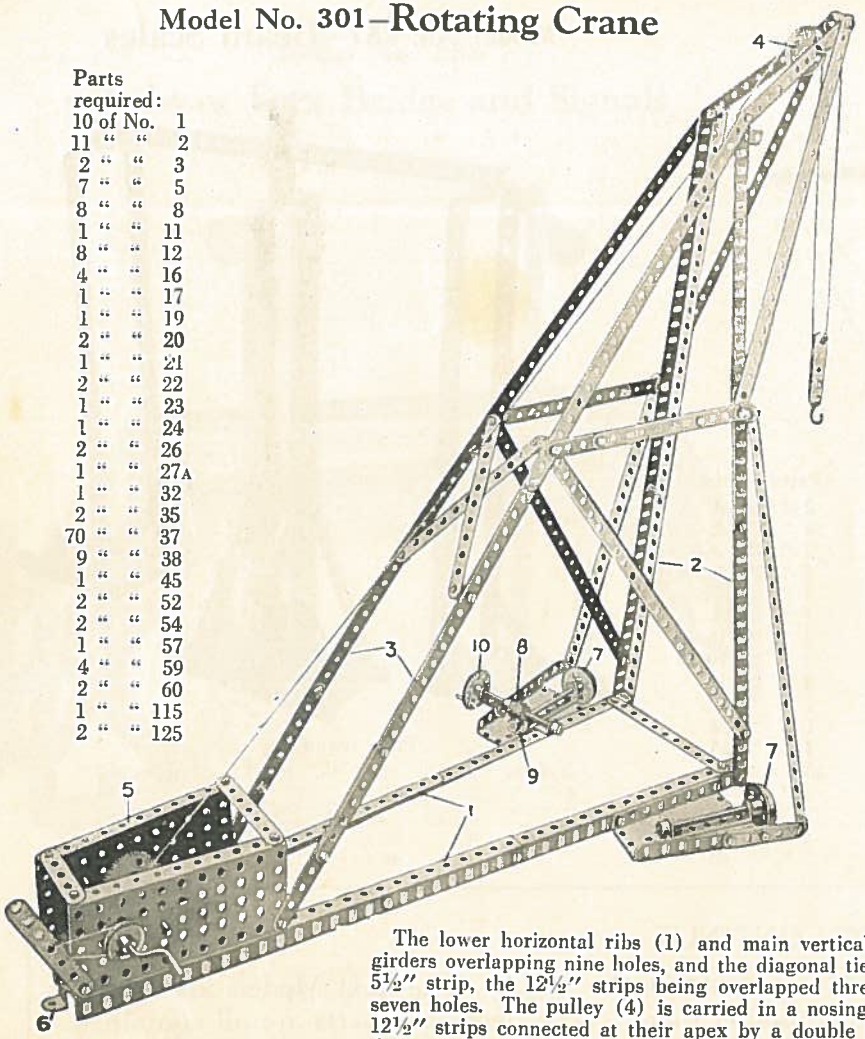
HOW TO CONTINUE

This completes the Models which may be made with MECCANO Outfit No. 2. The next Models are a little more advanced, requiring a number of extra parts to construct them. The necessary parts are all contained in a No. 2A Accessory Outfit (see page 58).

Model No. 301–Rotating Crane

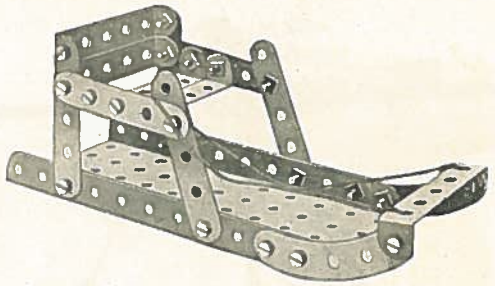
Parts required:

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



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 12½" strips and one 5½" strip, the 12½" strips being overlapped three holes, and the lower 5½" strip seven holes. The pulley (4) is carried in a nosing made of two 5½" strips and two 12½" 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 and is rotated by the hand wheel (10).

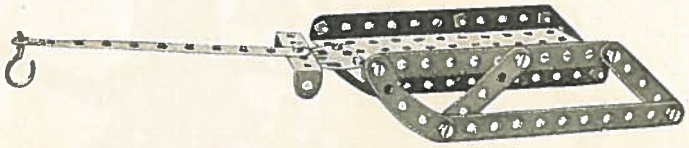
Model No. 302–Toboggan



Parts required:

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

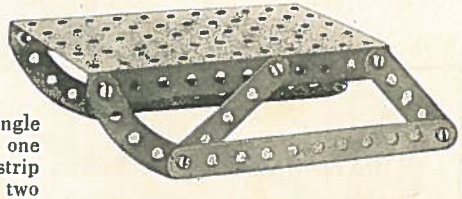
Model No. 303–Horse Sleigh



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

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

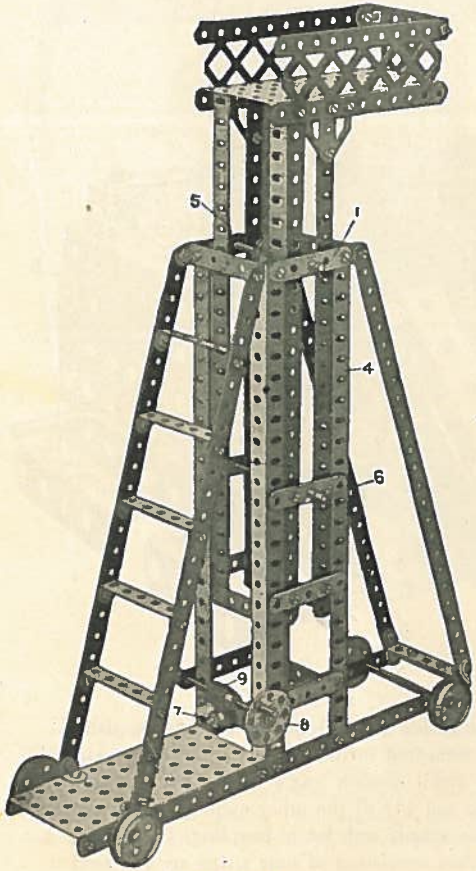


FIG. 305

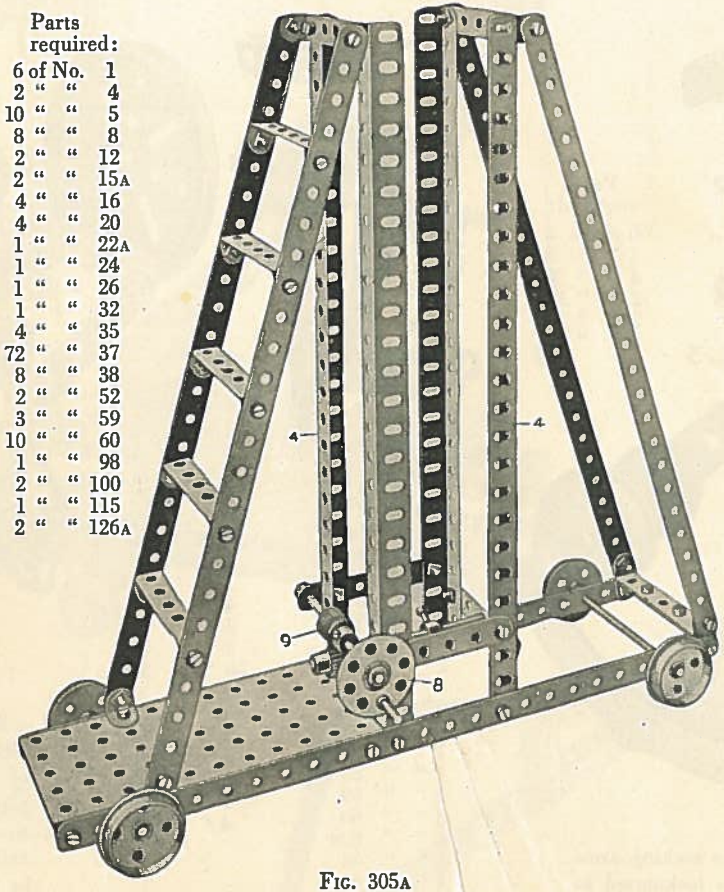


FIG. 305A

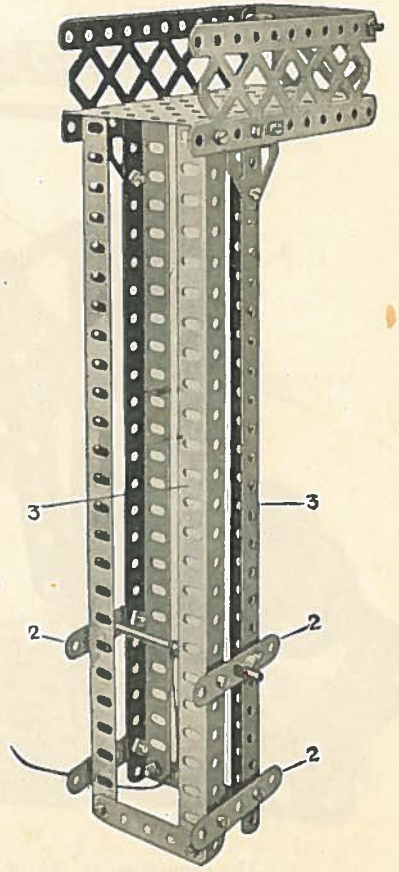
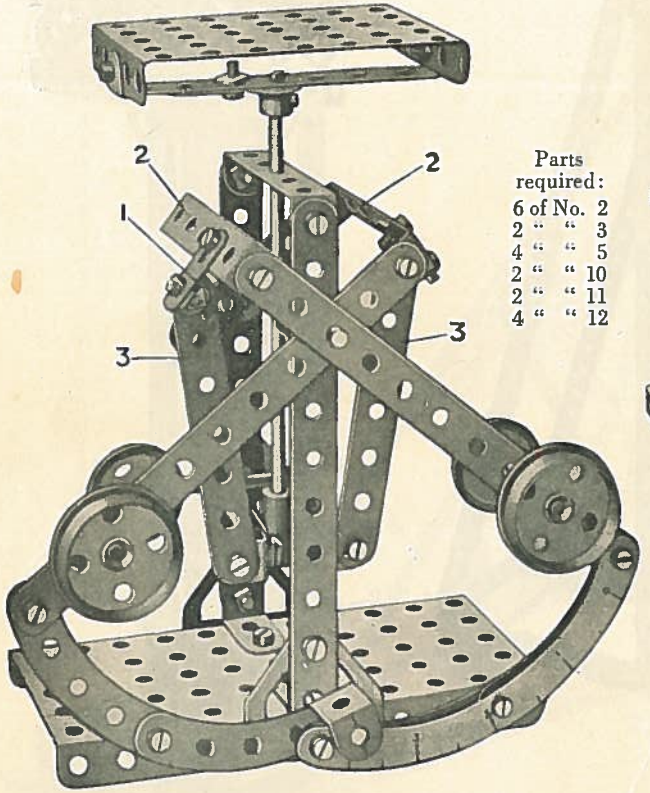


FIG. 305B

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).

Model No. 306—Letter Balance



Parts required:

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

The connection at (1) of the rocking arms (2) to the thrust strips (3) is 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.

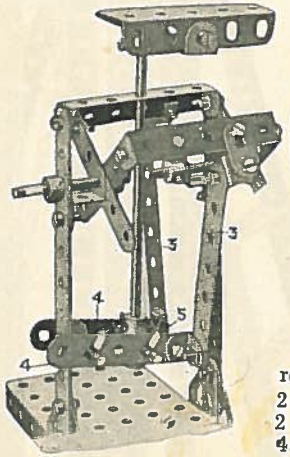
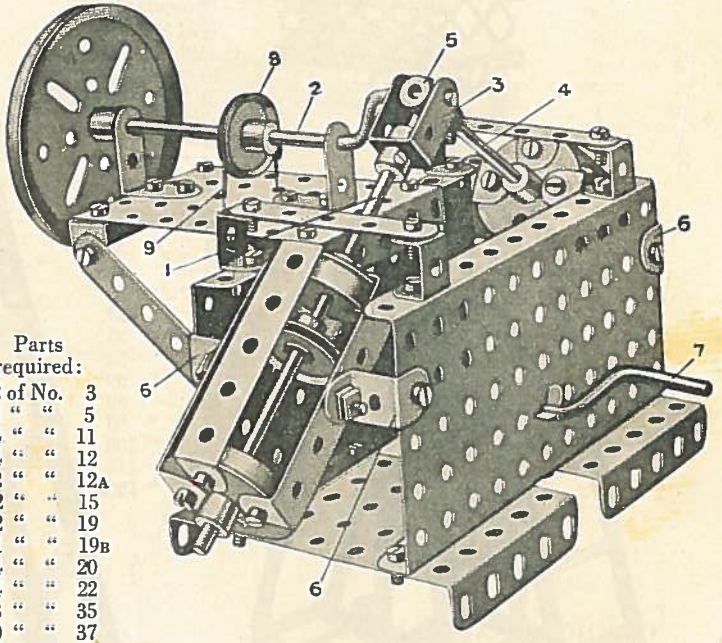


FIG. 306A

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 ½" 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).

Model No. 308—Railway Wagon Swivel Crane

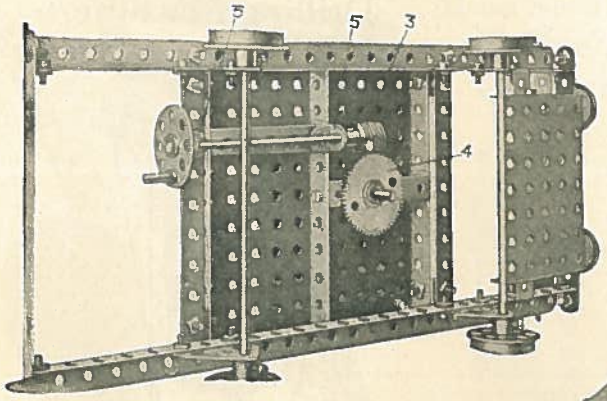
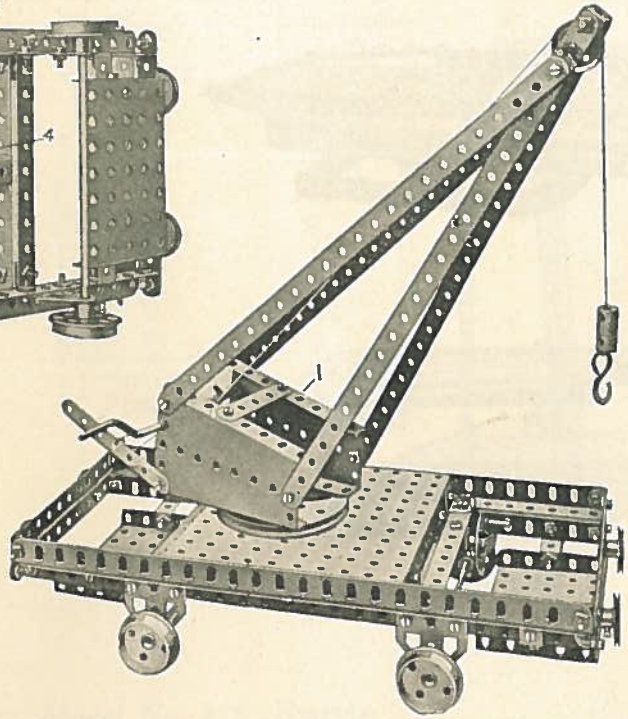


FIG. 308A

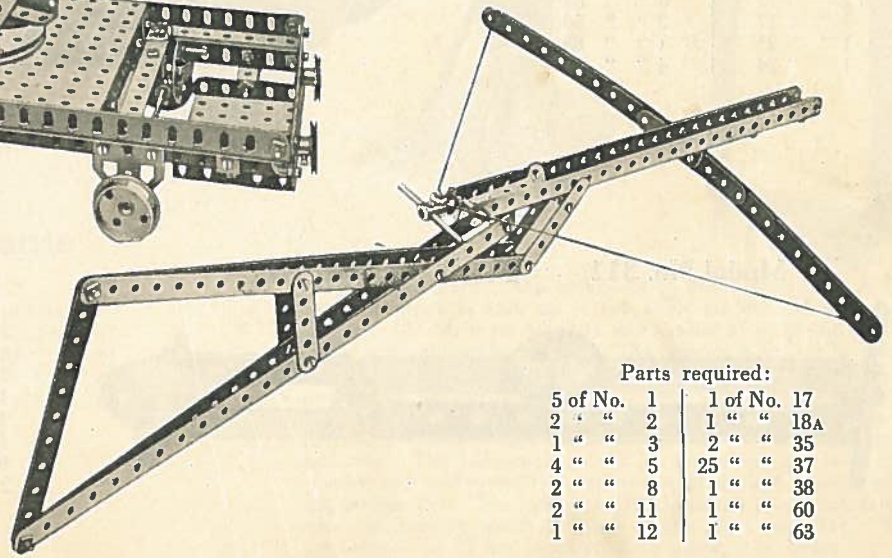


Parts required:

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

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 journalled.

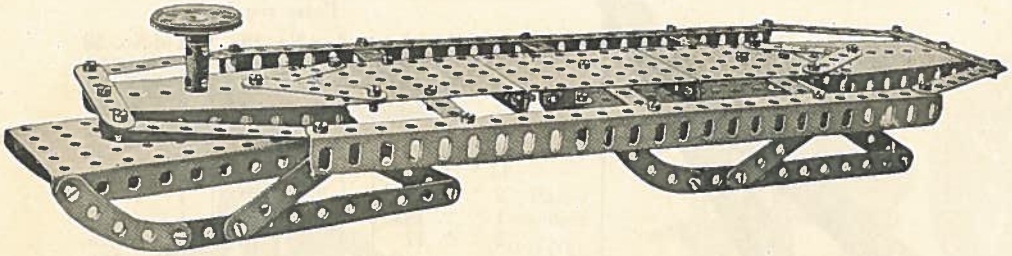
Model No. 309—Crossbow



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

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

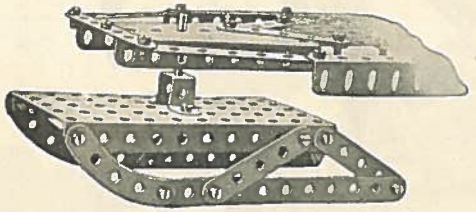
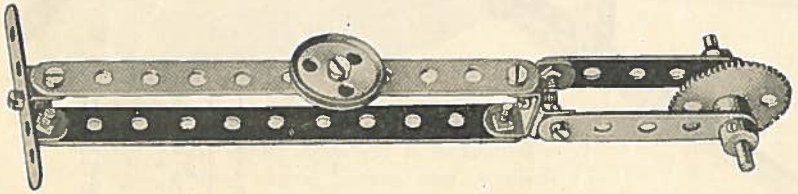


FIG. 310A

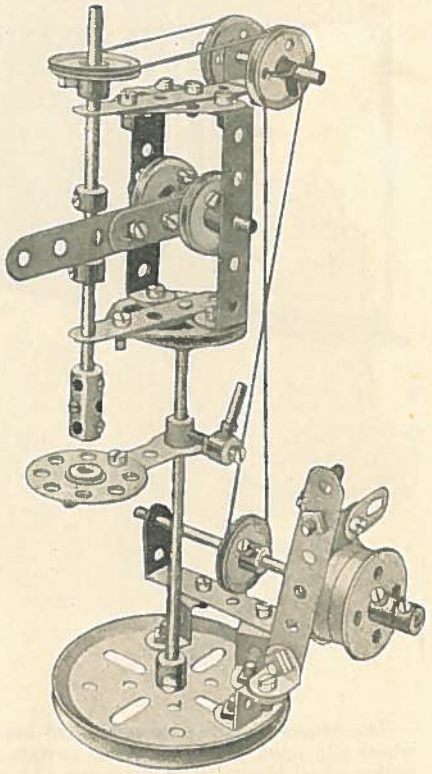
Model No. 311 Pastry Designer



Parts required:

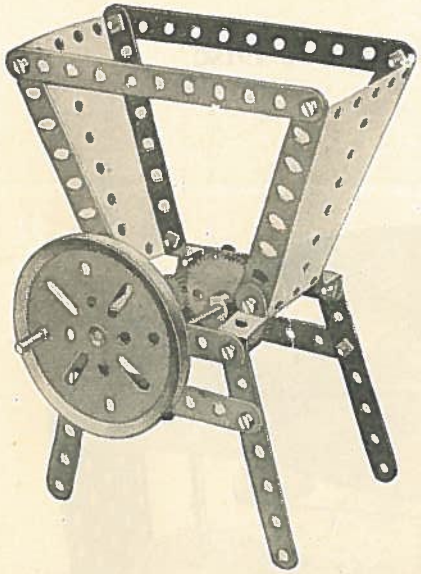
2 of No.	2
3 " "	5
3 " "	11
1 " "	17
1 " "	22A
1 " "	27A
9 " "	37
2 " "	59

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		



Model No. 313
Coffee Grinder

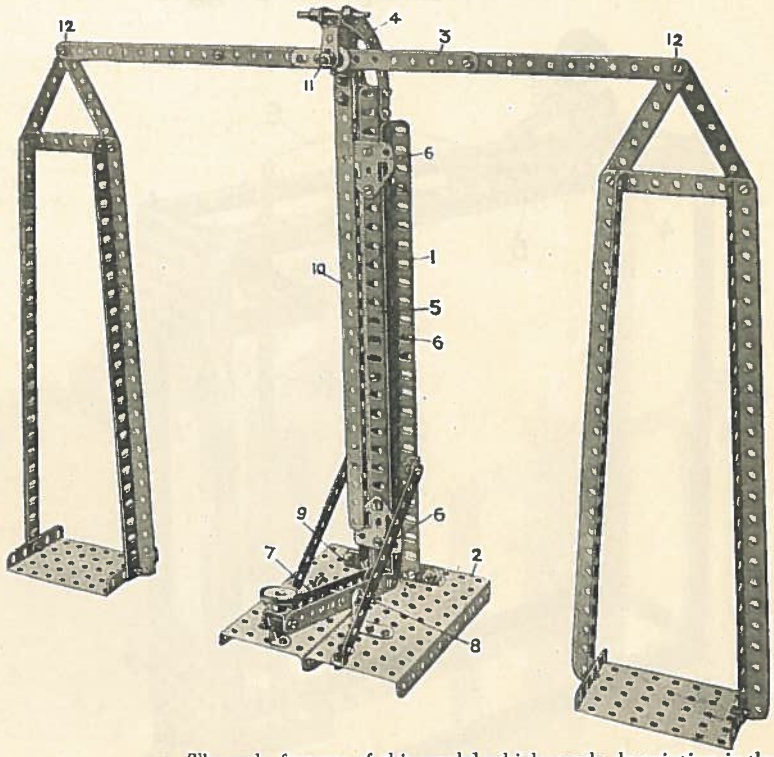
Parts required:

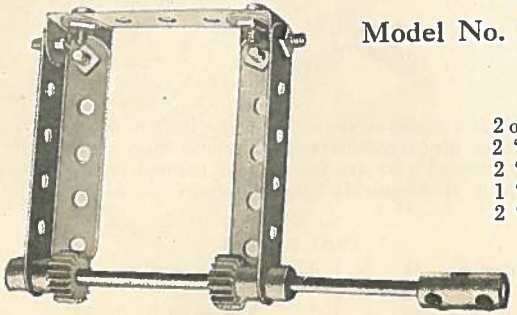
2	of No.	2
6	" "	3
2	" "	4
2	" "	16
1	" "	19B
1	" "	26
1	" "	27A
16	" "	37
2	" "	54
3	" "	59
1	" "	115
4	" "	125

Model No. 314—Demonstration Scales

Parts required:

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





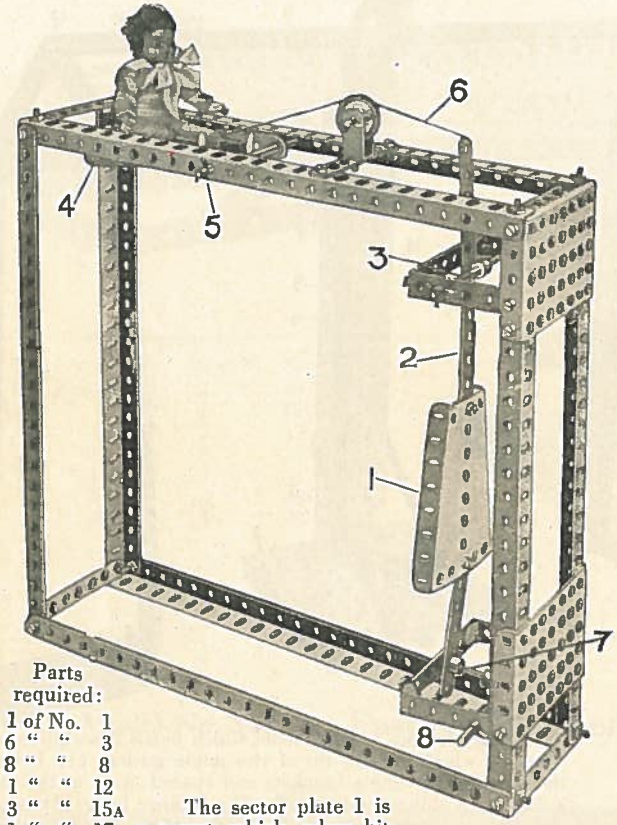
Model No. 315—Rattle

Parts required:

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

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 2½" 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.

Model No. 316–Drop the Nigger

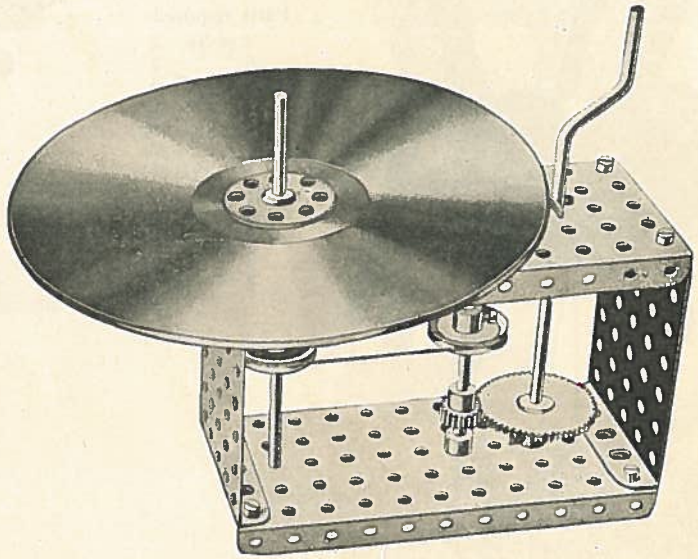


Parts required:

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



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.

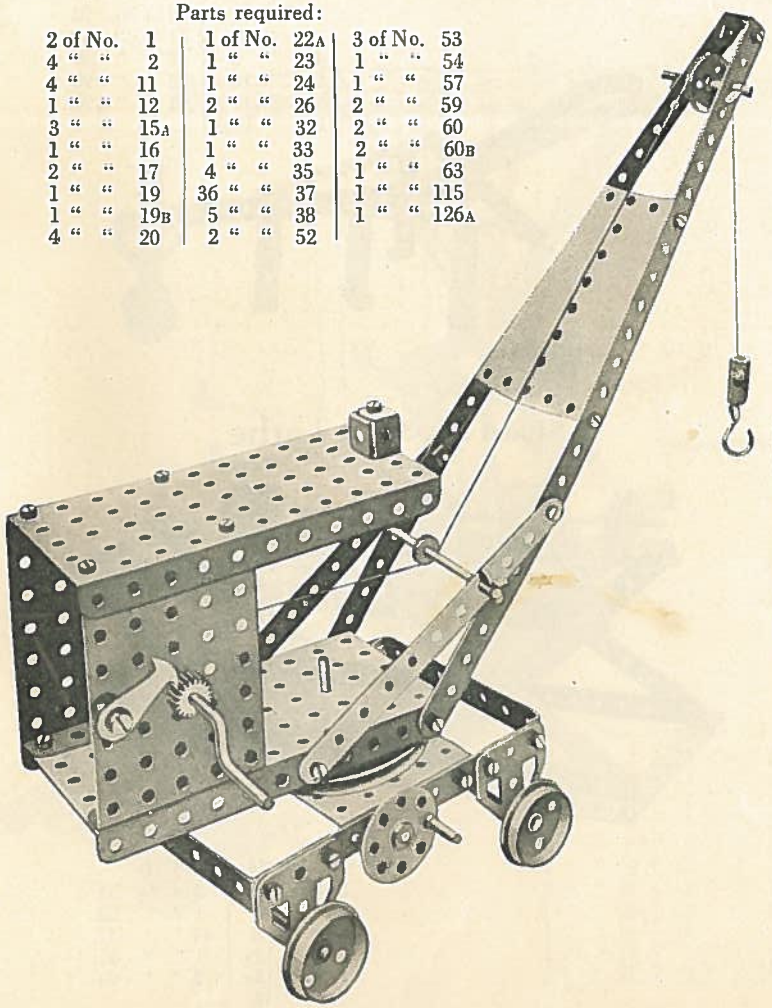
Parts required:

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

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		



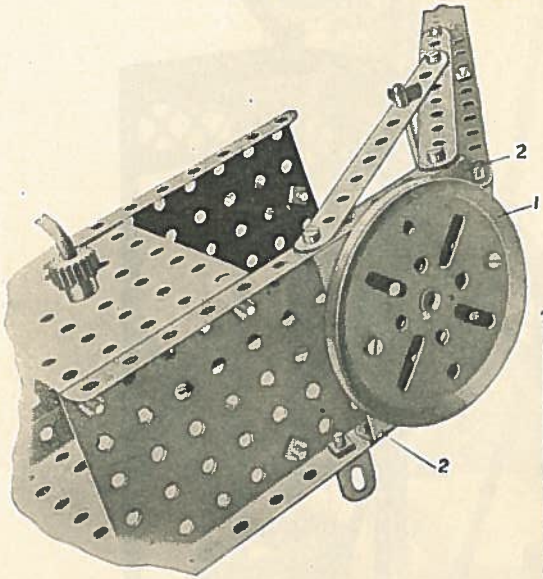


FIG. 318A

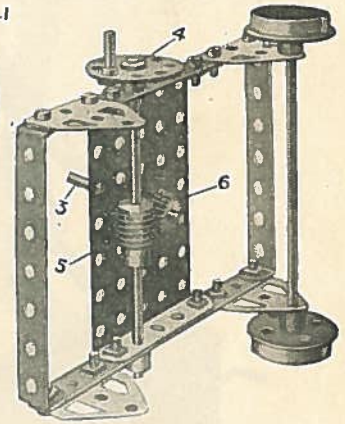


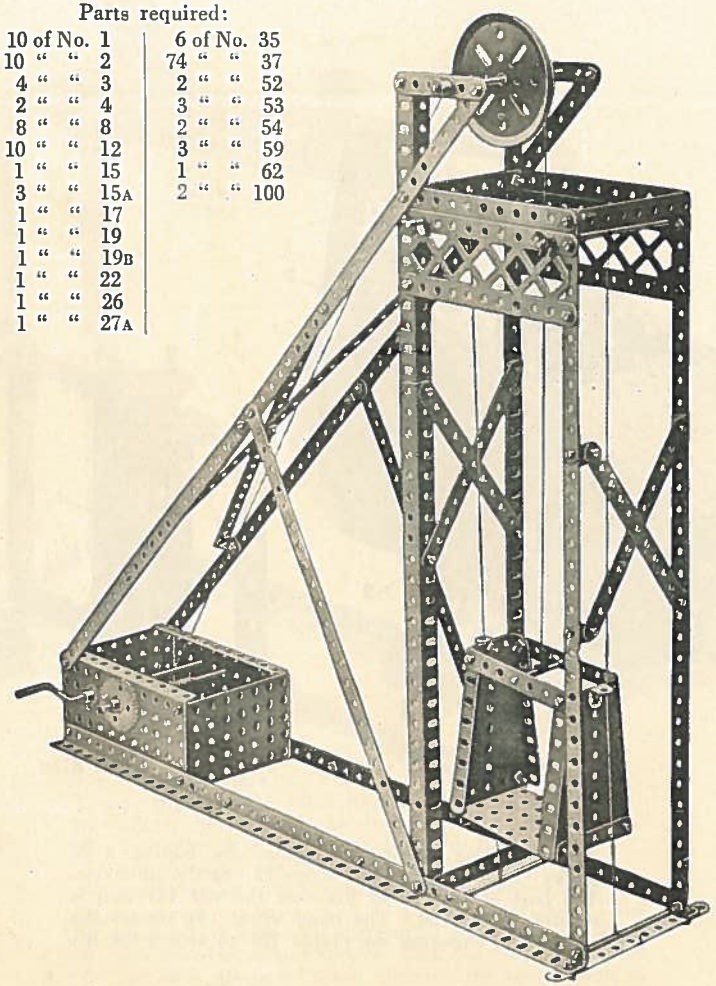
FIG. 318B

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.

Model No. 319
Pit Head Gear

Parts required:

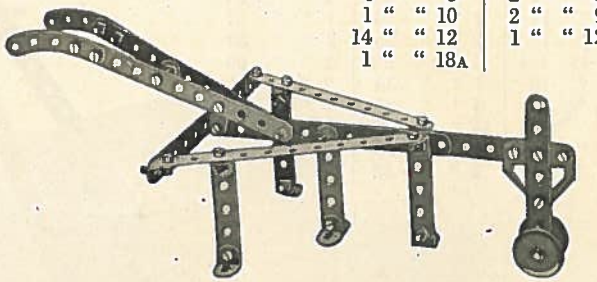
10	of No. 1	6	of No. 35
10	" " 2	74	" " 37
4	" " 3	2	" " 52
2	" " 4	3	" " 53
8	" " 8	2	" " 54
10	" " 12	3	" " 59
1	" " 15	1	" " 62
3	" " 15A	2	" " 100
1	" " 17		
1	" " 19		
1	" " 19B		
1	" " 22		
1	" " 26		
1	" " 27A		



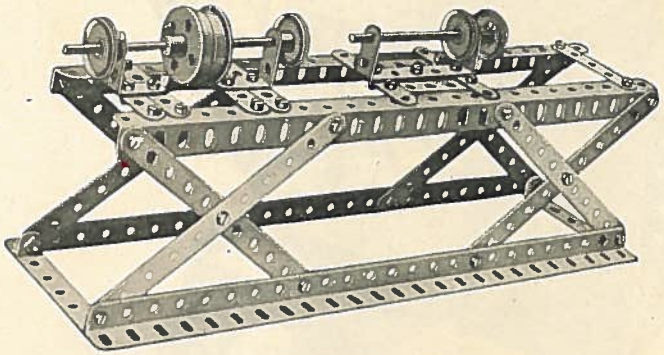
Model No. 320
Scarifier

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		



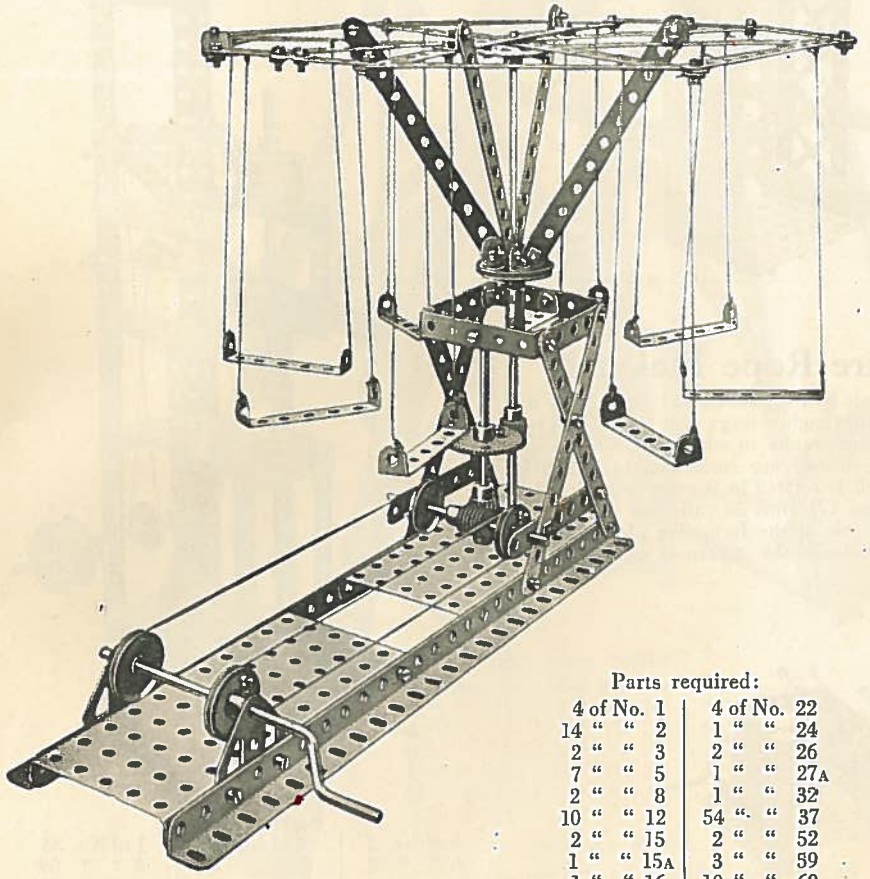
Model No. 321
Lathe



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		

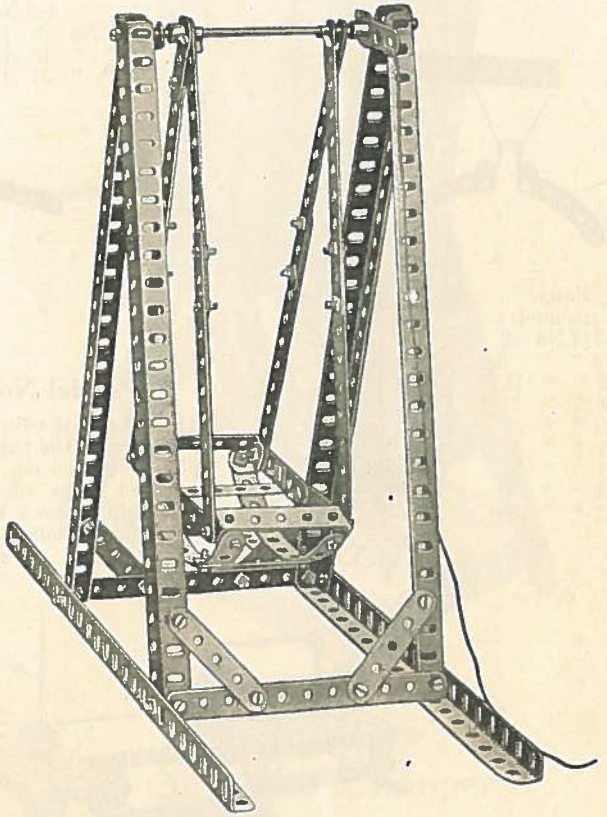
Model No. 322 Roundabout



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

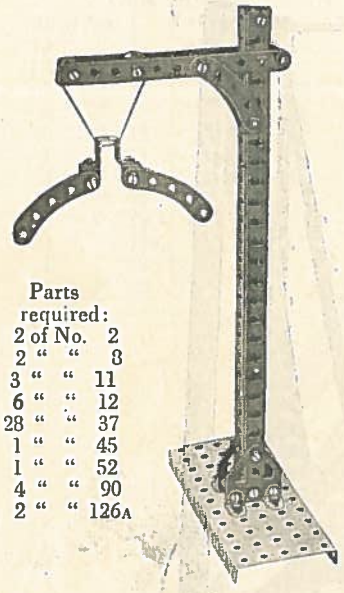
Model No. 323 Swing



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

Model No. 324
Railway Gauge



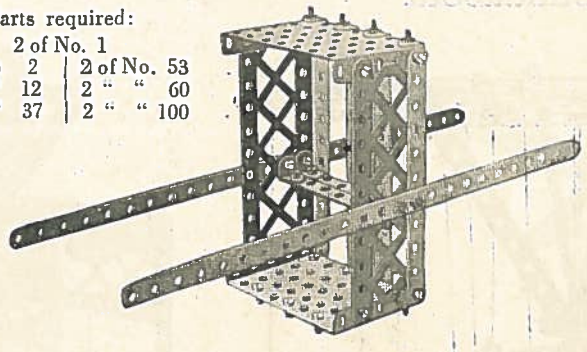
Parts required:

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

Model No. 325–Chinese Palanquin

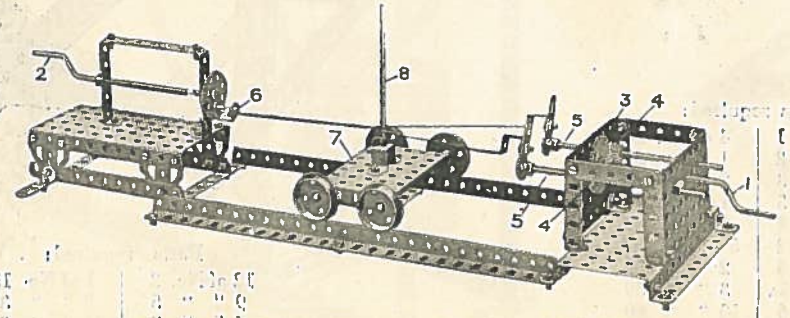
Parts required:

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



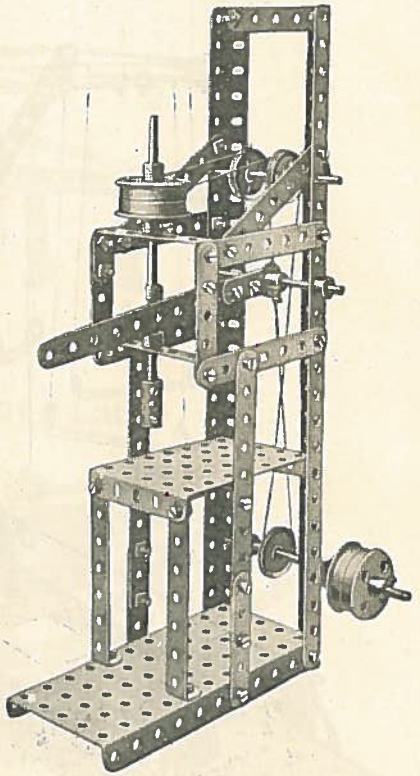
Model No. 327–Wire Rope Maker

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.



Parts required:							
6 of No. 2	2 of No. 5	2 of No. 15	1 of No. 24	50 of No. 37	4 of No. 59		
1 " " 3	2 " " 8	3 " " 15A	2 " " 26	1 " " 45	2 " " 60		
	3 " " 11	2 " " 19	1 " " 27A	2 " " 52	2 " " 62		
	12 " " 12	4 " " 20	3 " " 35	3 " " 53	4 " " 126A		

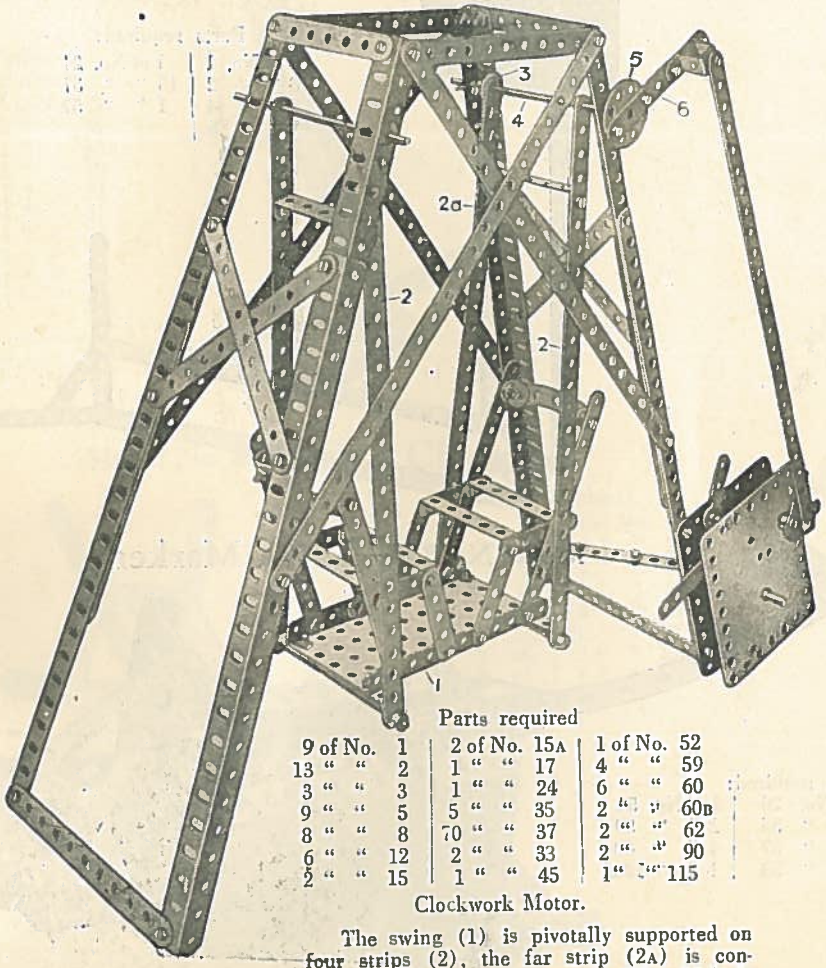
Model No. 326
Hand Punch



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	2 " " 46	1 " " 63
2 " " 16	1 " " 52	

Model No. 328–Lawn Swing

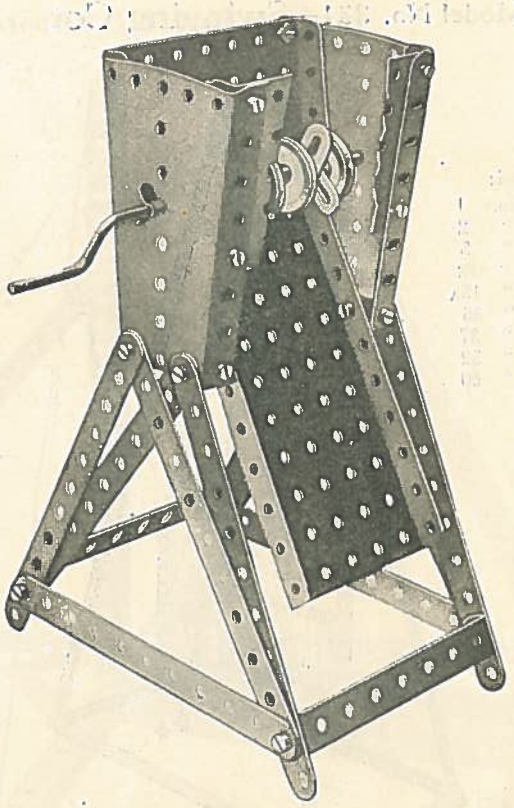


Parts required

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 " "	33	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

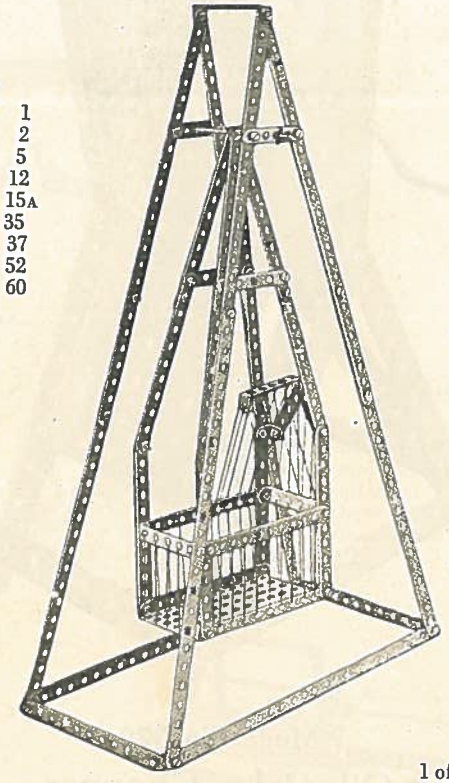
Parts required:

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

Model No. 331—Swinging Cot

Parts required:

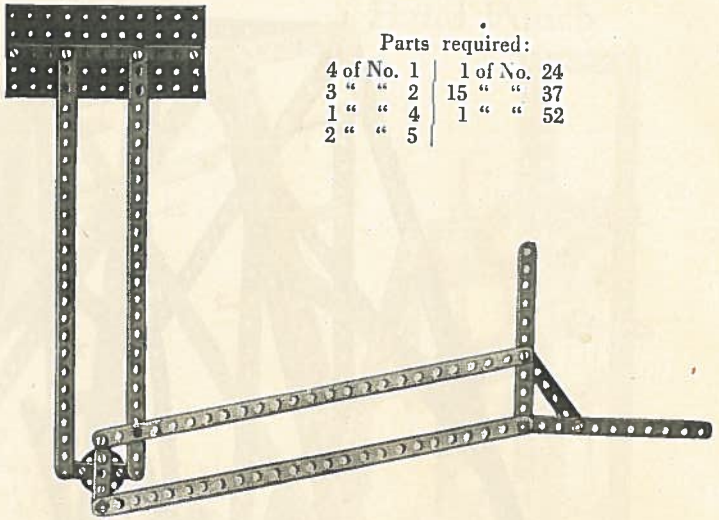
10	of No.	1
16	" "	2
6	" "	5
6	" "	12
1	" "	15A
4	" "	35
45	" "	37
1	" "	52
1	" "	60



Model No. 332—Drafting Machine

Parts required:

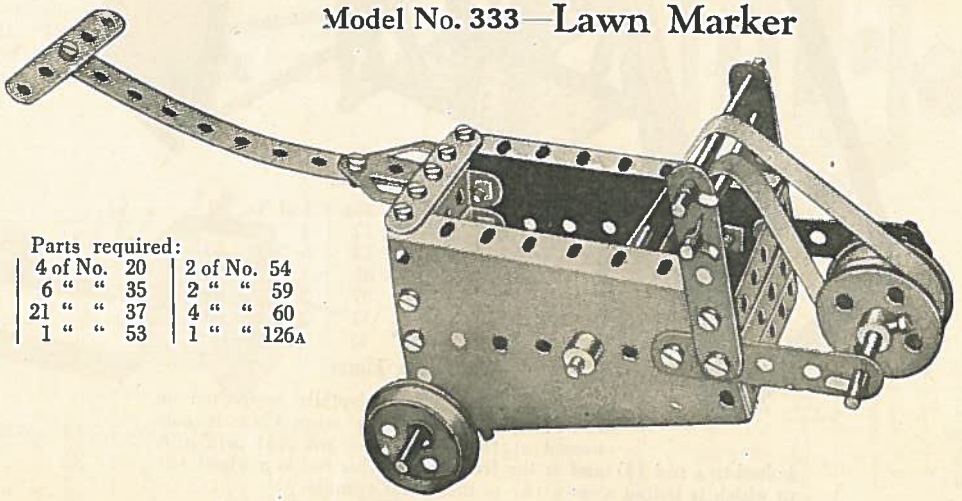
4	of No.	1	1	of No.	24
3	" "	2	15	" "	37
1	" "	4	1	" "	52
2	" "	5			



Model No. 333—Lawn Marker

Parts required:

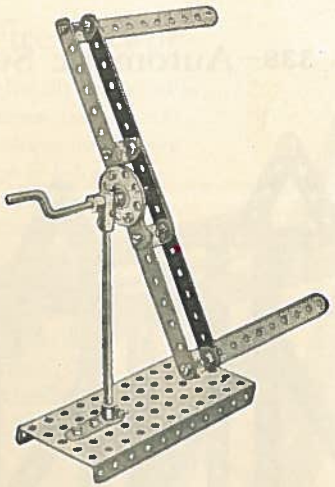
1	of No.	2	4	of No.	20	2	of No.	54
6	" "	5	6	" "	35	2	" "	59
1	" "	15A	21	" "	37	4	" "	60
4	" "	16	1	" "	53	1	" "	126A



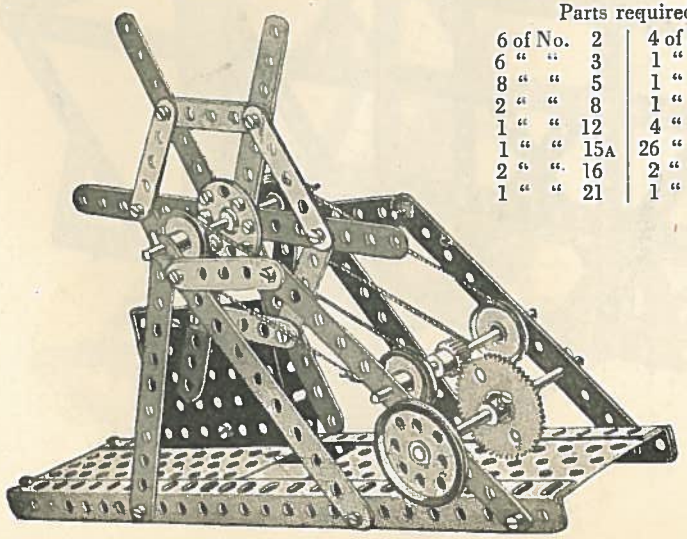
Model No. 334
Lace Jennier

Parts required:

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



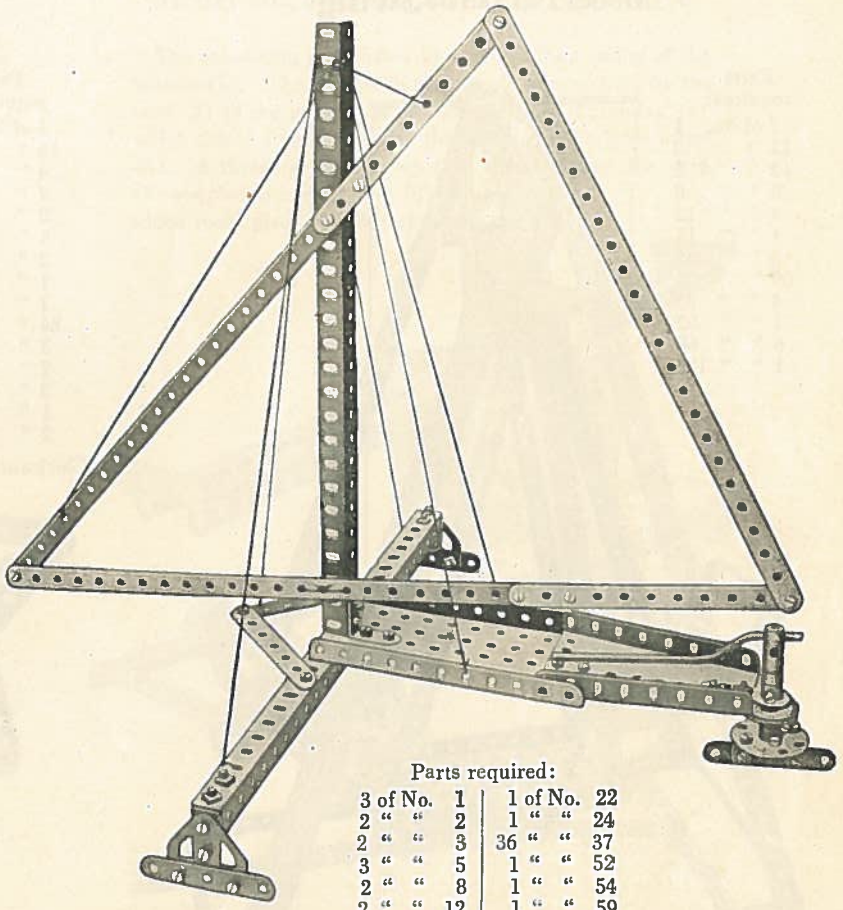
Model No. 335—Flax Cleaner



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



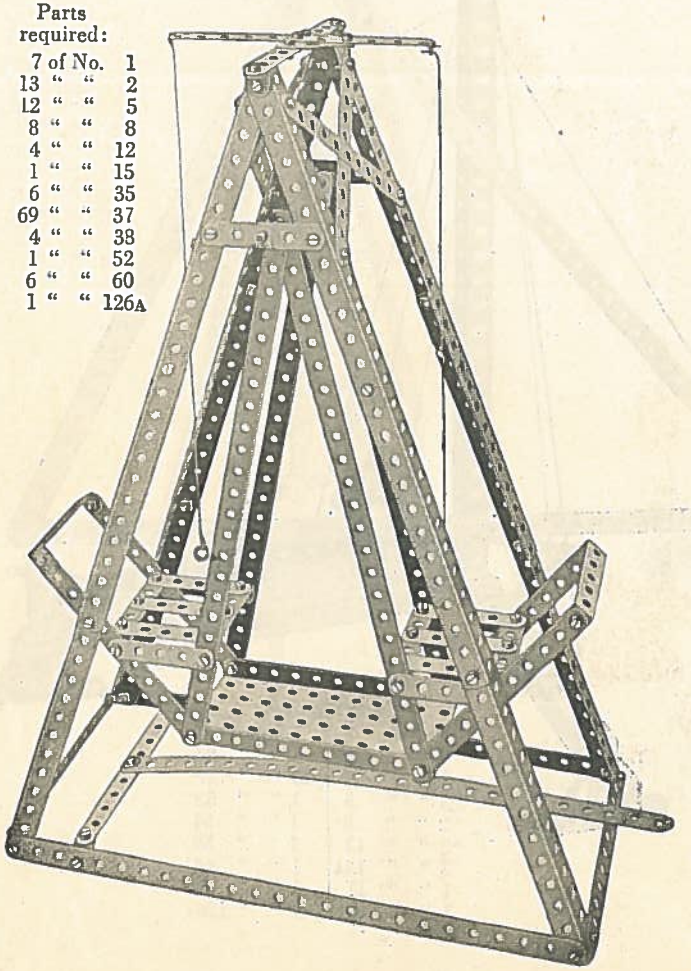
Parts required:

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

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

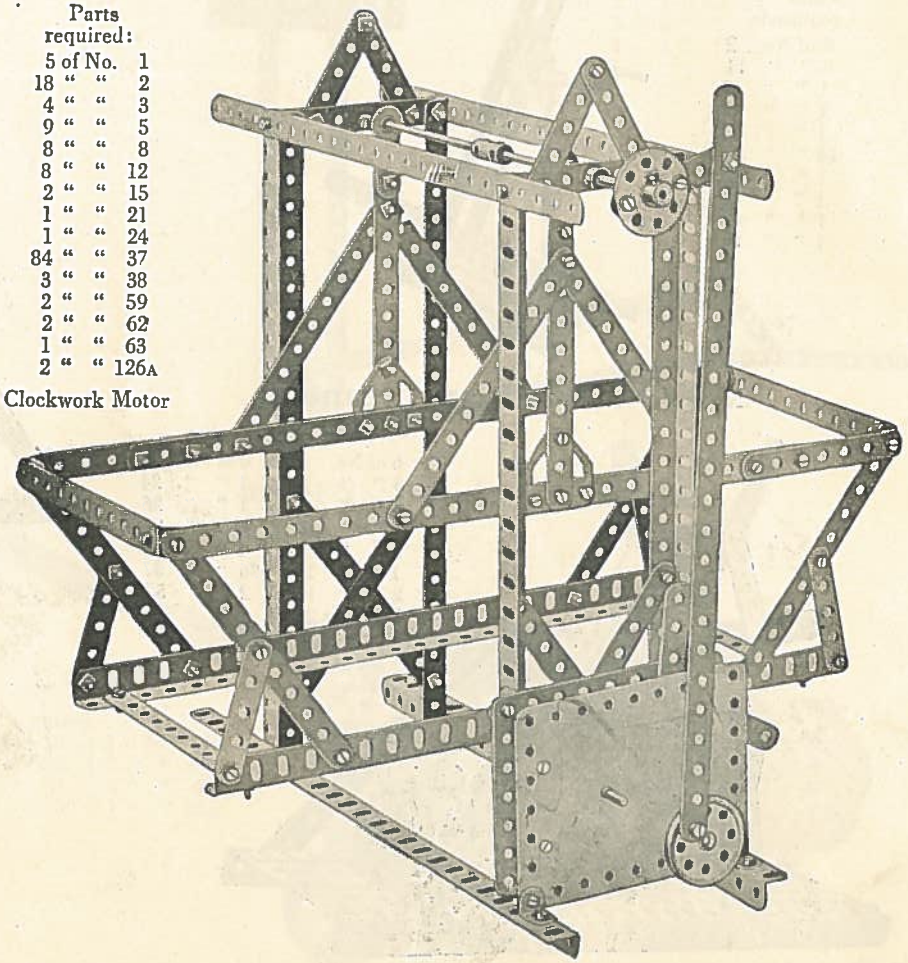


Model No. 338—Automatic Swing Boat

Parts required:

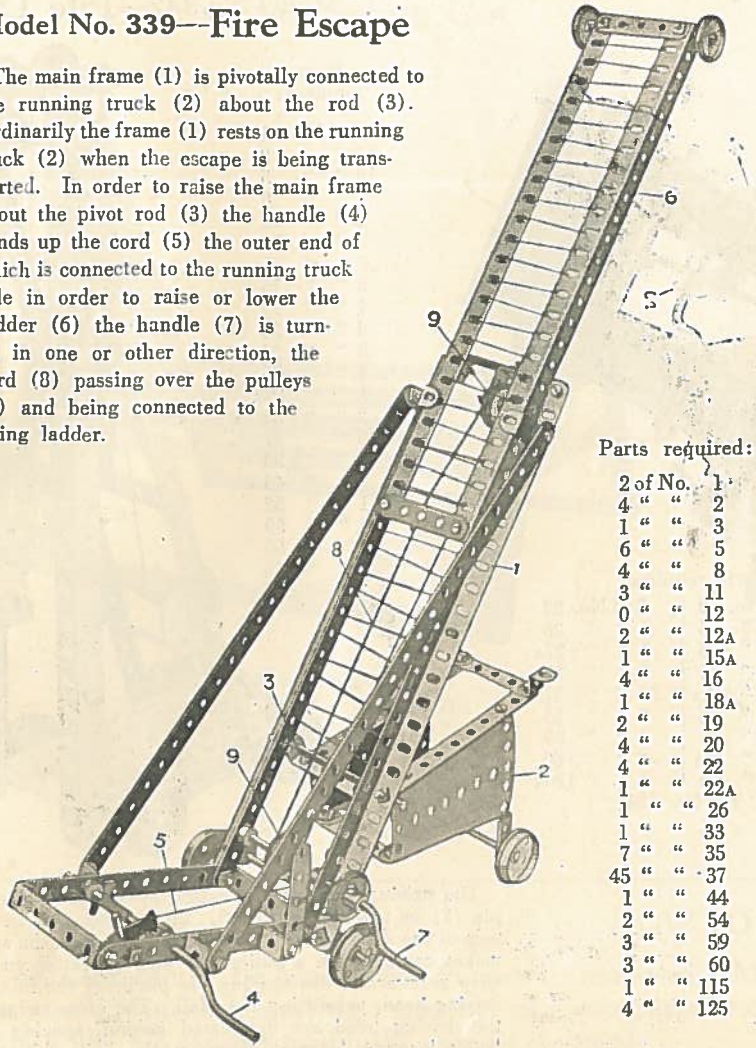
5	of No.	1
18	" "	2
4	" "	3
9	" "	5
8	" "	8
8	" "	12
2	" "	15
1	" "	21
1	" "	24
84	" "	37
3	" "	38
2	" "	59
2	" "	62
1	" "	63
2	" "	126A

Clockwork Motor



Model No. 339—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.

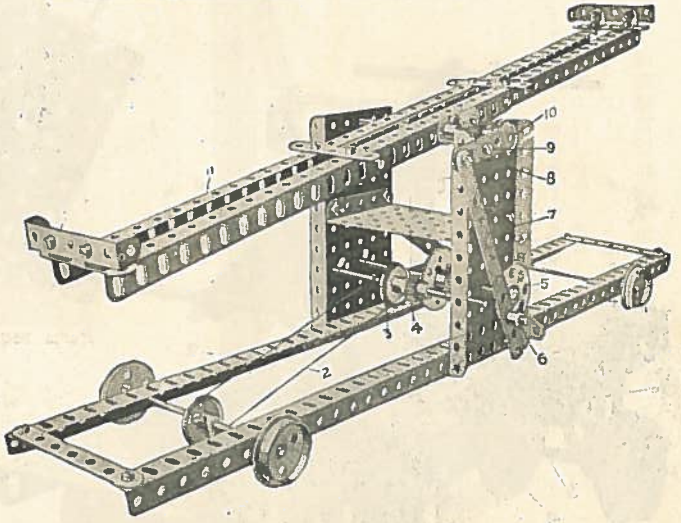


Parts required:

2 of No.	1
4 " "	2
1 " "	3
6 " "	5
4 " "	8
3 " "	11
0 " "	12
2 " "	12A
1 " "	15A
4 " "	16
1 " "	18A
2 " "	19
4 " "	20
4 " "	22
1 " "	22A
1 " "	26
1 " "	33
7 " "	35
45 " "	37
1 " "	44
2 " "	54
3 " "	59
3 " "	60
1 " "	115
4 " "	125

Model No. 340—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 pivot rod (10) of the see-saw (11).

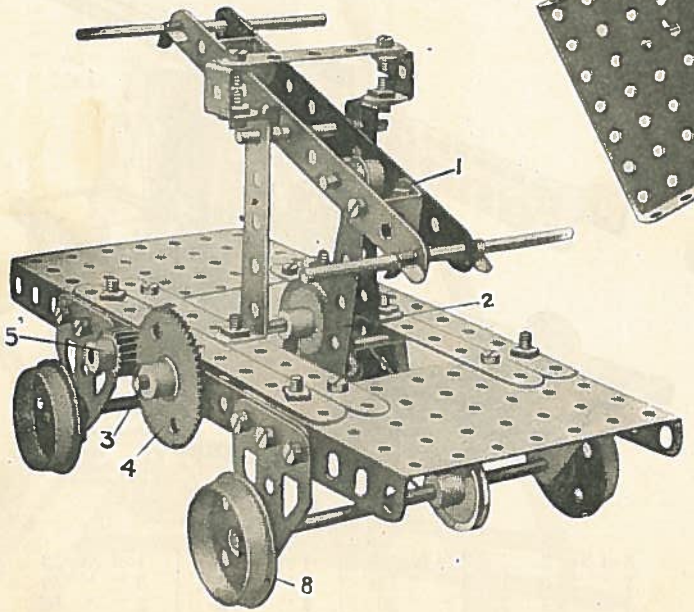


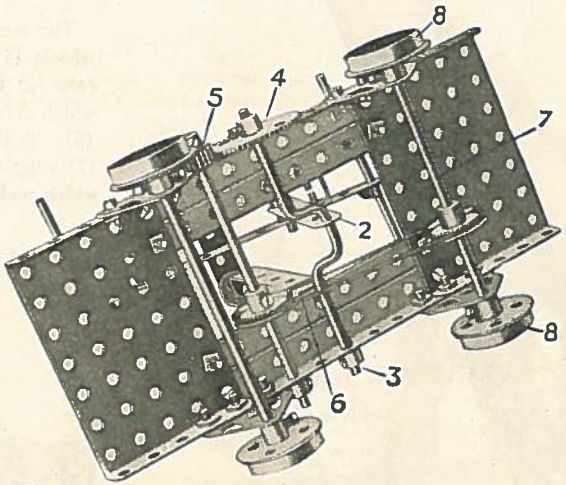
Parts required:

3 of No. 2	2 of No. 15	1 of No. 25	1 of No. 53
2 " " 3	3 " " 15A	1 " " 27A	3 " " 59
5 " " 5	4 " " 20	4 " " 35	2 " " 60
8 " " 8	2 " " 22	36 " " 37	2 " " 62
4 " " 12	1 " " 24	2 " " 52	1 " " 115

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

Model No. 341—Hand Car





Parts required:

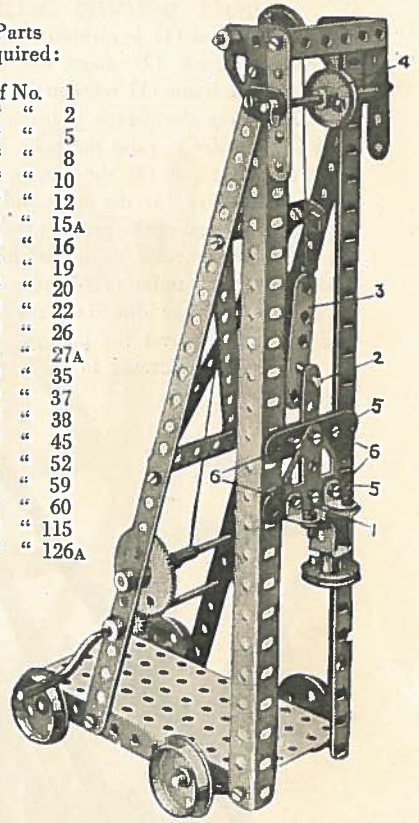
8 of No.	2	2 of No.	22
1 " "	4	1 " "	26
1 " "	5	1 " "	27A
4 " "	11	6 " "	35
3 " "	15A	30 " "	37
2 " "	16	2 " "	53
1 " "	17	4 " "	59
1 " "	18A	2 " "	60
4 " "	20	4 " "	126A
		1 of No.	134

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

Model No. 342—Pile Driver

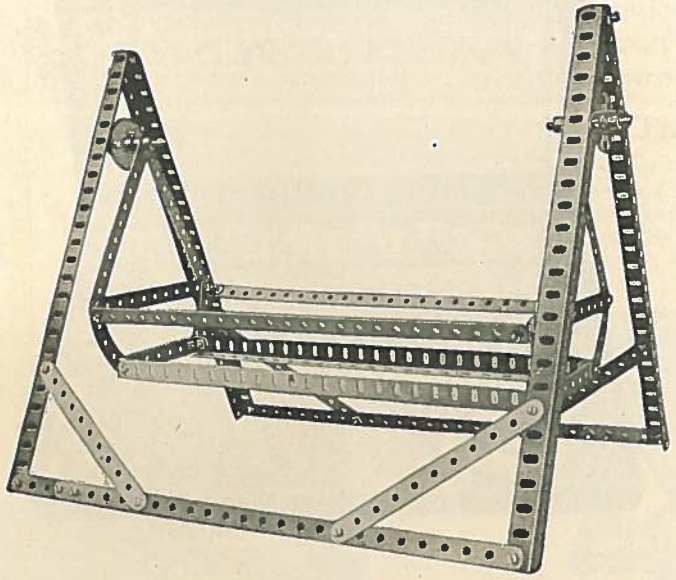
Parts required:

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

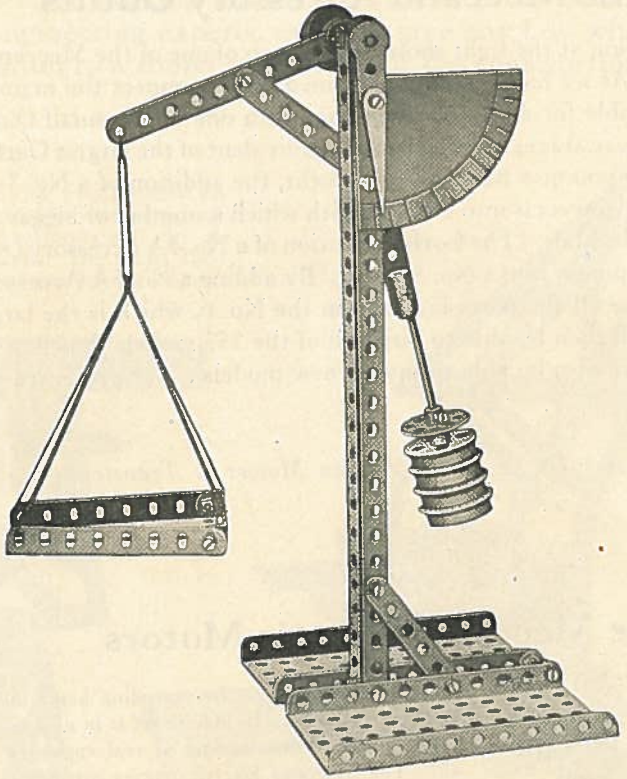
Model No. 343—Swing Cot



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. 344—Scales



Parts required:

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

HOW TO CONTINUE

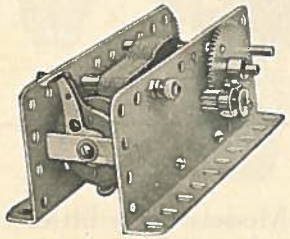
This completes the Models which may be made with MECCANO Outfit No. 3. The next Models are a little more advanced, requiring a number of extra parts to construct them. The necessary parts are all contained in a No. 3A Accessory Outfit (see next page).

The Meccano Accessory Outfits

The illustration at the right shows a specimen of one of the Meccano Accessory Outfits. As we have already explained, these connect the main Outfits, making it possible for a boy to commence with one of the small Outfits and build it up by easy stages until he has the equivalent of the largest Outfit made. For example, if you now have a No. 3 Outfit, the addition of a No. 3A Accessory Outfit will convert it into a No. 4, with which a number of bigger and better models can be built. The further addition of a No. 4A Accessory Outfit will build your equipment into a No. 5 Outfit. By adding a No. 5A Accessory Outfit you will have all the parts included in the No. 6, which is the largest one made. You will then be able to build all of the 353 models shown in the two big Manuals and also be able to invent new models. For prices see page 62.

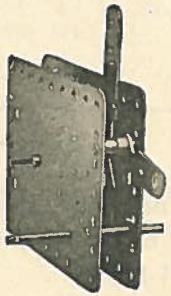
Accessory Outfits do not contain Motors or Transformers

The Meccano Electric Motors



How splendid it is, after spending hours in building a model, to be able to set it in motion with an electric motor, just as real engineers do! The Meccano Electric motors are made especially for this purpose and may be run from three dry batteries or direct from the house current with the Meccano Transformer. They are designed to be built into Meccano models and are the most powerful toy motors made. Two types are available—the E-1, a one-way motor which is fitted with a pulley for belt drive and a pinion for gears; and the E-2, which is reversible and includes extra gears. For prices see page 62.

The Meccano Clockwork Motor



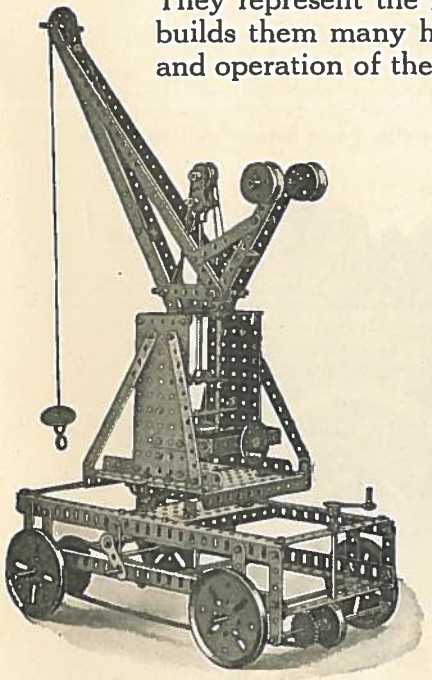
This motor serves the same purpose as the electric motors and is a fine piece of mechanism—simple, powerful and reliable. It is provided with the standard Meccano equidistant holes and can be built right into the model and form a rigid part of it. A starting and stopping lever is provided, and the motor is also fitted with reverse mechanism. For price see page 62.

The Meccano Transformer

Specially constructed to operate Meccano Electric Motors from the house current. A safe and reliable instrument that eliminates the expense of batteries. For alternating current of 110 volts, 60 cycles only. For price see page 62.

A Few Choice Meccano Models

On this and the following pages we illustrate some of the larger models which can be built with Meccano. Each one of these is a perfect working model, accurate in every detail. They represent the genius of generations of engineering experts, and will give any boy who builds them many hours of enjoyment in addition to a sound knowledge of the construction and operation of the actual mechanisms.

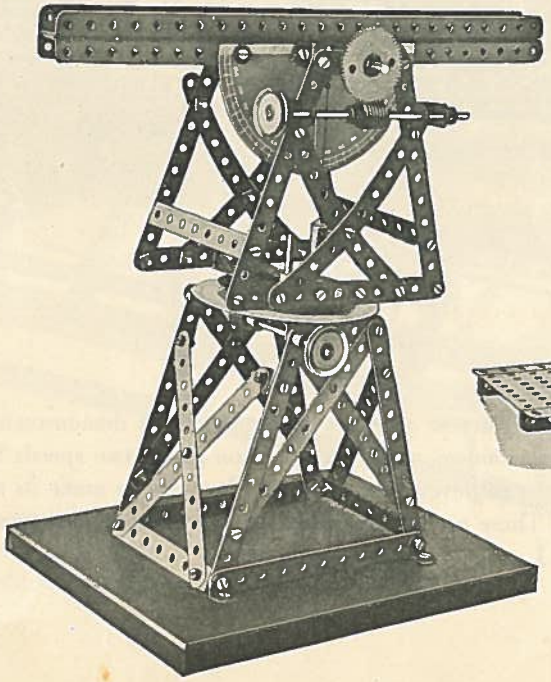


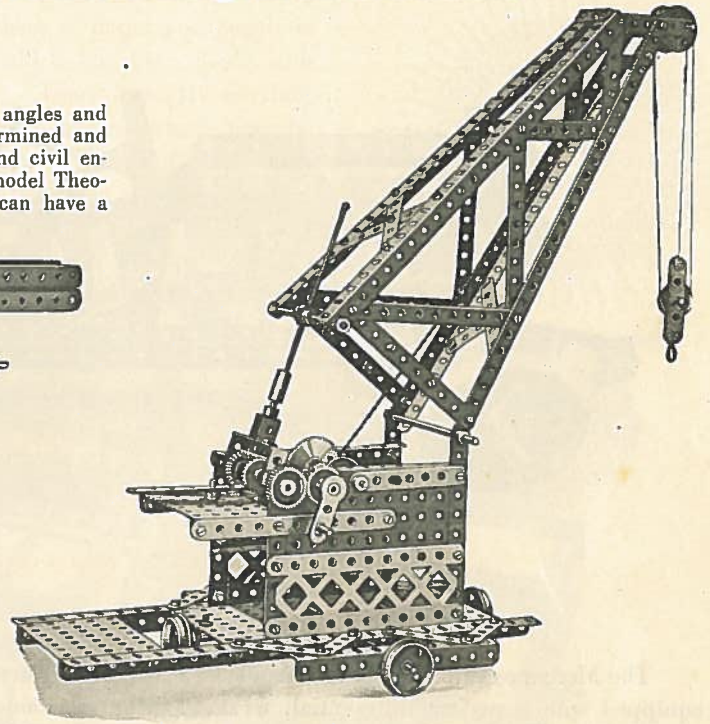
Hydraulic Crane

This model illustrates the operation of a Hydraulic Crane, in which great power is utilized to force two or more sets of pulley wheels apart; it is so arranged that a great movement of the load is obtained by a small movement of the operating power.

Theodolite

A Theodolite is an instrument with which angles and inclinations can be accurately and rapidly determined and distances calculated. It is used by surveyors and civil engineers for measuring plots of land, etc. The model Theodoite illustrated is easy to build and any boy can have a lot of fun with it.



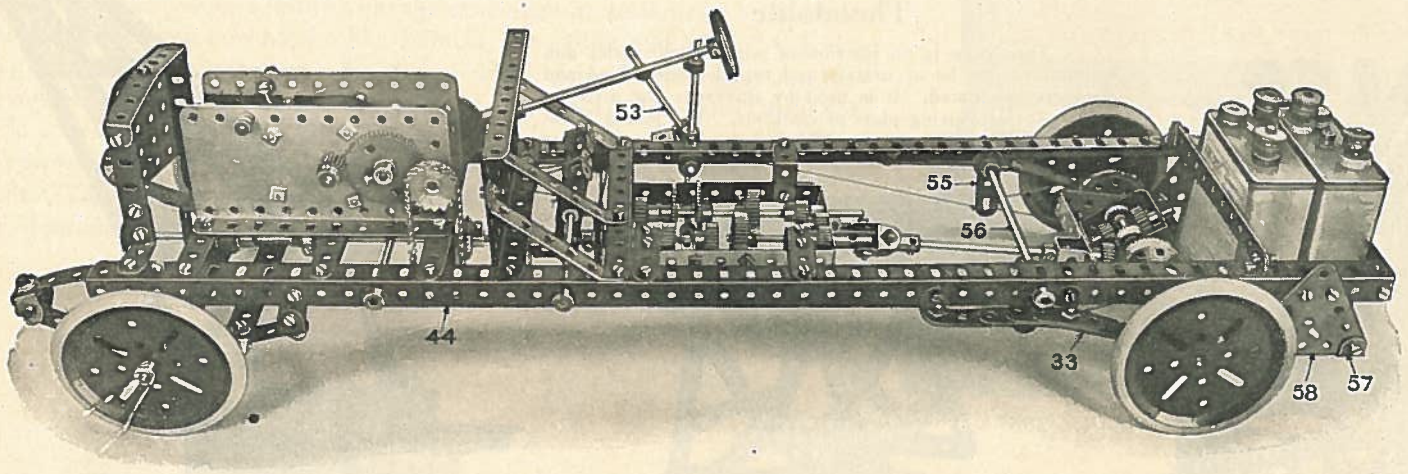


Revolving Crane

Another type of crane in which the movements of both the hoisting pulley and the jib are controlled by one handle. Clutches are provided for engaging either the pulley or jib gears, and the entire crane is mounted on four wheels at right angles to each other, and they may run on rails or on a flat surface to turn the crane around.

The Meccano Auto Chassis

Special Model No. 701

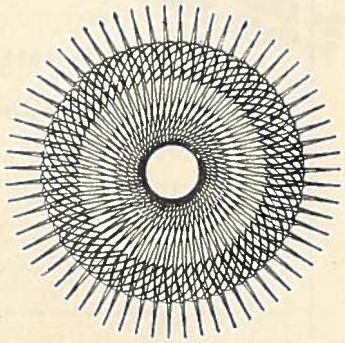


The Meccano Auto Chassis is a model of exceptional interest as it provides a complete demonstration of a real Auto Chassis. It is equipped with a perfect differential, worm steering mechanism and a transmission giving two speeds forward and reverse. It is underslung and provided with semi-elliptic front springs and cantilever rear springs. In order to make its construction quite clear a number of sectional photographs and drawings are necessary. These are all contained on a separate sheet, printed on art paper, which may be purchased from Meccano Company Inc., Elizabeth, N. J. price 15 cents postpaid.

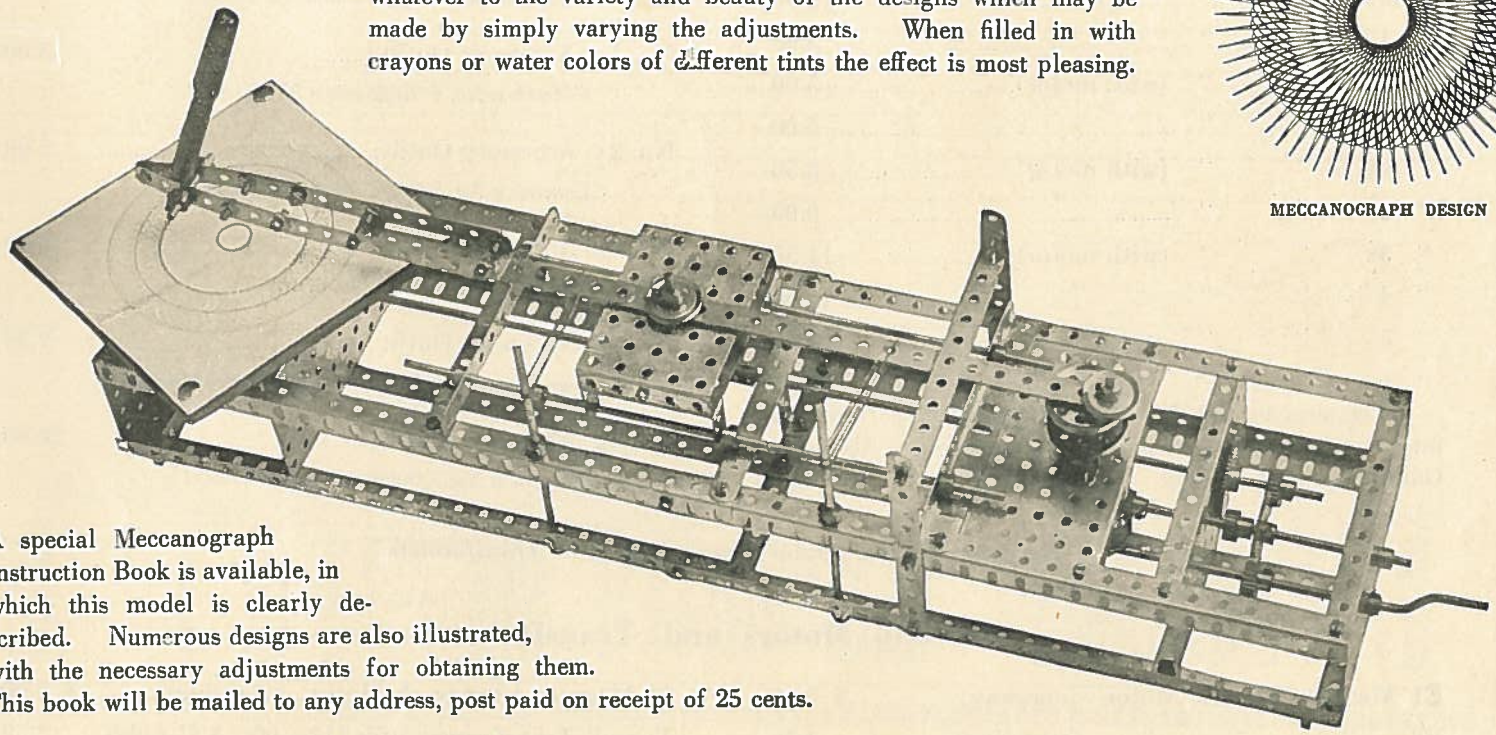
The "Meccanograph" Designing Machine

Special Model No. 708

This is a model of extraordinary interest, and we hope that all Meccano boys will build it. With it any boy can make an amazing variety of exquisite designs by fixing a sheet of paper and pencil in position and turning the handle. At the right we reproduce one design which has been made with this instrument and many others could be illustrated if we had the space. There is really no limit whatever to the variety and beauty of the designs which may be made by simply varying the adjustments. When filled in with crayons or water colors of different tints the effect is most pleasing.



MECCANOGRAPH DESIGN



A special Meccanograph Instruction Book is available, in which this model is clearly described. Numerous designs are also illustrated, with the necessary adjustments for obtaining them. This book will be mailed to any address, post paid on receipt of 25 cents.

REDUCED PRICES
2x Outfit - Now $7.50
3x Outfit - Now $10.00

MECCANO PRICE LIST

MECCANO OUTFITS

No. 00 Meccano Outfit	$ 1.00
" 0 " "	2.00
" 1 " "	3.00
" 1x " " (with motor)	5.00
" 2 " "	6.00
" 2x " " (with motor)	8.50
" 3 " "	9.00
" 3x " " (with motor)	11.50
" 4 " " " "	15.00
" 5 " " with motor and transformer	25.00
" 6 " " " " " "	45.00

Commencing with No. 0, each Outfit can be converted into the next larger by the addition of the proper Accessory Outfit. See next column.

ACCESSORY OUTFITS

No. 0A Accessory Outfit	$ 1.25
Converts a No. 0 Outfit into a No. 1 Outfit	
No. 1A Accessory Outfit	3.00
Converts a No. 1 Outfit into a No. 2 Outfit	
No. 2A Accessory Outfit	3.00
Converts a No. 2 Outfit into a No. 3 Outfit	
No. 3A Accessory Outfit	6.00
Converts a No. 3 into a No. 4, except motor	
No. 4A Accessory Outfit	7.50
Converts a No. 4 into a No. 5, except transformer	
No. 5A Accessory Outfit	20.00
Converts a No. 5 Outfit into a No. 6 Outfit	

Accessory Outfits do not contain Motors or Transformers

Meccano Motors and Transformer

E1 Meccano Electric Motor—(one-way)	$ 3.50
E2 " " " (reversing)	4.50
S1 Meccano Clockwork Motor (reversing)	$ 3.00
Type B Transformer (for 110v. 60c. A.C. only)	2.50

Contents of Outfits

No.	Description of Part	00	0	0A	1	1A	2	2A	3	3A	4	4A	5	5A	6
1	Perforated Strips, 12½"	....	....	4	4	6	10	....	10	2	12	4	16	32	48
1A	" " 9½"	....	....	....	....	....	....	....	....	....	....	....	....	2	2
2	" " 5½"	4	4	2	6	8	14	4	18	3	21	5	26	24	50
2A	" " 4½"	....	....	....	....	....	....	....	....	2	2	2	4	....	4
3	" " 3½"	....	....	1	1	1	2	4	6	....	6	6	12	6	18
4	" " 3"	....	....	....	....	....	....	2	2	4	6	2	8	16	24
5	" " 2½"	9	9	....	9	3	12	....	12	6	18	18	36	....	36
6	" " 2"	....	....	....	....	....	....	....	....	....	....	4	4	20	24
6A	" " 1½"	....	....	....	....	2	2	....	2	....	2	4	6	8	14
8	Angle Girders, 12½"	....	....	....	....	4	4	4	8	....	8	6	14	10	24
8A	" " 9½"	....	....	....	....	....	....	....	....	....	....	4	4	....	4
9	" " 5½"	....	....	....	....	....	....	....	....	4	4	....	4	12	16
9D	" " 2½"	....	....	....	....	....	....	....	....	....	....	1	1	....	1
10	Flat Brackets	4	5	....	5	3	8	....	8	....	8	4	12	4	16
11	Double Brackets	....	2	....	2	2	4	....	4	1	5	3	8	8	16
12	Angle Brackets, ½"×½"	6	8	....	8	4	12	2	14	8	22	14	36	44	80
12A	" " 1"×1"	....	....	....	....	2	2	1	3	1	4	....	4	....	4
12B	" " 1"×½"	....	....	....	....	....	....	....	....	....	....	....	....	2	2
13	Axle Rods, 11½"	....	....	....	....	....	....	....	....	2	2	....	2	2	4
13A	" " 8"	....	....	....	....	....	....	....	....	1	1	....	1	3	4
14	" " 6"	....	....	....	....	....	....	....	....	3	3	....	3	1	4
15	" " 5"	....	....	....	....	2	2	....	2	2	4	....	4	....	4
15A	" " 4½"	....	....	....	....	1	1	2	3	2	5	....	5	....	5
16	" " 3½"	2	2	1	3	1	4	....	4	1	5	....	5	....	5
16A	" " 2½"	....	....	....	....	....	....	....	....	....	....	....	....	2	2
17	" " 2"	2	2	....	2	....	2	....	2	3	5	....	5	....	5
18A	" " 1½"	....	....	1	1	1	2	....	2	2	4	....	4	....	4
19	Crank Handles	1	1	....	1	....	1	1	2	....	2	....	2	1	3
19A	Wheels, 3"	....	....	....	....	....	....	....	....	....	....	4	4	....	4
19B	Pulley Wheels, 3"	....	....	....	....	....	....	1	1	....	1	1	2	....	2
20	Flanged Wheels	....	....	....	....	4	4	....	4	4	8	....	8	....	8
21	Pulley Wheels, 1½"	....	....	....	....	....	....	1	1	....	1	1	2	....	2
22	" " 1" (Fast)	4	4	....	4	....	4	....	4	....	4	....	4	1	5
22A	" " 1" (Loose)	....	....	2	2	....	2	....	2	1	3	....	3	1	4
23	½" (Loose)	1	1	....	1	....	1	....	1	2	3	....	3	5	8
24	Bush Wheels	1	1	....	1	....	1	....	1	1	2	....	2	3	5
25	Pinion Wheels, ½"	....	....	....	....	....	....	....	....	....	....	....	....	2	2
26	" " ⅜"	....	....	....	....	....	....	2	2	....	2	1	3	3	6
27	Gear Wheels, 50 Teeth	....	....	....	....	....	....	....	....	....	....	....	....	1	1
27A	" " 57 "	....	....	....	....	....	....	1	1	....	1	1	2	1	3
28	Contrate Wheels, 1½"	....	....	....	....	....	....	....	....	1	1	....	1	1	2
29	" " ¾"	....	....	....	....	....	....	....	....	2	2	....	2	....	2
32	Worm Wheels	....	....	....	....	....	....	1	1	....	1	....	1	1	2
33	Pawls (complete)	....	....	....	....	....	....	1	1	....	1	....	1	1	2
34	Spanners	....	....	1	1	....	1	....	1	1	2	....	2	....	2
35	Spring Clips	4	6	2	8	4	12	....	12	6	18	....	18	6	24
36	Screw Drivers	1	1	....	1	....	1	....	1	....	1	....	1	....	1
36A	" (extra long)	....	....	....	....	....	....	....	....	....	....	1	1	....	1
37	Nuts and Bolts	20	25	5	30	25	55	35	90	40	130	45	175	125	300
38	Washers	....	6	....	6	6	12	....	12	12	24	....	24	6	30
40	Hanks of Cord	1	1	....	1	1	2	1	3	1	4	2	6	....	6
41	Propeller Blades	....	....	....	....	....	....	....	....	....	....	2	2	2	4
43	Springs	....	....	....	....	....	....	....	....	1	1	....	1	1	2
44	Cranked Bent Strips	1	1	....	1	....	1	....	1	....	1	....	1	....	1
45	Double Bent Strips	....	....	....	....	1	1	....	1	2	3	....	3	5	8
46	Double Angle Strips, 2½"×1"	....	....	....	....	....	....	1	1	1	2	2	4	....	4
47	" " " 2½"×1½"	....	....	....	....	....	....	....	....	....	....	1	1	1	2
47A	" " " 3" ×1½"	....	....	....	....	....	....	....	....	....	....	2	2	....	2
48	" " " 1½"× ⅜"	....	....	....	....	....	....	....	....	2	2	....	2	....	2
48A	" " " 2½"× ½"	2	4	2	6	2	8	2	10	....	10	....	10	6	16
48B	" " " 3½"× ½"	....	....	....	....	....	....	2	2	4	6	....	6	....	6
48D	" " " 5½"× ½"	....	....	....	....	....	....	....	....	2	2	2	4	3	7
50	Eye Pieces	....	....	....	....	....	....	....	....	....	....	1	1	1	2
52	Perforated Flanged Plates, 5½"×2½"	1	1	....	1	....	1	1	2	....	2	2	4	3	7
52A	Flat Plates, 5½"×3½"	....	....	....	....	....	....	....	....	....	....	2	2	....	2
53	Perforated Flanged Plates, 3½"×2½"	....	....	....	....	....	....	3	3	2	5	....	5	3	8
53A	Flat Plates, 4½"×2½"	....	....	....	....	....	....	....	....	....	....	....	....	1	1
54	Perforated Flanged Plates (Sector)	....	1	1	2	....	2	....	2	1	3	....	3	1	4
56	Instruction Manuals	1	1	1	1	....	1	....	1	1	2	....	2	....	2
57	Hooks	1	1	....	1	....	1	....	1	....	1	1	2	....	2
58	Spring Cord, 40" length	....	....	....	....	....	....	....	....	....	....	....	....	1	1
59	Collars with Set Screws	....	....	....	....	....	....	4	4	6	10	3	13	5	18
61	Windmill Sails	....	....	....	....	....	....	....	....	4	4	....	4	....	4
62	Cranks	....	....	....	....	2	2	....	2	....	2	....	2	1	3
62A	Threaded Cranks	....	....	....	....	....	....	....	....	....	....	....	....	1	1
63	Couplings	....	....	....	....	....	....	1	1	5	6	....	6	3	9
65	Centre Forks	....	....	....	....	....	....	....	....	1	1	....	1	....	1
70	Flat Plates, 5½"×2½"	....	....	....	....	....	....	....	....	....	....	1	1	2	3
72	" " 2½"×2½"	....	....	....	....	....	....	....	....	....	....	....	....	2	2
76	Triangular Plates, 2½"	....	....	....	....	....	....	....	....	....	....	....	....	1	1
77	" " 1"	....	....	....	....	....	....	....	....	2	2	....	2	....	2
80A	Screwed Rods, 3½"	....	....	....	....	....	....	....	....	....	....	....	....	1	1
81	" " 2"	....	....	....	....	....	....	....	....	....	....	....	....	1	1
89	Curved Strips, 5½"	....	....	....	....	....	....	....	....	....	....	4	4	....	4
90	" " 2½"	....	....	....	....	....	....	4	4	....	4	2	6	....	6
94	Sprocket Chain	....	....	....	....	....	....	....	....	3′	3′	....	3′	5′	8′
95	Sprocket Wheels, 2"	....	....	....	....	....	....	....	....	1	1	1	2	1	3
95A	" " 1½"	....	....	....	....	....	....	....	....	....	....	....	....	1	1
96	" " 1"	....	....	....	....	....	....	....	....	2	2	....	2	2	4
96A	" " ¾"	....	....	....	....	....	....	....	....	....	....	....	....	1	1

(Continued on next page)

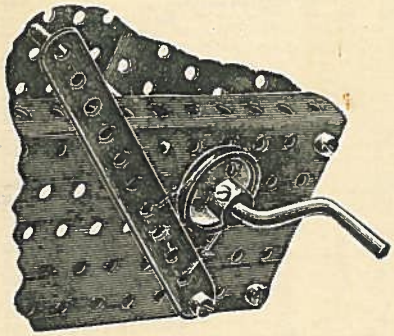
Contents of Outfits

(Continued)

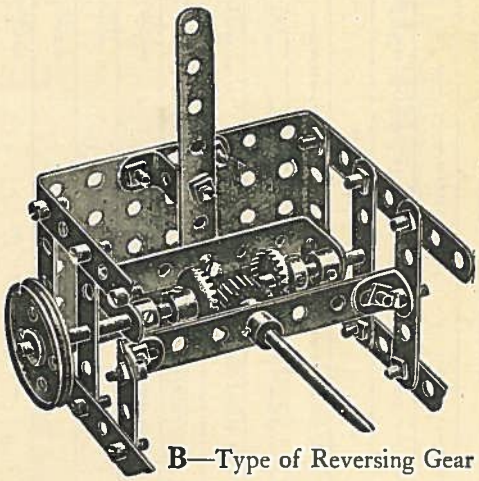
No.	Description of Part	00	0	0A	1	1A	2	2A	3	3A	4	4A	5	5A	6
97	Braced Girders, 3½"	....	....	....	....	....	....	....	....	....	....	....	....	4	4
98	" " 2½"	....	....	....	....	....	....	1	1	....	1	....	1	7	8
99	" " 12½"	....	....	....	....	....	....	....	....	4	4	....	4	4	8
100	" " 5½"	....	....	....	....	2	2	....	2	4	6	1	7	7	14
102	Single Bent Strips	....	....	....	....	....	....	....	....	....	....	2	2	....	2
103F	Flat Girders, 2½"	....	....	....	....	....	....	....	....	2	2	....	2	....	2
108	Architraves	....	....	....	....	....	....	....	....	2	2	....	2	2	4
109	Face Plates, 2½"	....	....	....	....	....	....	....	....	1	1	....	1	....	1
110	Rack Strips, 3½"	....	....	....	....	....	....	....	....	....	....	....	....	2	2
111	Bolts, ½"	....	....	....	....	....	....	2	2	1	3	....	3	....	3
115	Threaded Pins	....	....	....	....	1	1	....	1	1	2	....	2	....	2
116	Fork Pieces	....	....	....	....	....	....	1	1	....	1	....	1	....	1
123	Cone Pulleys	....	....	....	....	....	....	....	....	....	....	....	....	1	1
125	Reversed Angle Brackets, ½"	2	2	....	2	2	4	....	4	....	4	....	4	....	4
126A	Flat Trunnions	2	2	....	2	....	2	2	4	....	4	1	5	....	5
128	Boss Bell Cranks	....	....	....	....	....	....	....	....	....	....	1	1	....	1
130	Triple Throw Eccentrics	....	....	....	....	....	....	....	....	2	2	....	2	....	2
134	Crank Shafts, 1" stroke	....	....	....	....	....	....	1	1	....	1	....	1	....	1
135	Theodolite Protractors	....	....	....	....	....	....	....	....	....	....	....	....	1	1
	Electric Motors	....	....	....	....	....	....	....	....	....	1	....	1	....	1
	Transformers	....	....	....	....	....	....	....	....	....	....	....	1	....	1

NOTE: Outfits Nos. 1x, 2x and 3x have the same contents as Outfits Nos. 1, 2 and 3 respectively, and in addition an Electric Motor.

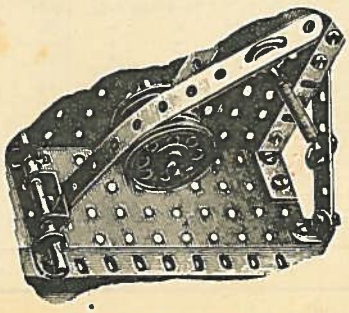
Standard Details of Construction



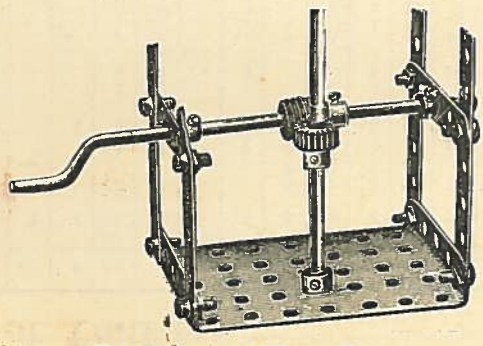
A—A Brake Mechanism suitable for controlling winding or similar spindles



B—Type of Reversing Gear



C—Spring controlled Band Friction Brake



D—Worm and Worm Gear

MECCANO

Hornby's Original System, First Patented 1901

PATENTED IN THE UNITED STATES

Jan. 16, 1906	Jan. 4, 1916	Oct. 24, 1916	Oct. 19, 1920
Nov. 18, 1913	Feb. 15, 1916	Oct. 9, 1917	Dec. 14, 1920
Nov. 23, 1915	Aug. 1, 1916	Dec. 24, 1918	Apr. 11, 1922
Dec. 21, 1915	Aug. 29, 1916	Feb. 11, 1919	May 15, 1923

Design Patent July 4, 1916

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 do the corresponding engineering elements in actual practice. No other system of model construction can be correct, and other toys which attempt the same object by other methods must avail themselves of constructive elements which are not correct engineering elements. Consequently, though a boy may succeed in building playthings with them, they are merely toys and nothing else.