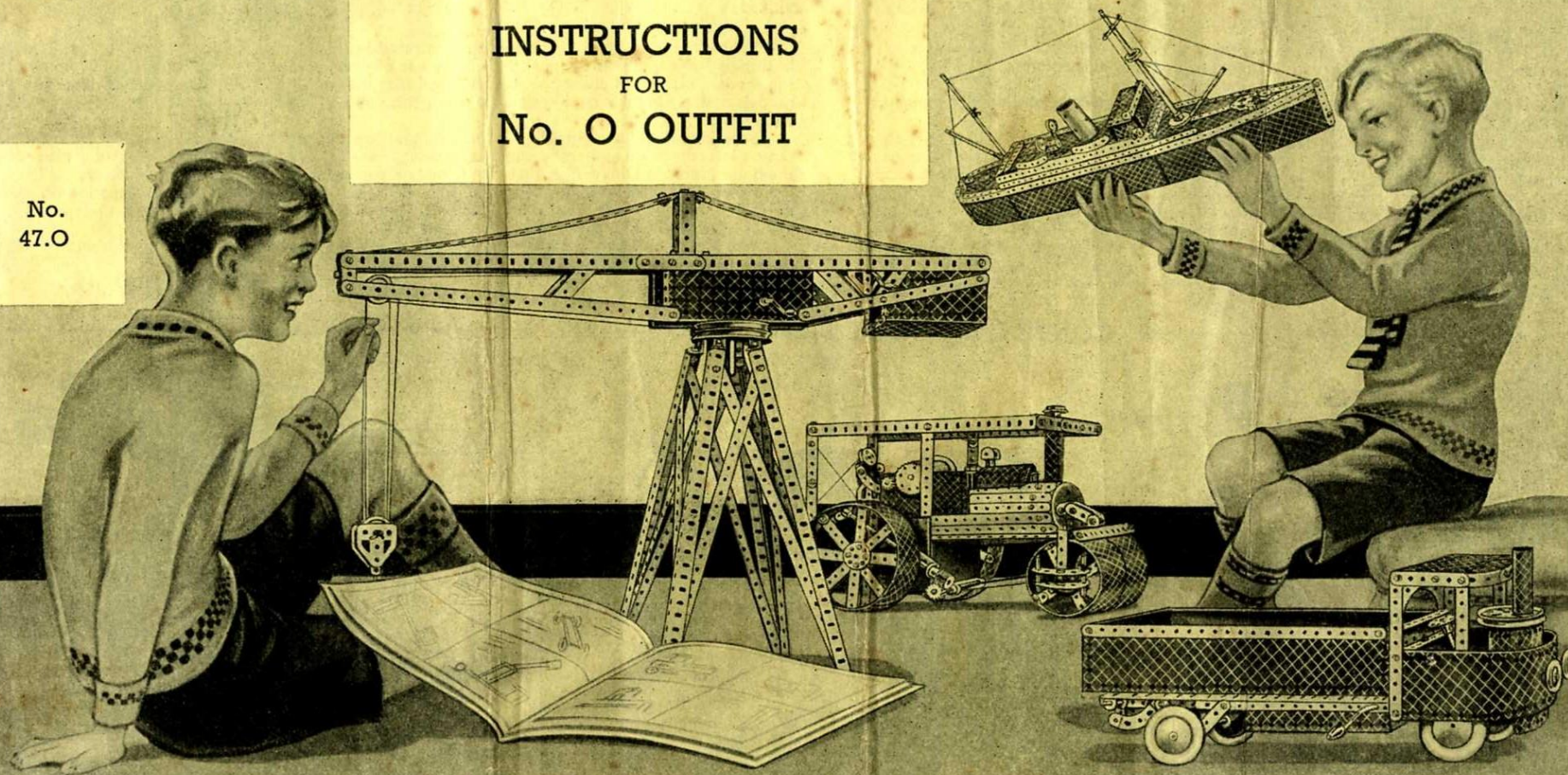


MECCANO

INSTRUCTIONS
FOR
No. O OUTFIT

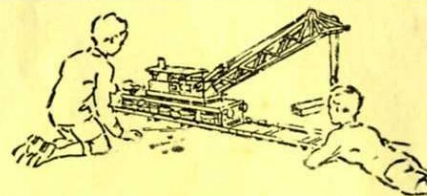
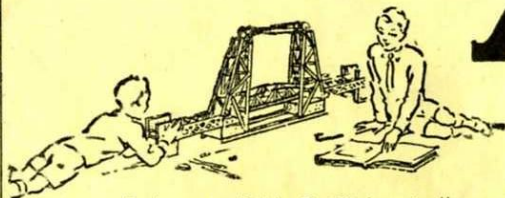
No.
47.O



MECCANO

REAL ENGINEERING IN YOUR PLAY HOURS

HOW TO BEGIN



Each part of this Outfit is actually a real engineering part in miniature. The only tools required for fitting them together and making the splendid models illustrated in this book are a Spanner and a Screwdriver, both of which you will find in the Outfit.

First select the model you want to build, and then lay out on the table all the parts detailed in the "Parts Required" list. The illustrated list below will help you.

Take Model No. O.5 as an example. Begin by bolting the Flat Trunnions that support the uprights of the swing to the Flanged Plate. Then bolt the uprights themselves to the Trunnions and join their upper ends with a $2\frac{1}{2}$ " \times $\frac{1}{2}$ " Double Angle Strip as shown. The Strips that form the backstays to the uprights, and the swing seat, can then be added.

In some models it is necessary to join certain parts together so that, although they cannot come apart, they are free to pivot or move in relation to one another. To do this the parts are bolted together as usual but the nut is not screwed up tightly, so that the parts are not gripped. Then, to prevent the nut from unscrewing, a second nut is screwed up tightly against it, the first nut being held with a spanner. This method of using a second nut is known as lock-nutting.

When you have built all the models illustrated in this Manual the fun is not over but is just beginning! Now comes the chance to make use of your own ideas. First of all rebuild some of the models with small changes in construction that may occur to you; then try building simple models entirely of your own design. In doing this you will feel the real thrill of the engineer and the inventor.

Several of the illustrations in this Manual show how miniature figures and various small articles can be introduced to add realism to the models. These are not included in the Outfit. Many of them are Meccano Dinky Toys that can be bought separately from your Meccano dealer.

If you ever meet with any small difficulty, or if you wish to have further information on any point in connection with your model-building, write to Meccano Ltd., Binns Road, Liverpool 13, and your letter will be answered fully and promptly.

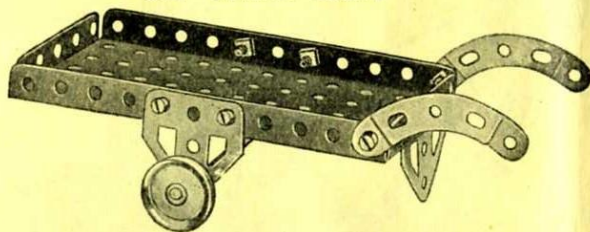
The Meccano Plates (Flanged, Flat, Curved, etc.) are shown in the Manual models with white lines. In the new Meccano Outfits these parts are plain.

CONTENTS OF MECCANO No. O OUTFIT

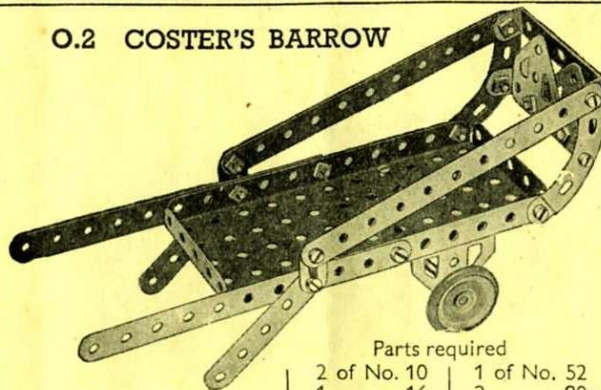
No.	Description	Quantity
5	Perforated Strips, $5\frac{1}{2}$ "	4
10	" " $2\frac{1}{2}$ "	2
10	Fishplates	4
12	Angle Brackets, $\frac{1}{2}$ " \times $\frac{1}{2}$ "	4
17	Axle Rods, $3\frac{1}{2}$ "	1
17	" " 2"	1
19s	Crank Handles, $3\frac{1}{2}$ " shaft	1

No.	Description	Quantity
22	Pulleys 1" diam. with boss and screw	2
24	Bush Wheels	1
34	Spanners	1
35	Spring Clips	4
36	Screwdrivers	1
37a	Nuts	22
37b	Bolts, $\frac{7}{32}$ "	18
38	Washers	2

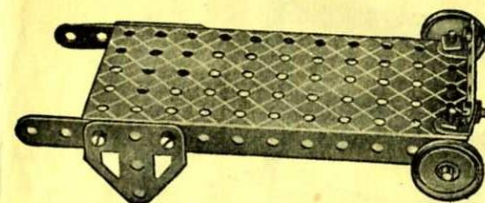
No.	Description	Quantity
38a	Double Angle Strips, $2\frac{1}{2}$ " \times $\frac{1}{2}$ "	2
52	Perforated Flanged Plates, $5\frac{1}{2}$ " \times $2\frac{1}{2}$ "	1
90a	Curved Strips, $2\frac{1}{2}$ " stepped	2
111c	Bolts, $\frac{3}{8}$ "	2
126	Trunnions	2
126a	Flat Trunnions	2
155	Rubber Rings to fit 1" Pulleys	2

O.1 HAND CART**Parts required**

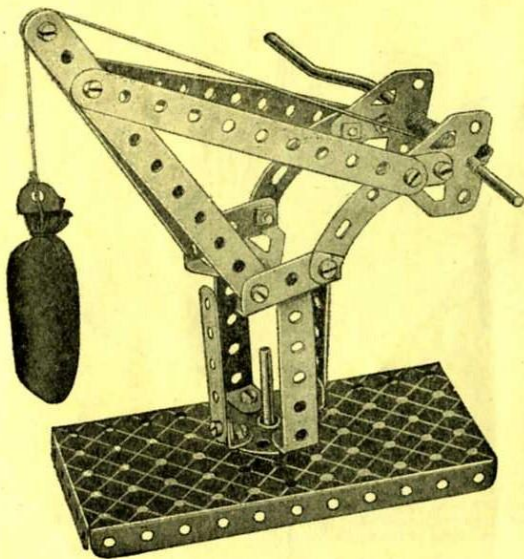
1 of No. 16	1 of No. 52	2 of No. 126a
2 " " 22	2 " " 90a	2 " " 155
8 " " 37	1 " " 126	

O.2 COSTER'S BARROW**Parts required**

2 of No. 10	1 of No. 52
1 " " 16	2 " " 90a
2 " " 22	2 " " 126
16 " " 37	2 " " 126a
2 " " 48a	2 " " 155
4 of No. 2	
2 " " 5	

O.3 FLAT TRUCK**Parts required**

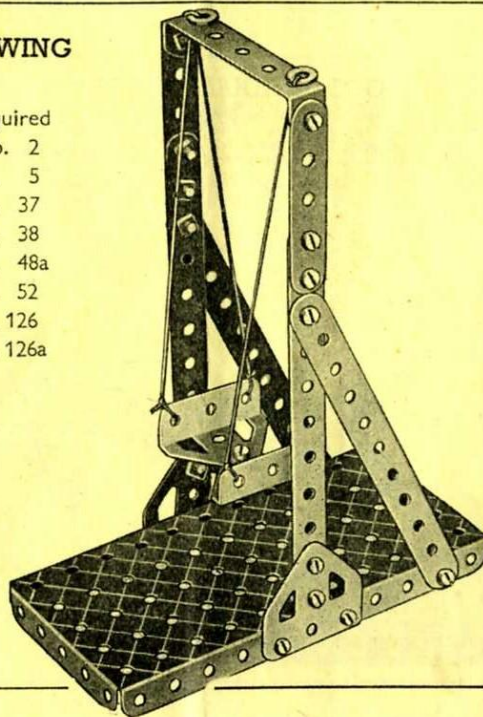
2 of No. 5	2 of No. 22	1 of No. 90a
2 " " 12	8 " " 37	2 " " 126a
1 " " 16	1 " " 52	2 " " 155

O.4 DOCKSIDE CRANE**Parts required**

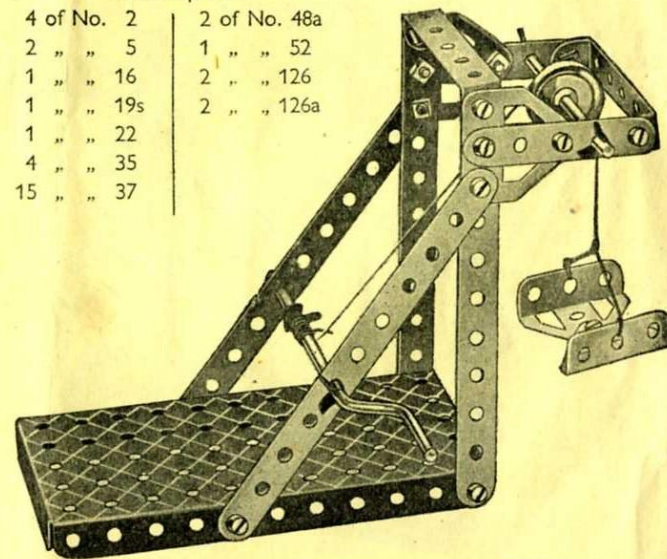
4 of No. 2
2 " " 5
3 " " 12
1 " " 17
1 " " 19s
1 " " 22
1 " " 24
2 " " 35
18 " " 37
2 " " 37a
2 " " 38
2 " " 48a
1 " " 52
2 " " 90a
2 " " 111c
2 " " 126
2 " " 126a

O.5 SWING**Parts required**

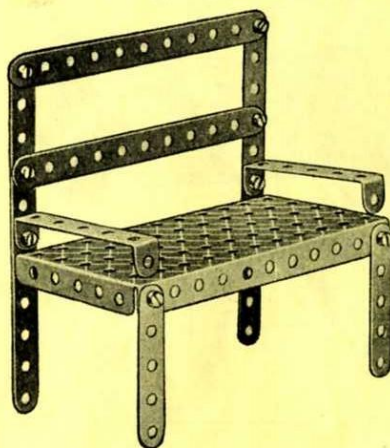
4 of No. 2
2 " " 5
18 " " 37
2 " " 38
1 " " 48a
1 " " 52
2 " " 126
2 " " 126a

**O.6 ELEVATOR****Parts required**

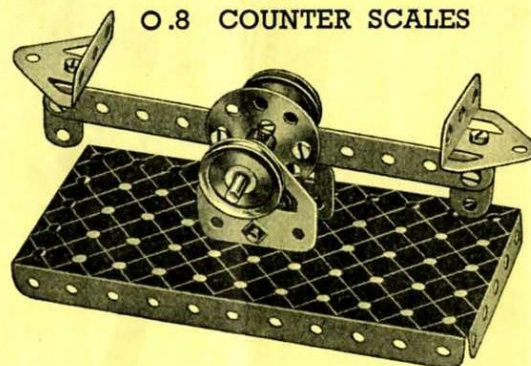
4 of No. 2	2 of No. 48a
2 " " 5	1 " " 52
1 " " 16	2 " " 126
1 " " 19s	2 " " 126a
1 " " 22	
4 " " 35	
15 " " 37	



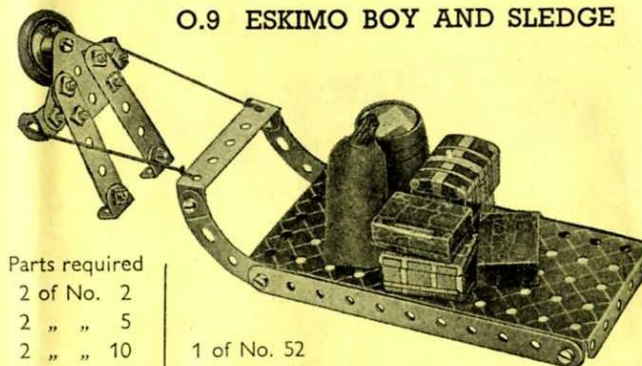
These Models can be built with MECCANO No. O Outfit

O.7 GARDEN SEAT**Parts required**

4 of No. 2	5
2 " " 5	
10 " " 37	
2 " " 48a	
1 " " 52	

O.8 COUNTER SCALES**Parts required**

1 of No. 2	2 of No. 22	1 of No. 52
2 " " 10	1 " " 24	2 " " 126
4 " " 12	9 " " 37	2 " " 126a
1 " " 17	2 " " 38	

O.9 ESKIMO BOY AND SLEDGE**Parts required**

2 of No. 2	
2 " " 5	
2 " " 10	1 of No. 52
4 " " 12	2 " " 90a
1 " " 22	1 " " 111c
14 " " 37	1 " " 126a
1 " " 48a	1 " " 155

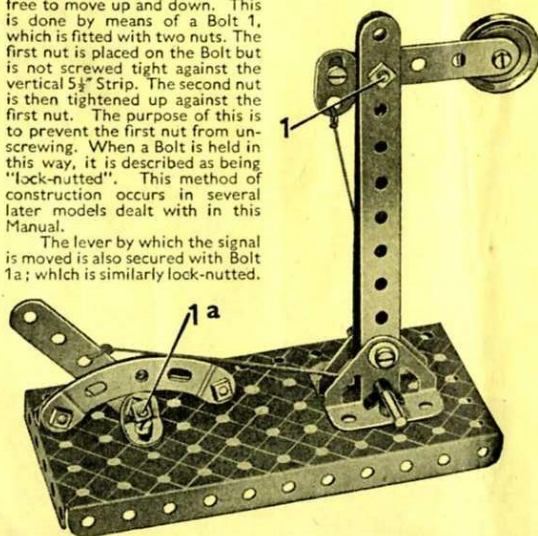
O.10 SIGNAL

The signal arm is attached to the post in such a way that it is free to move up and down. This is done by means of a Bolt 1, which is fitted with two nuts. The first nut is placed on the Bolt but is not screwed tight against the vertical 5½" Strip. The second nut is then tightened up against the first nut. The purpose of this is to prevent the first nut from unscrewing. When a Bolt is held in this way, it is described as being "lock-nutted". This method of construction occurs in several later models dealt with in this Manual.

The lever by which the signal is moved is also secured with Bolt 1a; which is similarly lock-nutted.

Parts required

2 of No. 2
2 " " 5
1 " " 10
3 " " 12
1 " " 17
1 " " 22
2 " " 35
11 " " 37
3 " " 37a
2 " " 38
1 " " 52
2 " " 90a
2 " " 111c
2 " " 126

**O.11 RADIAL CRANE**

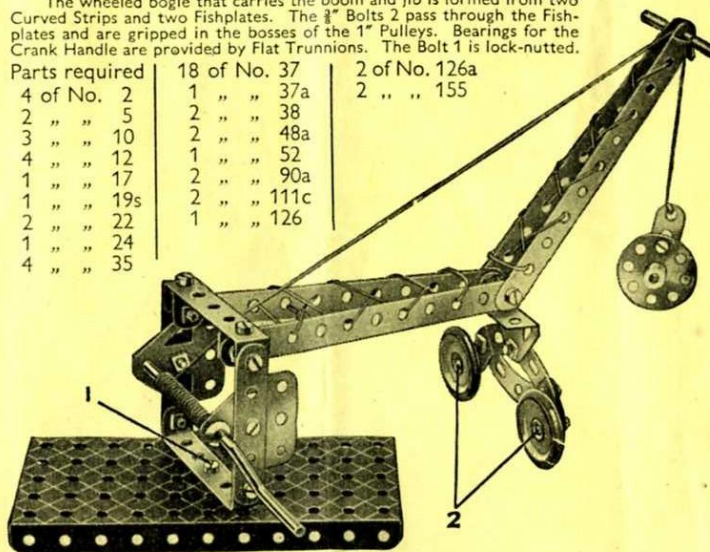
The wheeled bogie that carries the boom and jib is formed from two Curved Strips and two Fishplates. The ½" Bolts 2 pass through the Fishplates and are gripped in the bosses of the 1" Pulleys. Bearings for the Crank Handle are provided by Flat Trunnions. The Bolt 1 is lock-nutted.

Parts required

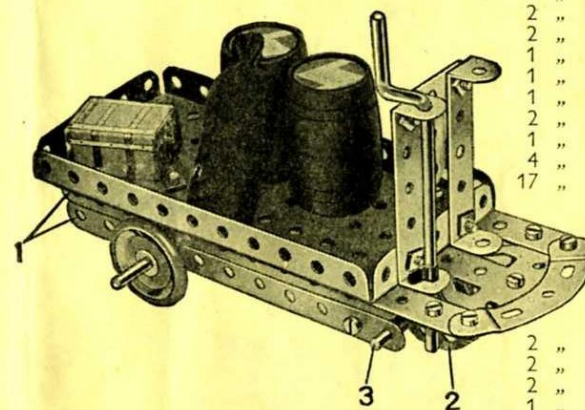
4 of No. 2
2 " " 5
3 " " 10
4 " " 12
1 " " 17
1 " " 19s
2 " " 22
1 " " 24
4 " " 35

18 of No. 37
1 " " 37a
2 " " 38
2 " " 48a
1 " " 52
2 " " 90a
2 " " 111c
1 " " 126

2 of No. 126a
2 " " 155

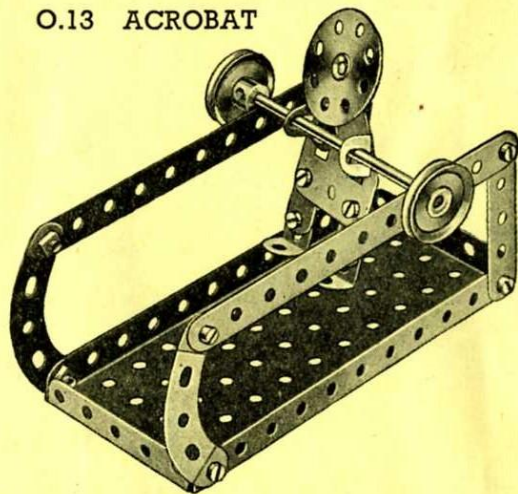
**O.12 ELECTRIC TRUCK****Parts required**

4 of No. 2
2 " " 5
2 " " 10
2 " " 12
1 " " 16
1 " " 17
1 " " 19s
2 " " 22
1 " " 24
4 " " 35
17 " " 37

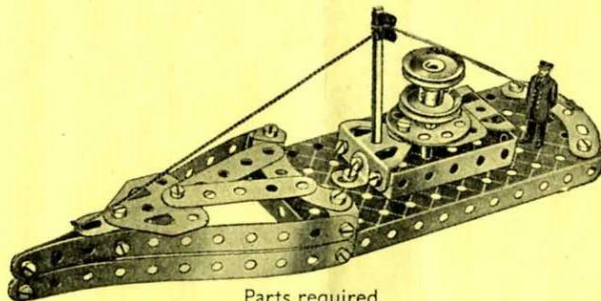


The two 5½" Strips 1 are fastened on each side of the model to the Flanged Plate by a Trunnion secured to the Plate on the underneath side. A Bush Wheel 2 is fixed on the Axle Rod 3, which passes through the end holes of the 5½" Strips that form the sides of the truck frame.

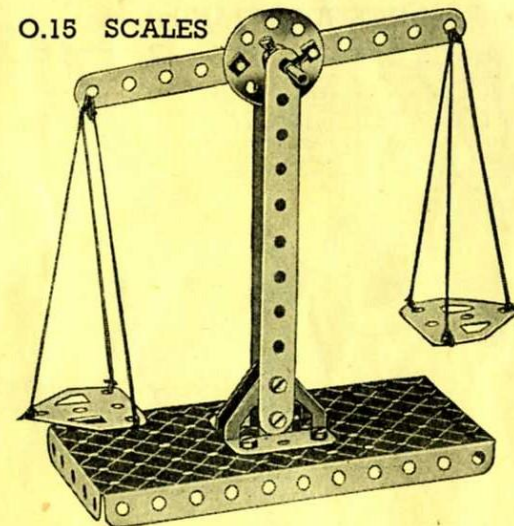
2 " " 37a
2 " " 38
2 " " 48a
1 " " 52
2 " " 90a
2 " " 111c
2 " " 126
2 " " 126a
2 " " 155

O.13 ACROBAT**Parts required**

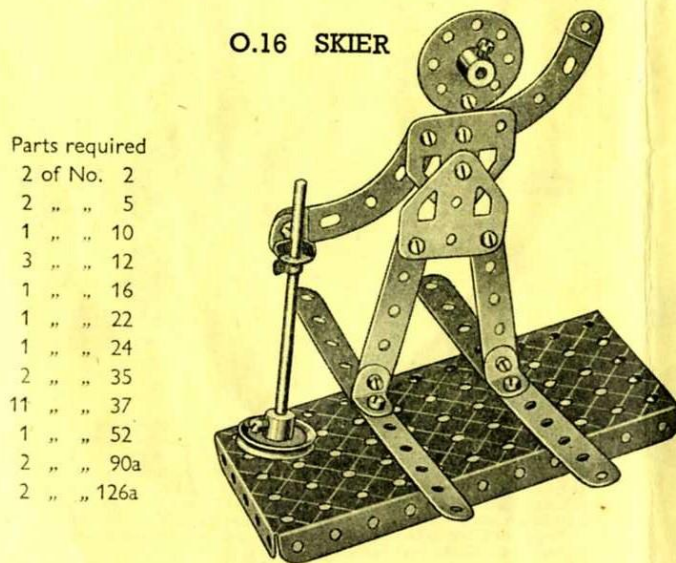
2 of No. 2
2 " " 5
3 " " 10
4 " " 12
1 " " 16
2 " " 22
1 " " 24
15 " " 37
1 " " 52
2 " " 90a
1 " " 111c
1 " " 126a

O.14 BATTLESHIP**Parts required**

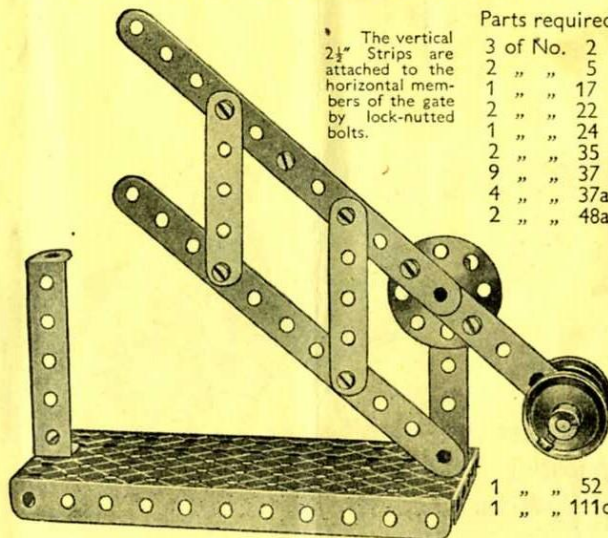
4 of No. 2	2 of No. 22	1 of No. 52
2 " " 5	1 " " 24	2 " " 90a
3 " " 10	3 " " 35	1 " " 111c
4 " " 12	18 " " 37	2 " " 126
1 " " 16	1 " " 37a	2 " " 126a
1 " " 17	2 " " 48a	

O.15 SCALES**Parts required**

3 of No. 2
1 " " 17
1 " " 24
2 " " 35
10 " " 37
1 " " 52
2 " " 126
2 " " 126a

O.16 SKIER**Parts required**

2 of No. 2
2 " " 5
1 " " 10
3 " " 12
1 " " 16
1 " " 22
1 " " 24
2 " " 35
11 " " 37
1 " " 52
2 " " 90a
2 " " 126a

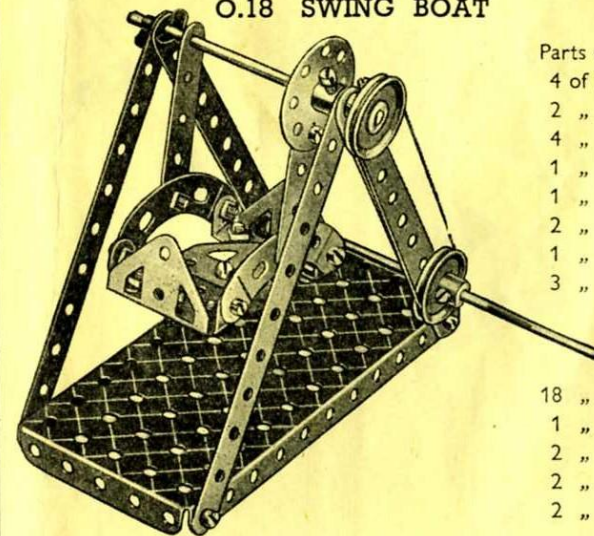
O.17 LEVEL CROSSING BARRIER

The vertical
2½" Strips are
attached to the
horizontal mem-
bers of the gate
by lock-nutted
bolts.

Parts required

3 of No. 2
2 " " 5
1 " " 17
2 " " 22
1 " " 24
2 " " 35
9 " " 37
4 " " 37a
2 " " 48a

1 " " 52
1 " " 111c

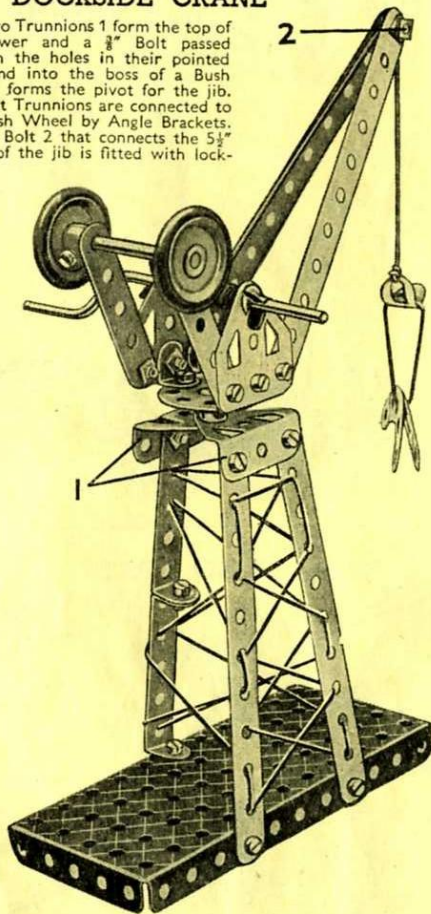
O.18 SWING BOAT**Parts required**

4 of No. 2
2 " " 5
4 " " 12
1 " " 16
1 " " 19s
2 " " 22
1 " " 24
3 " " 35

18 " " 37
1 " " 52
2 " " 90a
2 " " 126
2 " " 126a

O.19 DOCKSIDE CRANE

Two Trunnions 1 form the top of the tower and a $\frac{3}{4}$ " Bolt passed through the holes in their pointed ends and into the boss of a Bush Wheel, forms the pivot for the jib. The Flat Trunnions are connected to the Bush Wheel by Angle Brackets. The $\frac{3}{4}$ " Bolt 2 that connects the $5\frac{1}{2}$ " strips of the jib is fitted with lock-nuts.

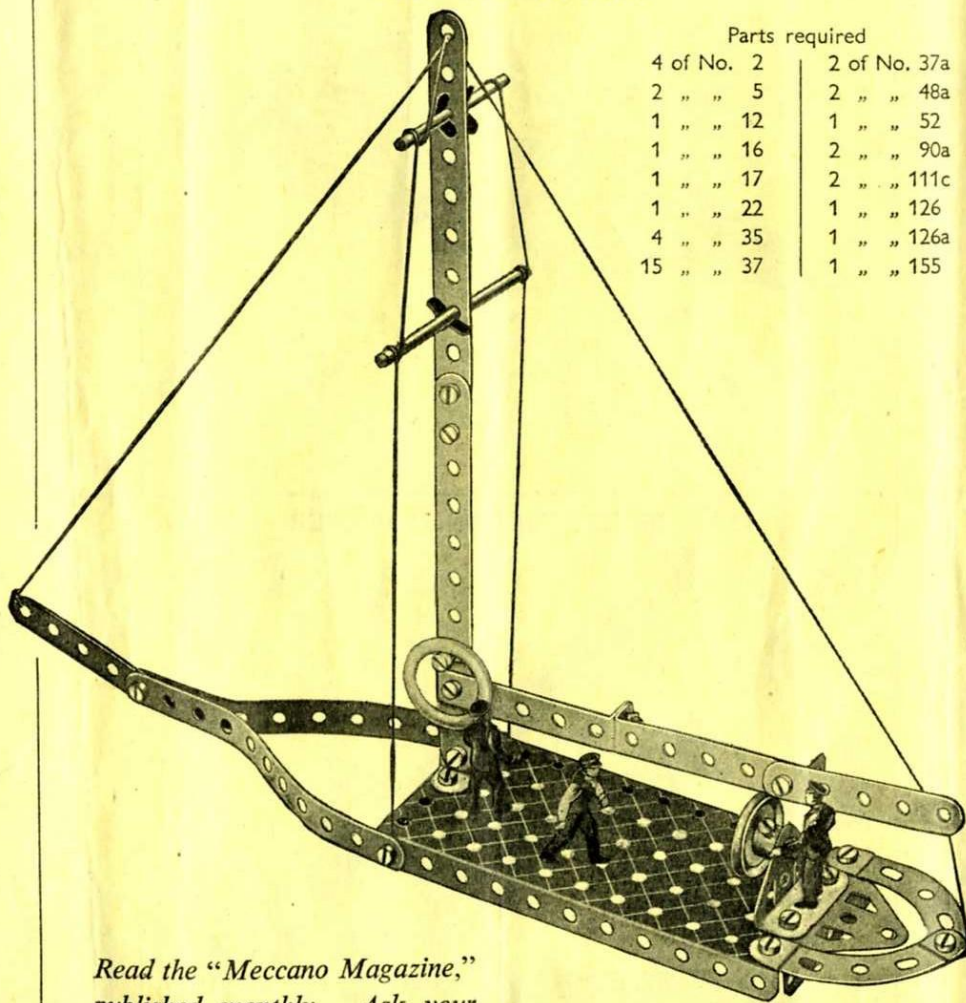


Parts required		
4 of No. 2	1 of No. 24	1 of No. 52
2 " " 5	2 " " 35	2 " " 90a
3 " " 12	15 " " 37	2 " " 111c
1 " " 17	25 " " 37a	2 " " 126
1 " " 19s	2 " " 38	2 " " 126a
2 " " 22	2 " " 48a	2 " " 155

O.20 SAILING BOAT

Parts required

4 of No. 2	2 of No. 37a
2 " " 5	2 " " 48a
1 " " 12	1 " " 52
1 " " 16	2 " " 90a
1 " " 17	2 " " 111c
1 " " 22	1 " " 126
4 " " 35	1 " " 126a
15 " " 37	1 " " 155

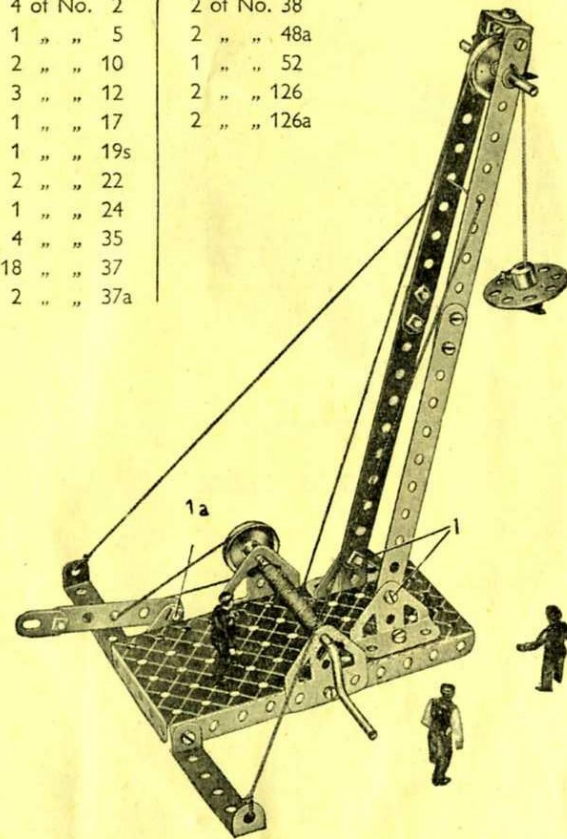


Read the "Meccano Magazine," published monthly. Ask your dealer for full particulars.

O.21 DERRICK CRANE

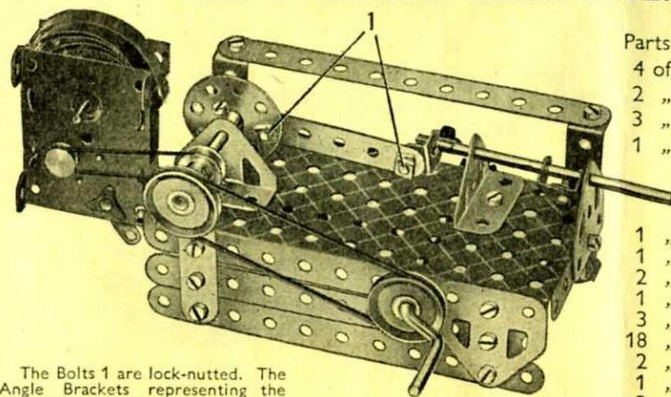
Parts required

4 of No. 2	2 of No. 38
1 " " 5	2 " " 48a
2 " " 10	1 " " 52
3 " " 12	2 " " 126
1 " " 17	2 " " 126a
1 " " 19s	
2 " " 22	
1 " " 24	
4 " " 35	
18 " " 37	
2 " " 37a	



The construction of the model is commenced by bolting the Trunnions and Flat Trunnions that support the jib and Crank Handle respectively, to the $5\frac{1}{2}$ " x $2\frac{1}{4}$ " Flanged Plate that forms the base of the model. The jib is then assembled and fastened to the Trunnions by means of the lock-nutted Bolts 1. The brake lever is a $2\frac{1}{4}$ " Strip extended by a Fishplate, and is fastened to a second Fishplate bolted to the Flanged Plate by means of a Bolt 1a the nut of which is left sufficiently loose to allow the Strip to move. A length of Cord is fastened to the lever and then passed round the 1" Pulley on the Crank Handle.

O.22 STATIONARY STEAM ENGINE



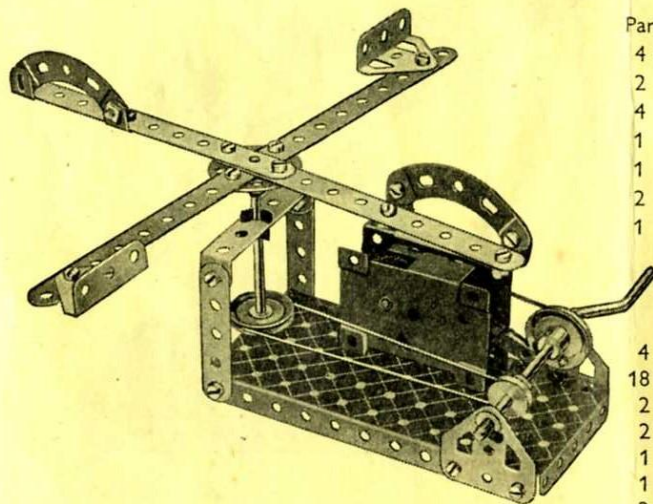
Parts required

4 of No. 2
2 " " 5
3 " " 12
1 " " 16

1 " " 17
1 " " 19s
2 " " 22
1 " " 24
3 " " 35
18 " " 37
2 " " 37a
1 " " 38
2 " " 48a
1 " " 52

The Bolts 1 are lock-nutted. The Angle Brackets representing the piston are clamped to the Rod by a nut and bolt fastened in their elongated holes.

O.24 MERRY-GO-ROUND



Parts required

4 of No. 2
2 " " 5
4 " " 12
1 " " 16
1 " " 19s
2 " " 22
1 " " 24

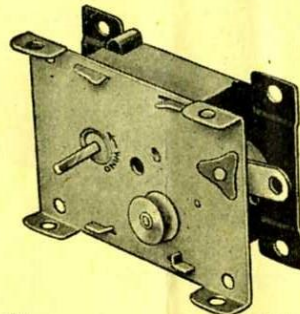
4 " " 35
18 " " 37
2 " " 37a
2 " " 38
1 " " 38a
1 " " 52
2 " " 90a

2 of No. 126

2 " " 126a

Magic Motor (not
in Outfit)

THE MECCANO MAGIC MOTOR



The greatest thrill in Meccano model-building is experienced when a model is set to work by means of a Meccano *Magic Motor*. The illustrations on this page show how the *Magic Motor* can be fitted without any difficulty to No. O Outfit models of various types. Fit the model you have just built with one of these wonderful Motors, and enjoy the fun of watching it work just like the real thing.

The Motor is not included in the Outfit.

2 of No. 111c

2 " " 126

2 " " 126a

Magic Motor (not
in Outfit)

Parts required

3 of No. 2
2 " " 5
1 " " 10

1 of No. 52

2 " " 90a

2 " " 126

2 " " 126a

O.23 MECHANICAL HAMMER

4 of No. 12

1 " " 17

1 " " 19s

2 " " 22

1 " " 24

3 " " 35

15 " " 37

1 " " 38

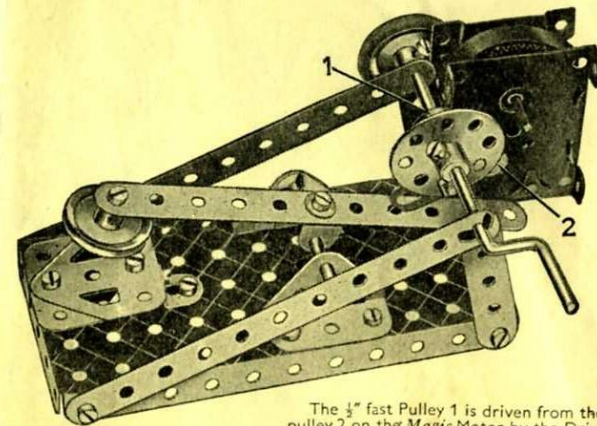
1 " " 52

1 " " 111c

2 " " 126

2 " " 126a

1 " " 155



Magic Motor (not
in Outfit.)

The $\frac{1}{2}$ " fast Pulley 1 is driven from the pulley 2 on the *Magic Motor* by the Driving Band supplied with the Motor.

O.25 WINDMILL

A Driving Band connects the pulley of the *Magic Motor* to a 1" Pulley fastened on the Crank Handle. The Crank Handle carries also a $\frac{1}{2}$ " Pulley, which is connected by a second Driving Band with a further 1" Pulley fixed to the Rod on which the sails are mounted.

Parts required

4 of No. 2

2 " " 5

1 " " 16

1 " " 19s

2 " " 22

1 " " 24

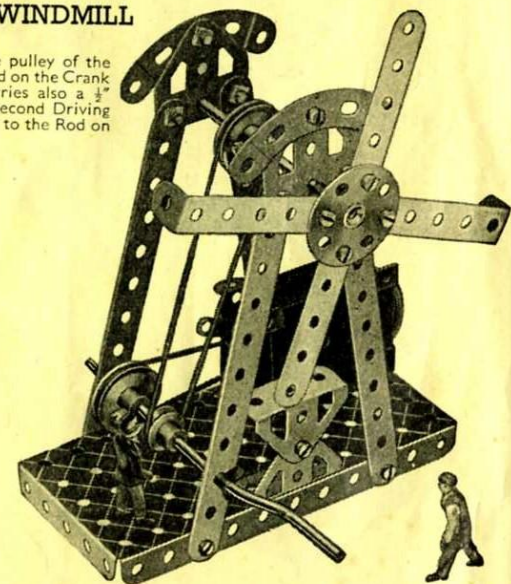
3 " " 35

18 " " 37

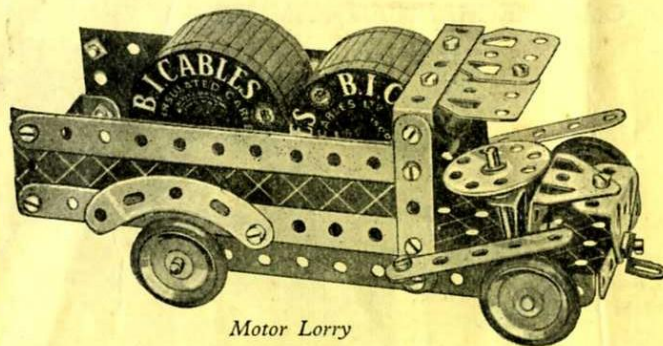
2 " " 38

2 " " 48a

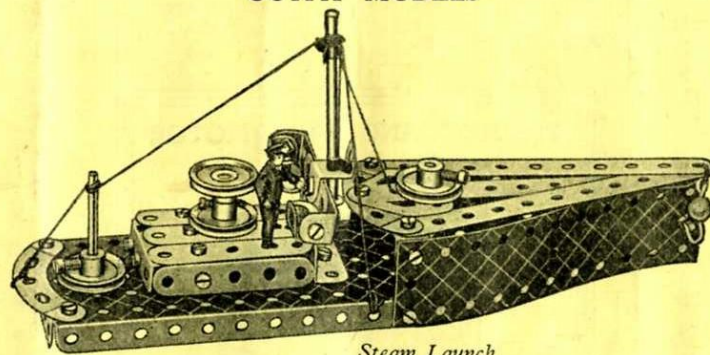
Magic Motor (not
in Outfit.)



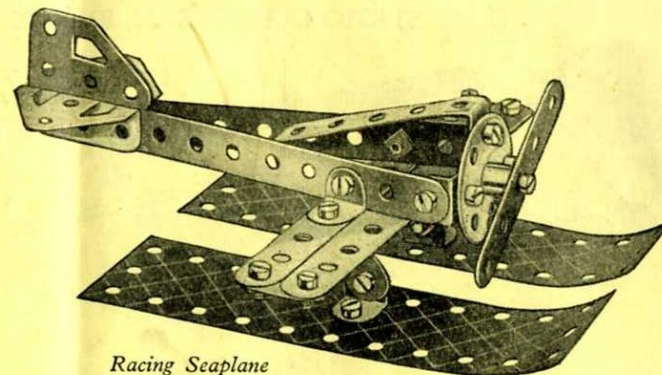
Keep adding to your Outfit

A SELECTION OF MECCANO NO. 1
OUTFIT MODELS

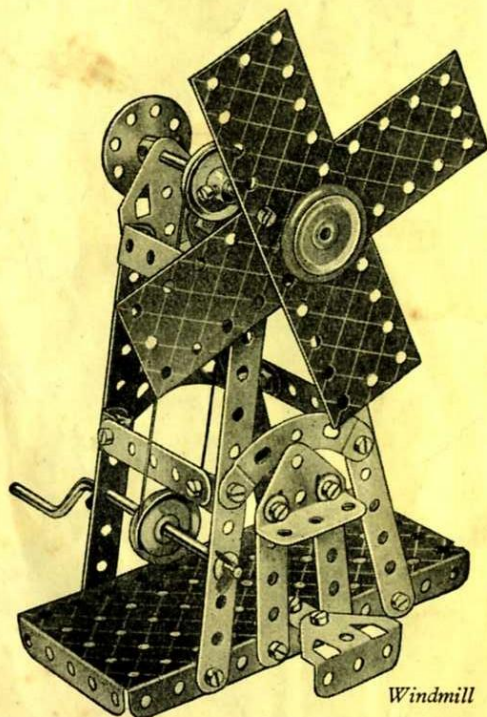
Motor Lorry



Steam Launch



Racing Seaplane



Windmill

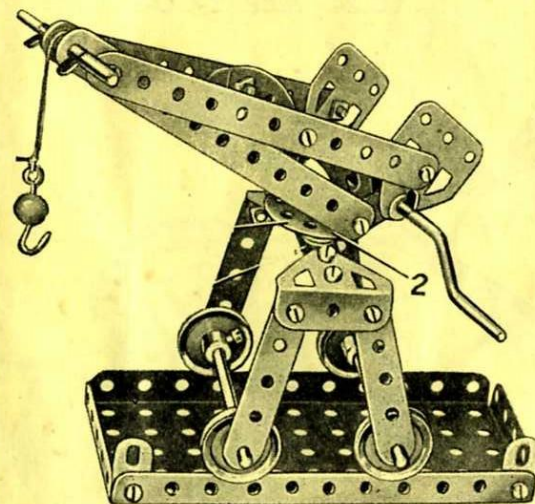
HOW TO CONTINUE

When you have built all the models shown in this Manual you should obtain a copy of the No. 1 Manual from your dealer, together with the selection of Meccano parts listed below. These additional parts will convert your No. 0 Outfit into a No. 1 Outfit, with which it is possible to build larger and more attractive models similar to those illustrated on this page.

Part No.		Quantity
5.	Perforated Strips, $2\frac{1}{2}$ "	2
12	Angle Brackets, $\frac{1}{2}$ " \times $\frac{1}{2}$ "	4
16	Axle Rods, $3\frac{1}{2}$ "	1
17	Axle Rods, $2\frac{1}{2}$ "	1
22	Pulleys, 1" diam. with boss and screw	2
34	Spanners	1
37a	Nuts	8
37b	Bolts, $\frac{3}{8}$ "	6
38	Washers	2
40	Hanks of Cord	1
57c	Hooks, Loaded, Small	1
111c	Bolts, $\frac{3}{8}$ "	2
125	Reversed Angle Brackets, $\frac{1}{2}$ "	1
155	Rubber Ring for 1" Pulleys	2
189	Flexible Plates, $5\frac{1}{2}$ " \times $1\frac{1}{2}$ "	2

The more Meccano parts you have, the bigger and better the models you are able to build. Keen and enthusiastic model-builders keep adding to their Outfits, until they are able to build all the wonderful models shown in the Meccano Manuals.

Remember that the model-building possibilities of the Meccano System are unlimited.



Travelling Crane