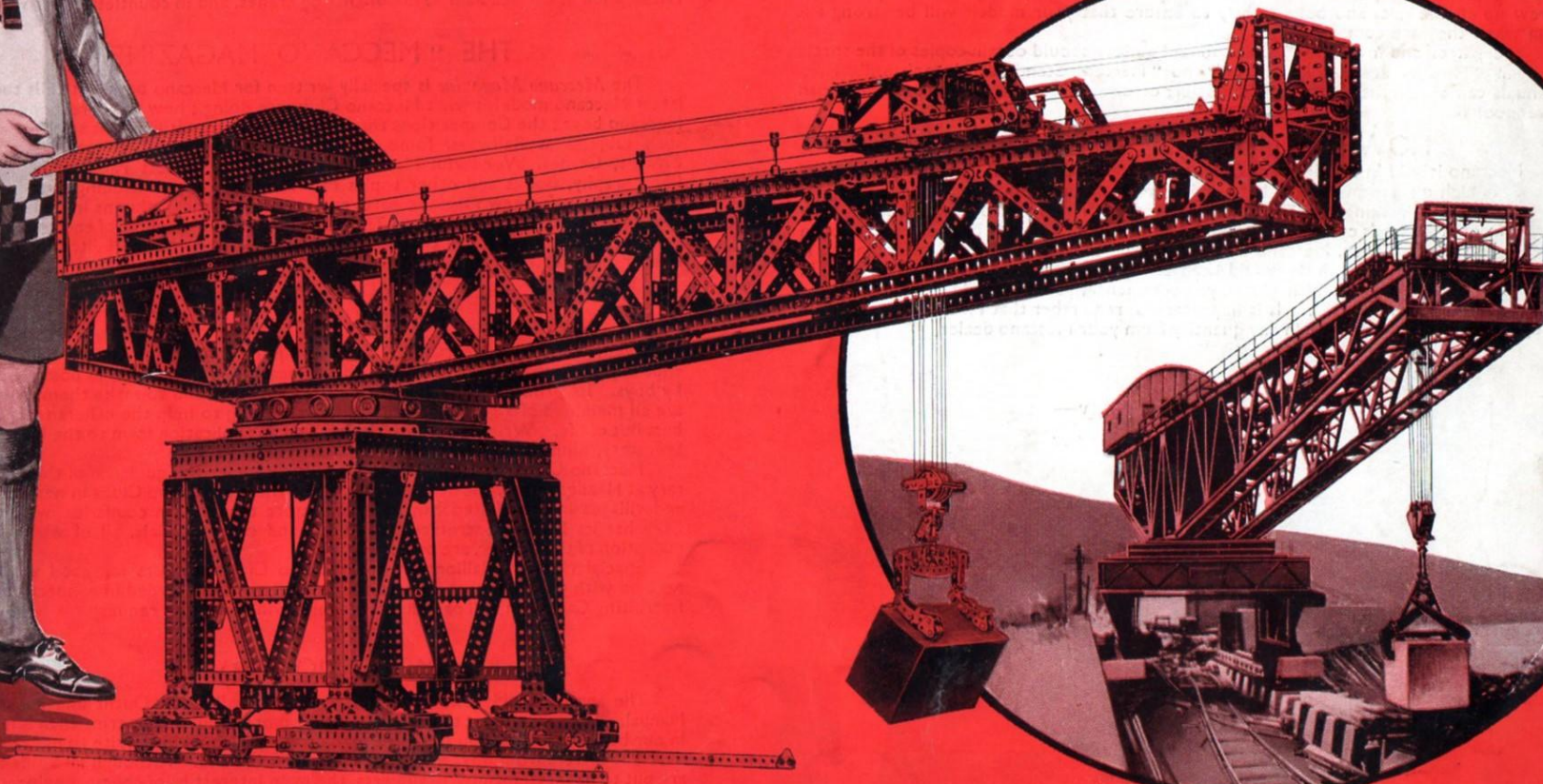


# MECCANO

HORNBY'S ORIGINAL SYSTEM — FIRST PATENTED 1901

INSTRUCTIONS FOR OUTFITS A to C

PRICE  
**6d.**

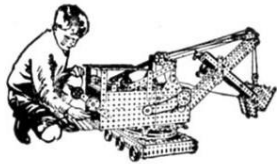


35A-C

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13/635/21 (U.K.)





# MECCANO

HORNBY'S ORIGINAL SYSTEM — FIRST PATENTED 1901



## MODEL-BUILDING WITH MECCANO

There is no limit to the number of models that can be built with Meccano—Cranes, Clocks, Motor Cars, Ship Coalers, Machine Tools, Locomotives—in fact everything that interests boys. A screwdriver and a spanner, both of which are provided in each Outfit, are the only tools necessary.

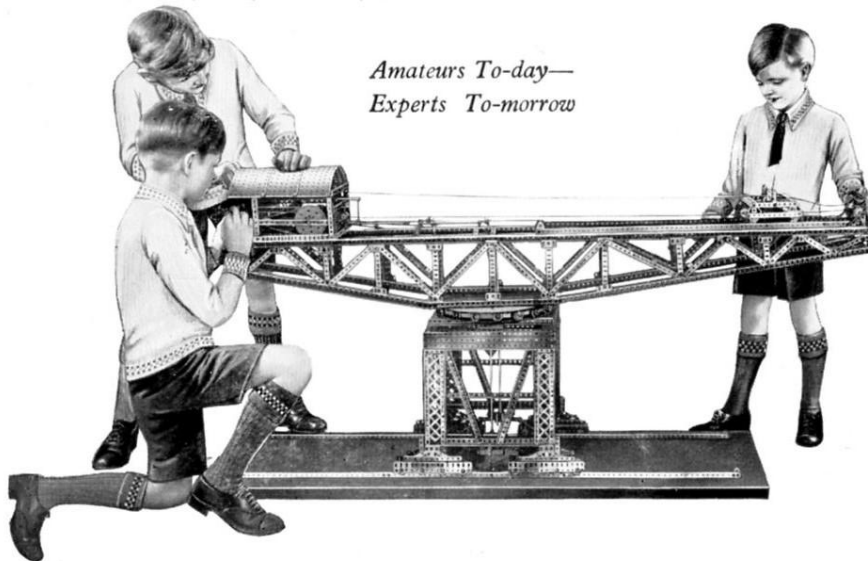
Make the simple models first—they will provide hours of fun—and then try to improve them. Every model can be made in a dozen different ways. It is important to screw up all the nuts and bolts tightly to ensure that your models will be strong and firm when they are completed.

Every keen and inventive Meccano model builder should obtain copies of the special Manuals "How to use Meccano Parts" and "Meccano Standard Mechanisms." These Manuals can be purchased from your dealer, or direct from Meccano Ltd., Binns Road, Liverpool 13.

## HOW TO BUILD UP YOUR OUTFIT

Meccano is sold in ten different Outfits, lettered A to L. All Meccano parts are of the same high quality and finish, but the larger Outfits contain a greater quantity and variety of parts, making possible the construction of more elaborate models. Each Outfit from A upwards can be converted into the one next higher by the purchase of an Accessory Outfit. Thus, Meccano Outfit A can be converted into a B by adding to it an Aa Accessory Outfit. A Ba would then convert it into a C Outfit, and so on. In this way, no matter with which Outfit you commence, you can build it up by degrees until you possess an L Outfit. It is important to remember that Meccano Parts can be bought separately at any time in any quantity from your Meccano dealer.

*Amateurs To-day—  
Experts To-morrow*



## ELECTRIC LIGHTING OF MECCANO MODELS

It is great fun to illuminate your Meccano models by electric light, and a special Meccano Lighting Set can be obtained from your dealer for this purpose. This consists of two spot lights with plain and coloured imitation glass discs, one stand lamp, two special brackets, and two pea lamps, operated from a 4-volt flashlamp battery (not included in the set). The stand lamp is used for decorative purposes, and the spot lights can be used as car headlamps, floodlights on cranes, and in countless other ways.

## THE "MECCANO MAGAZINE"

The *Meccano Magazine* is specially written for Meccano boys. It tells them of the latest Meccano models; what Meccano Clubs are doing; how to correspond with other Meccano boys; the Competitions that are running, etc. It contains splendid articles on such subjects as Railways, Famous Engineers and Inventors, Electricity, Chemistry, Bridges, Cranes, Wonderful Machinery, Aeronautics, Latest Patents, Radio, Stamps, Photography, Books and other topics of interest to boys, including suggestions from Meccano boys for new Meccano parts and correspondence columns in which the Editor replies to his readers' enquiries. The publishing date is the first of each month. If you are not already a reader of the *Meccano Magazine* write to the Editor for full particulars, or order a copy from your Meccano dealer or from any newsagent.

## THE MECCANO GUILD

Every owner of a Meccano Outfit should join the Meccano Guild. This is a world-wide organisation for boys, started at the request of boys, and as far as possible conducted by boys. Its primary object is to bring boys together and to make them feel that they are all members of a great brotherhood, each trying to help the others to get the very best out of life. Write for full particulars and an application form to the Meccano Guild Secretary, Binns Road, Liverpool 13.

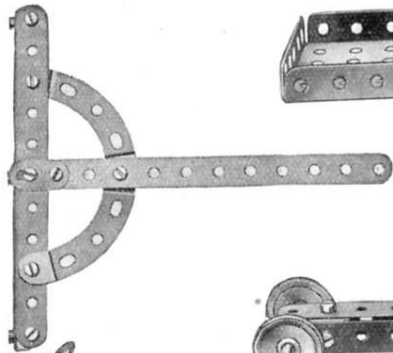
Meccano Clubs are founded and established under the guidance of the Guild Secretary at Headquarters, and at the present time there are active Clubs in nearly 250 towns and villages in the United Kingdom, and more than 100 in countries overseas. Each Club has its Leader, Secretary, Treasurer, and other officials, all of whom, with the exception of the Leader, are boys.

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

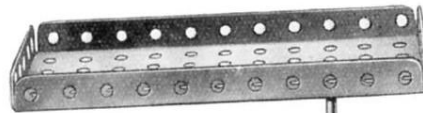
## MECCANO SERVICE

The service of Meccano does not end with selling an Outfit and an Instruction Manual. When you want to know something more about engineering than is now shown in our books, or when you strike a tough problem of any kind, write to us. We receive over 200 letters from boys every day all the year round. Although all kinds of queries are put to us on all manner of subjects, the main interest is, of course, engineering. No one has such a wonderful knowledge of engineering matters as that possessed by our staff of experts. This vast store of knowledge, gained only by many years of hard-earned experience, is at your service. *We want the Meccano boy of to-day to be the famous engineer of to-morrow.*

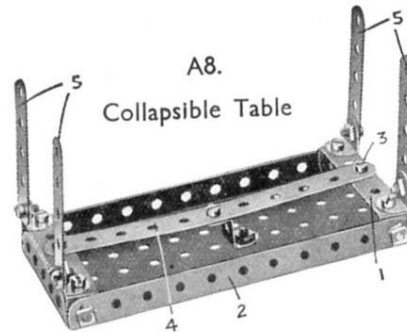
A1. Rake



A5. Bed Table

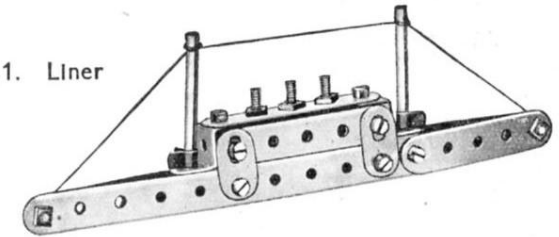


A8. Collapsible Table

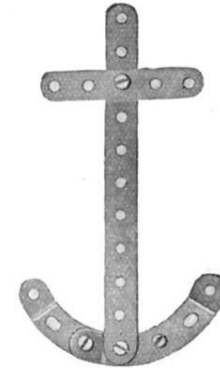


The  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strips 1 are attached to the  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  Flanged Plate 2 by lock-nutted Bolts as in Standard Mechanism No. 1A. The Bolts 3 are secured to the  $5\frac{1}{2}''$  Strip 4 and their shanks engage with the centre holes in the  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strips 1, thus maintaining the legs 5 in an upright position. When it is desired to fold up the legs 5, it is only necessary to raise the ends of the Strip 4, thus freeing the Double Angle Strips 1. The table is shown in the folded position in Fig. A8a.

A11. Liner



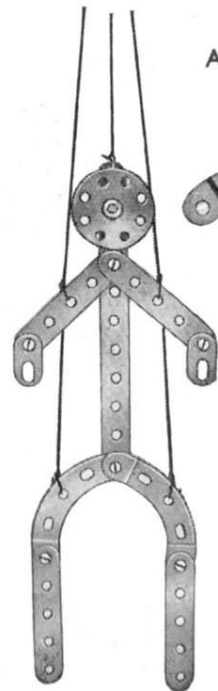
A12. Anchor



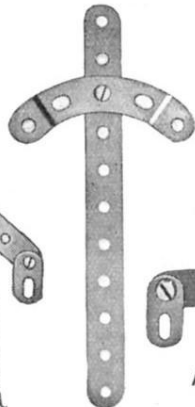
A16. Go-chair



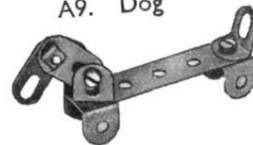
A2. Jumping Jack



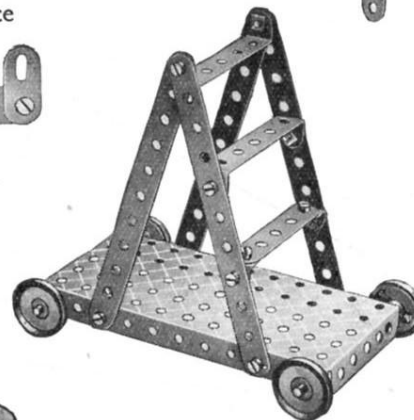
A3. Sword



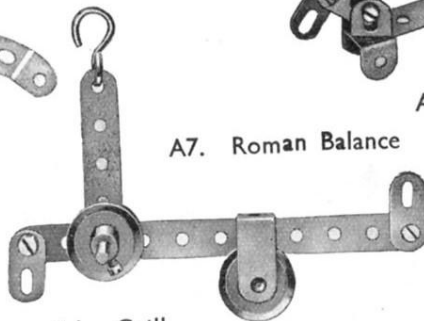
A9. Dog



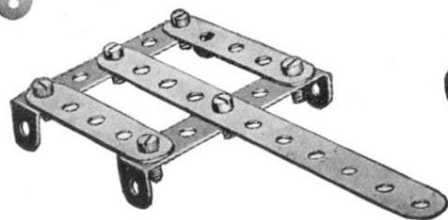
A10. Ladder on Wheels



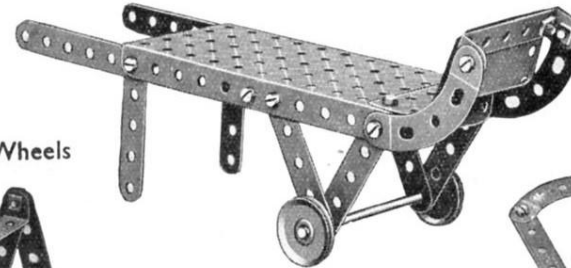
A7. Roman Balance



A4. Grill



A13. Hand Truck



A14. Fire Axe



A15. Flat Truck



A17. Telegraph Pole

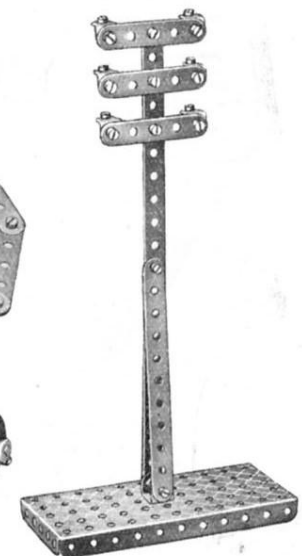
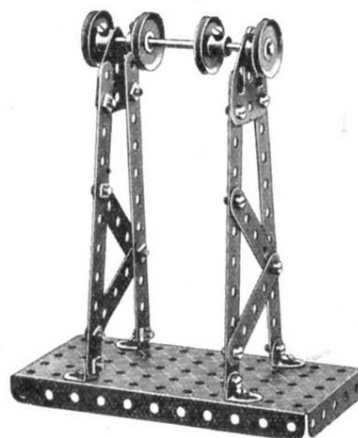


Fig. A8a

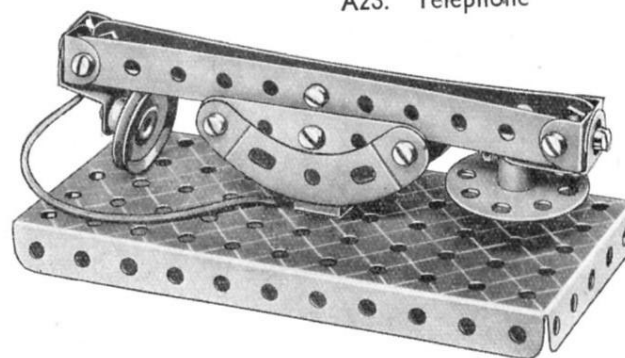
A18. Music Stool



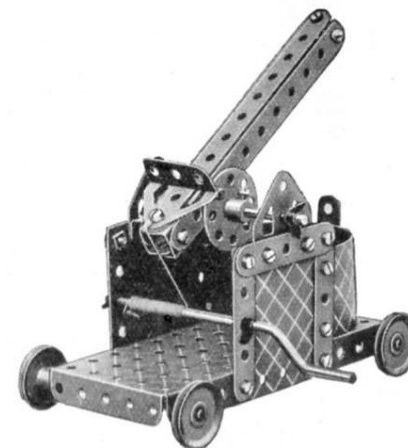
A21. Shafting Standard



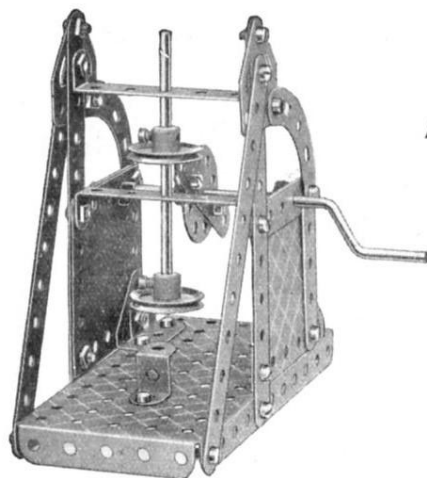
A23. Telephone



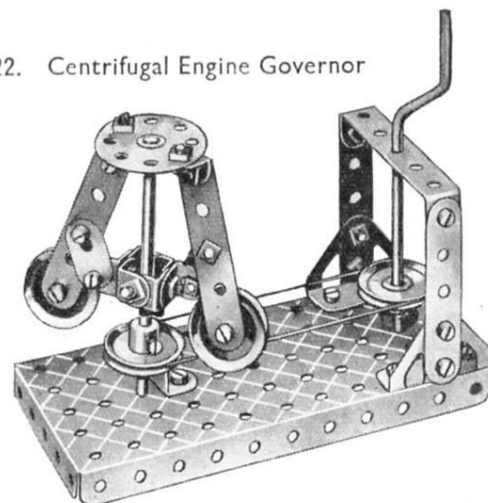
A26. Anti-aircraft Gun



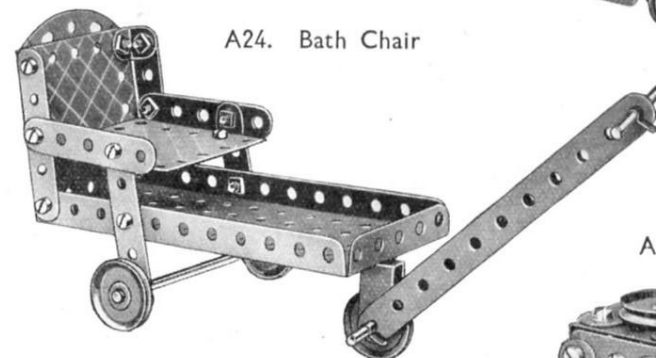
A19. Ore Crusher



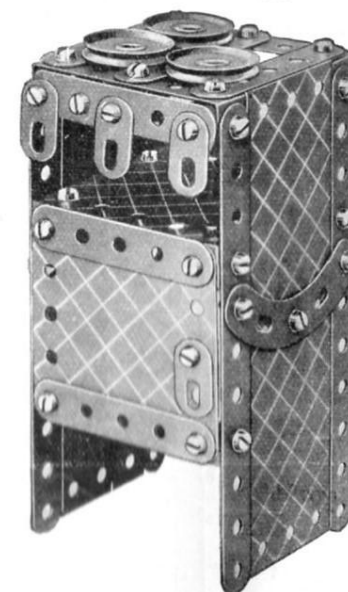
A22. Centrifugal Engine Governor



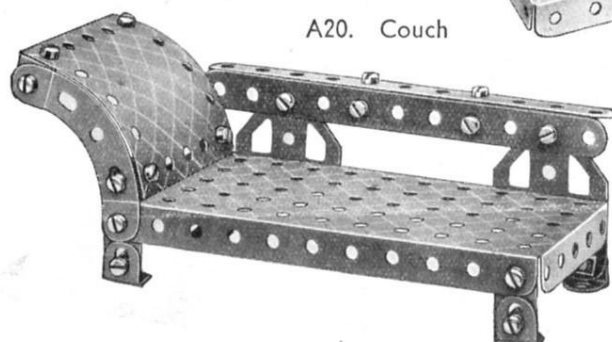
A24. Bath Chair



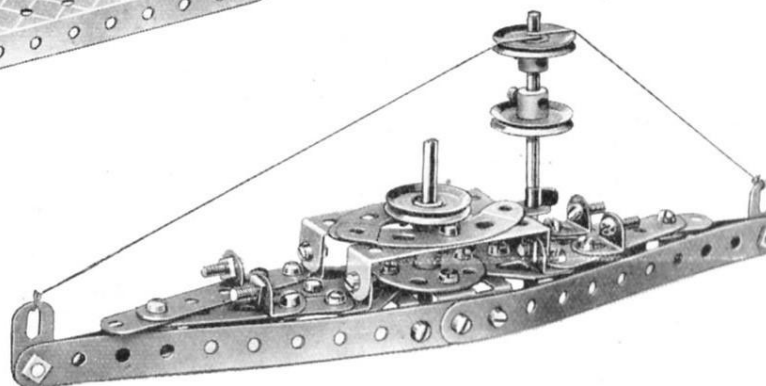
A27. Gas Stove



A20. Couch

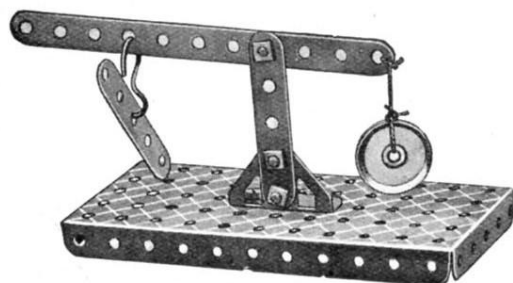


A25. Battleship

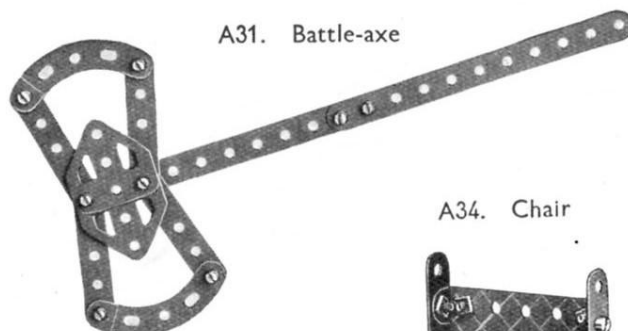




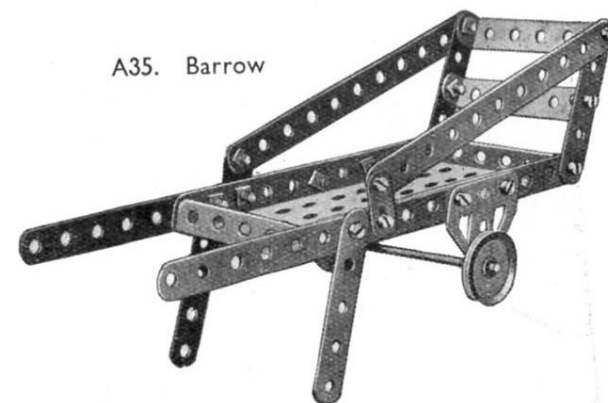
A28. Lever of the First Order



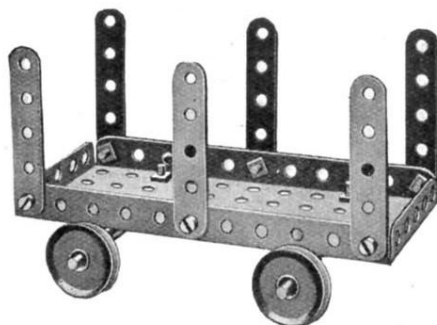
A31. Battle-axe



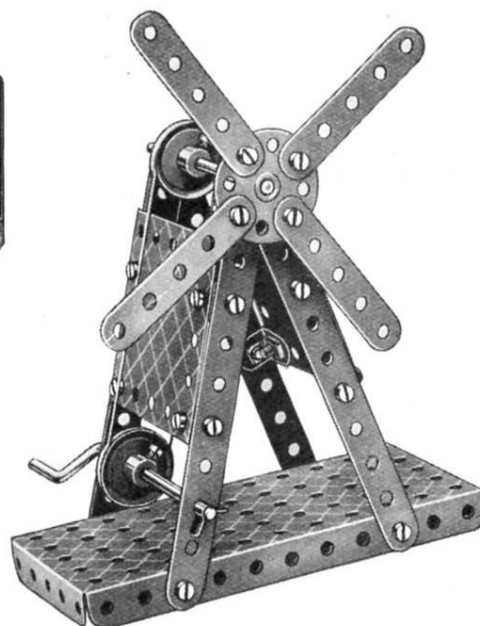
A35. Barrow



A29. Timber Truck



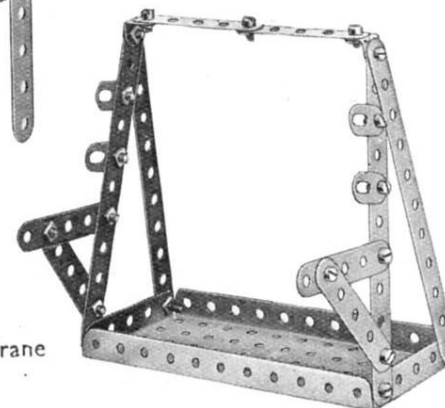
A32. Windmill



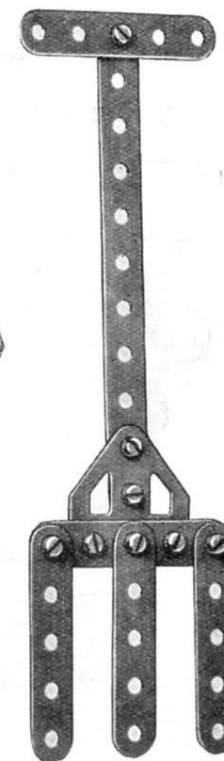
A34. Chair



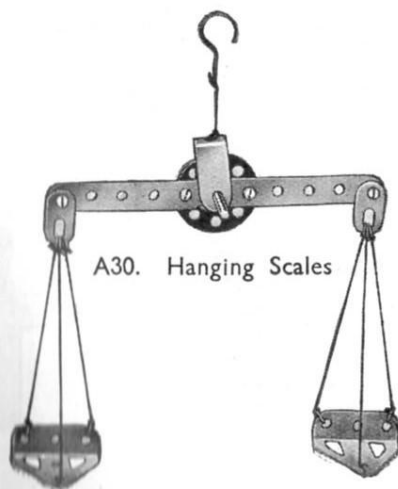
A36. Pen Rack



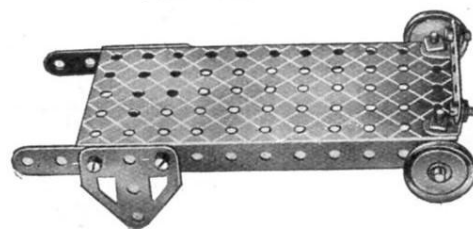
A38. Fork



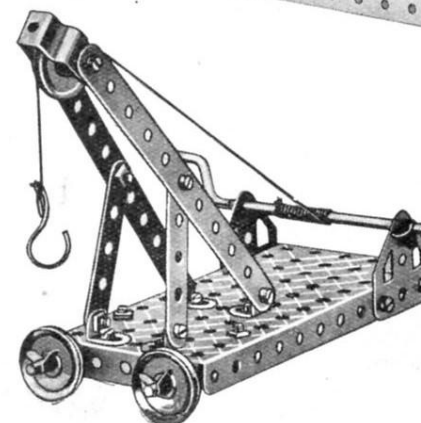
A30. Hanging Scales



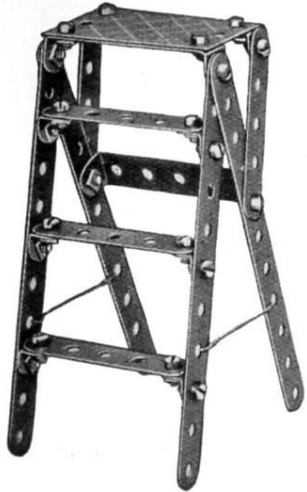
A33. Flat Truck



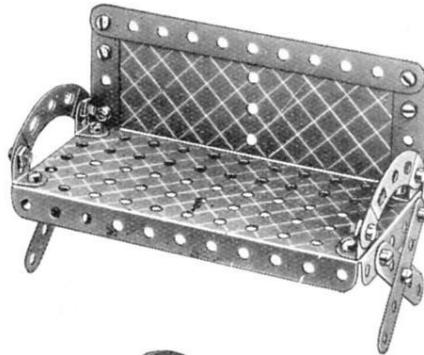
A37. Revolving Crane



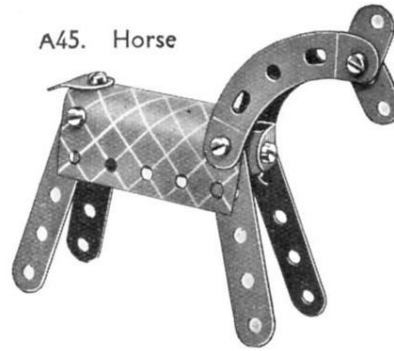
A39. Step Ladder



A42. Garden Seat



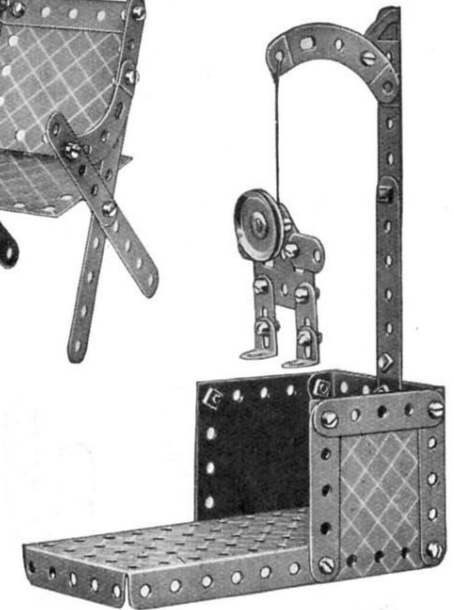
A45. Horse



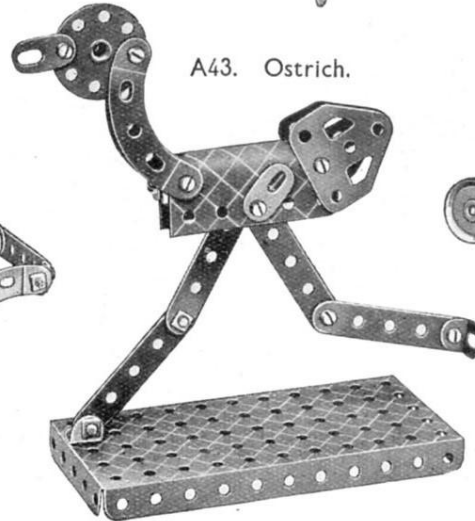
A48. Arm Chair



A49. Gallows



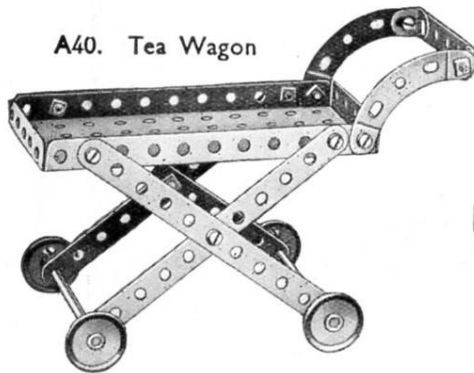
A43. Ostrich.



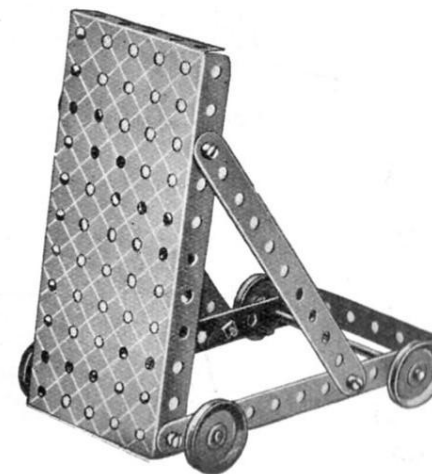
A46. Devil Wall



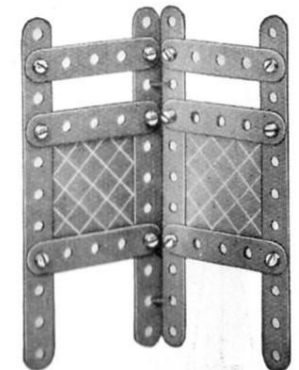
A40. Tea Wagon



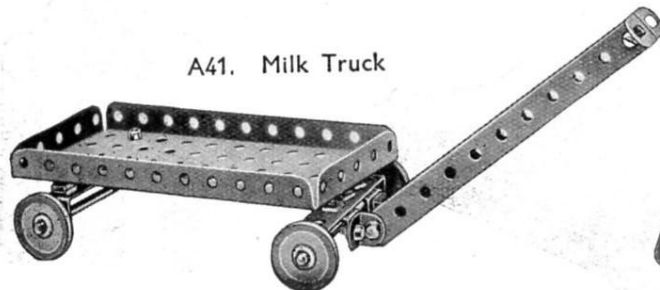
A47. Gravel Sifter



A50. Fire Screen



A41. Milk Truck



A44. Giraffe

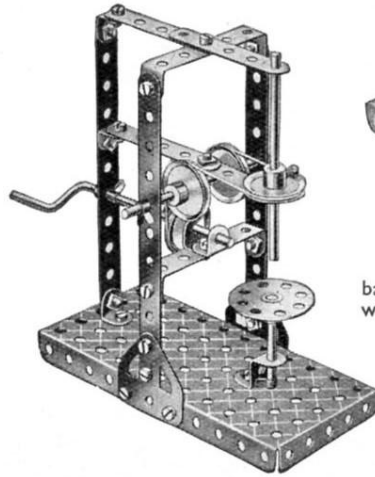




A51. Umpire's Seat

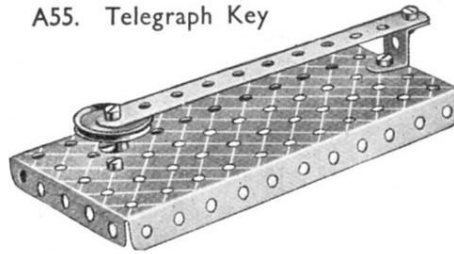


A52. Drilling Machine



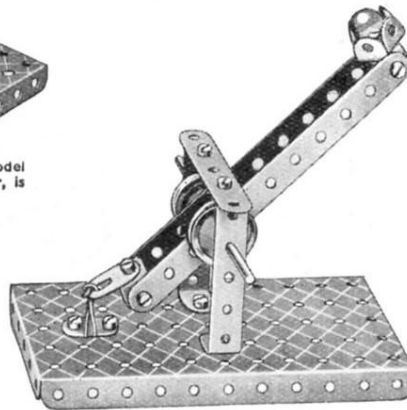
An alternative design of this model (A52M), fitted with the *Magic Motor*, is shown on page 9.

A55. Telegraph Key

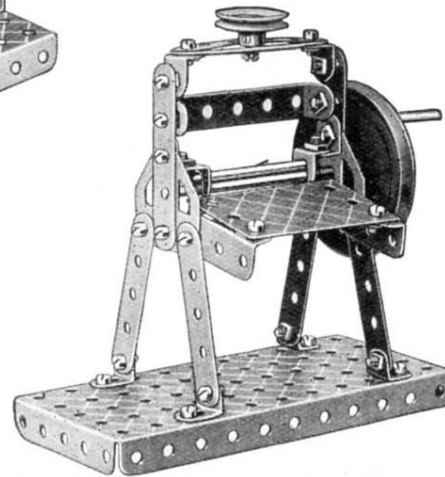


A56. Catapult

The pivoted arm is connected to the base by means of a short piece of elastic which is not provided in the Outfit.



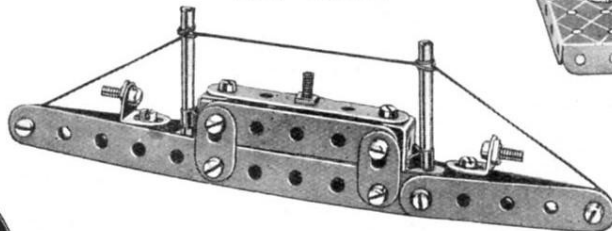
A58. Wringing Machine



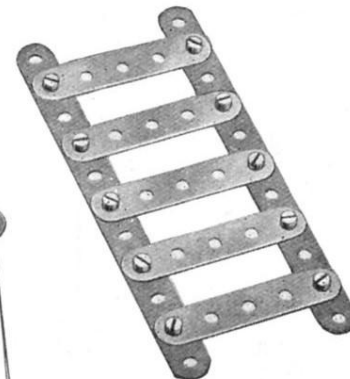
A60. Grandfather Clock



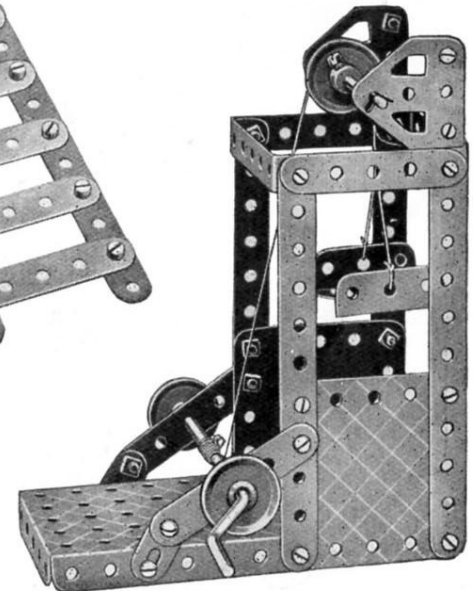
A53. Cruiser



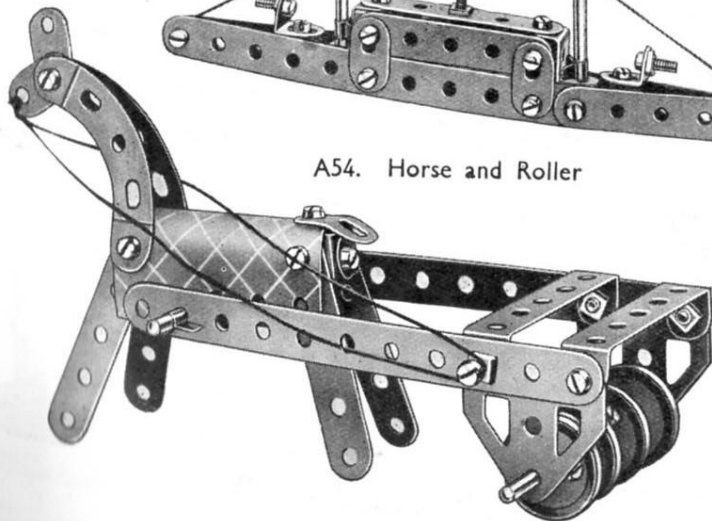
A59. Ladder



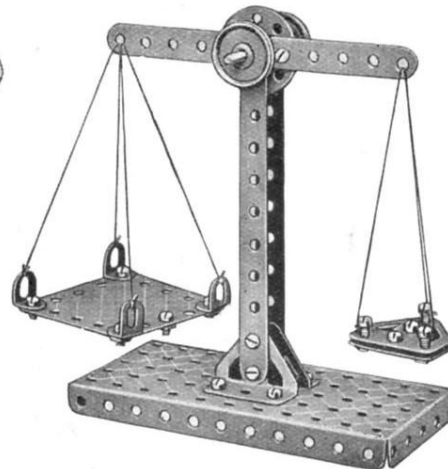
A61. Pit-head Gear



A54. Horse and Roller

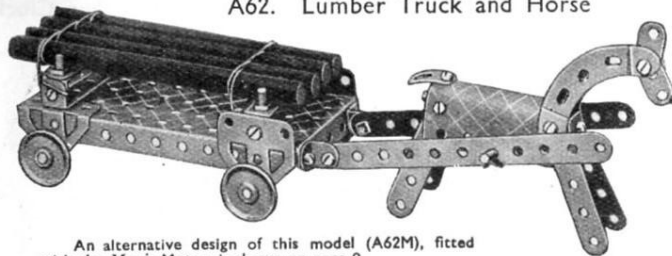


A57. Scales



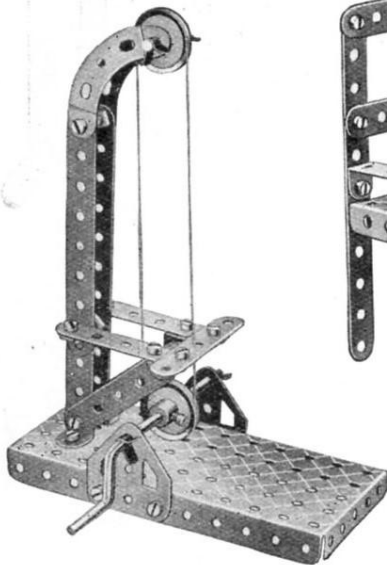
## These Models can be built with MECCANO Outfit A

A62. Lumber Truck and Horse

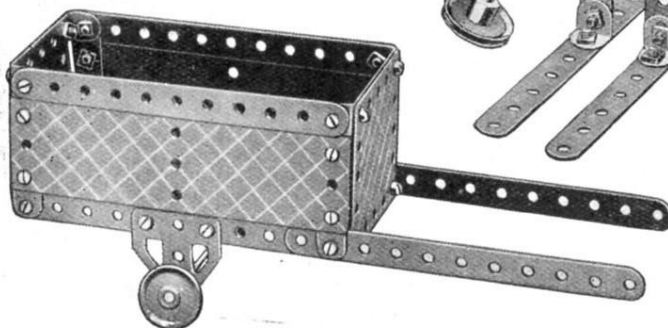


An alternative design of this model (A62M), fitted with the Magic Motor, is shown on page 9.

A63. Band Saw



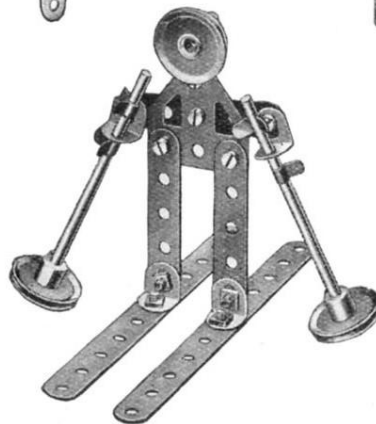
A64. Cart



A65. Bench



A66. Skier

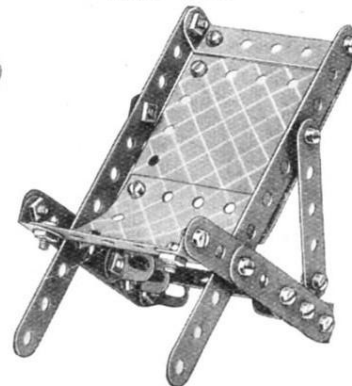


A67. Magic Plate

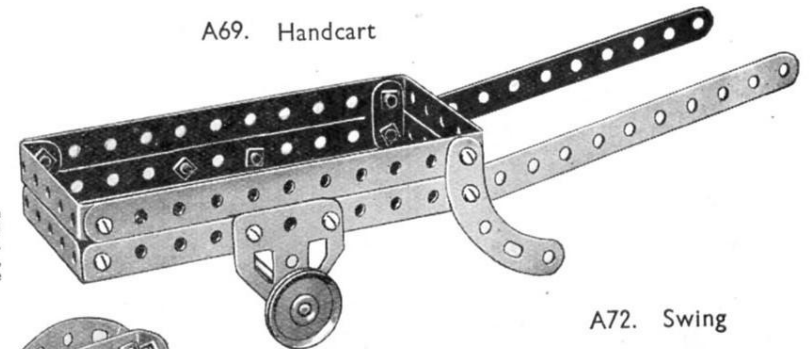
The cord is wound once round a 2" Axle Rod that is journalled in a  $\frac{1}{2}$ " Reversed Angle Bracket, which is bolted to the Plate. If the cord is held loosely the Plate will drop, but as soon as the cord is tightened the Plate becomes immovable.



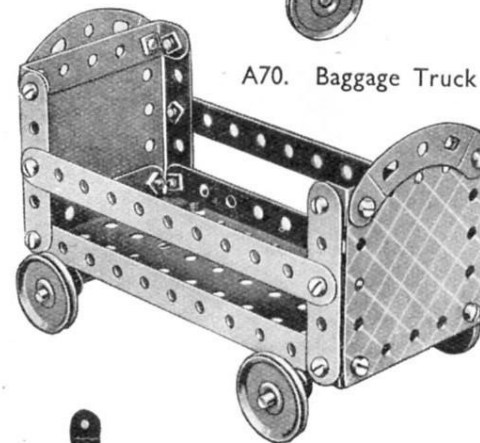
A68. Deck Chair



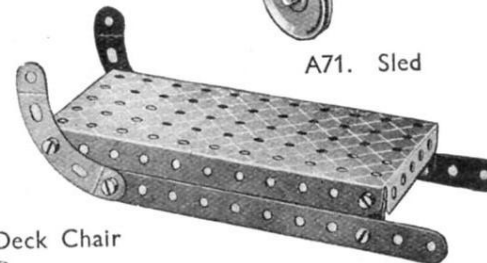
A69. Handcart



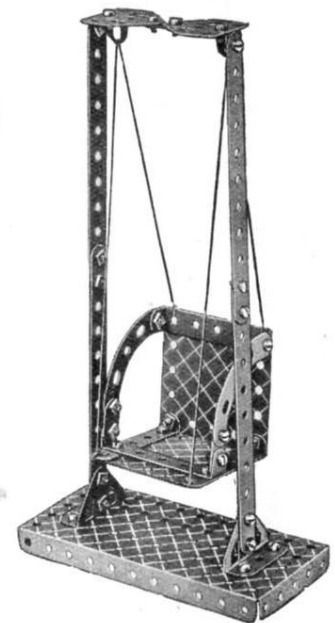
A70. Baggage Truck



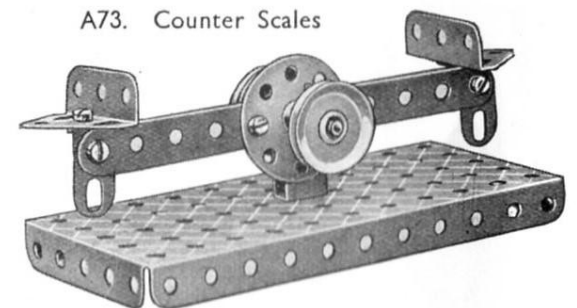
A71. Sled



A72. Swing

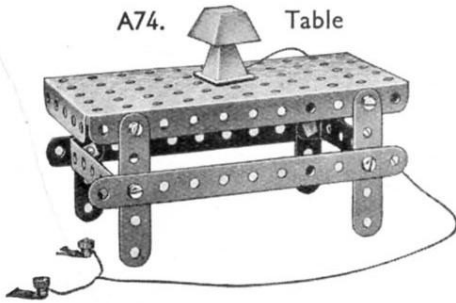


A73. Counter Scales

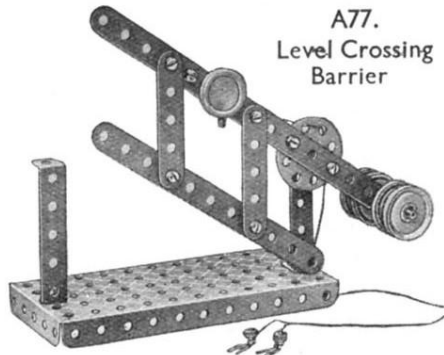




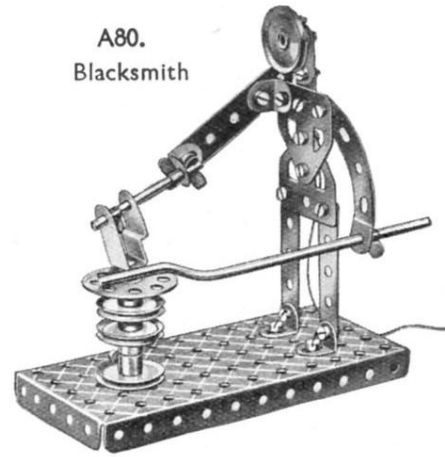
A74. Table



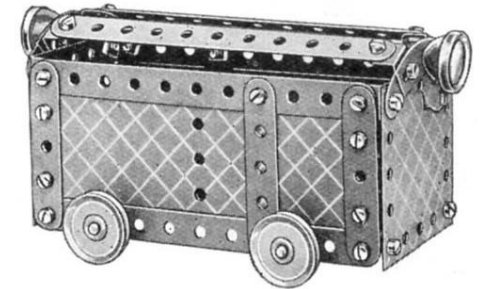
A77. Level Crossing Barrier



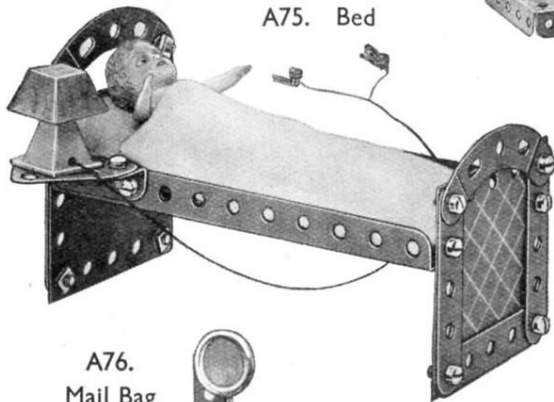
A80. Blacksmith



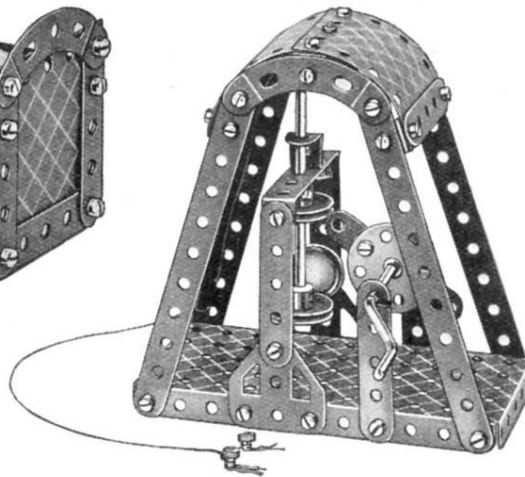
A83. Pullman Car



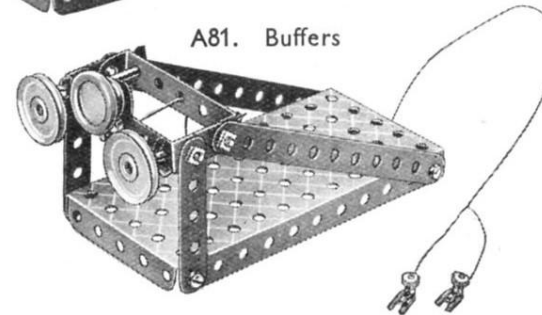
A75. Bed



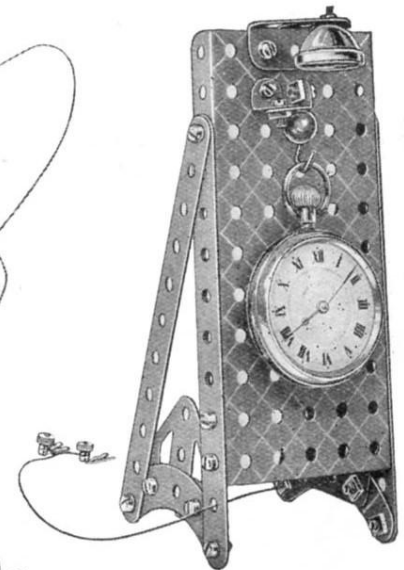
A78. Stamping Mill



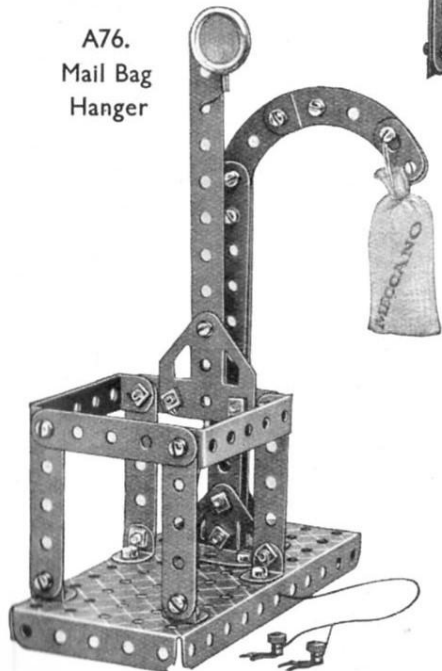
A81. Buffers



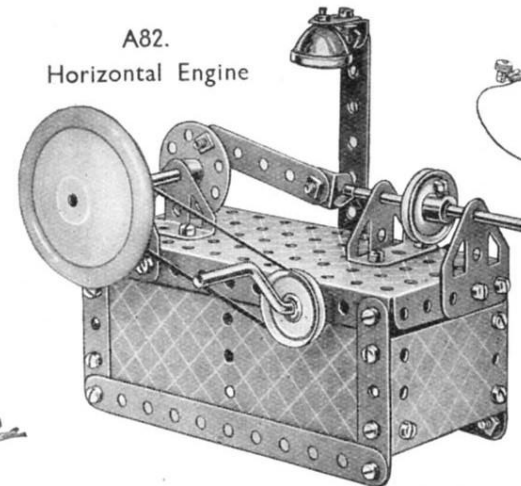
A84. Watch Stand



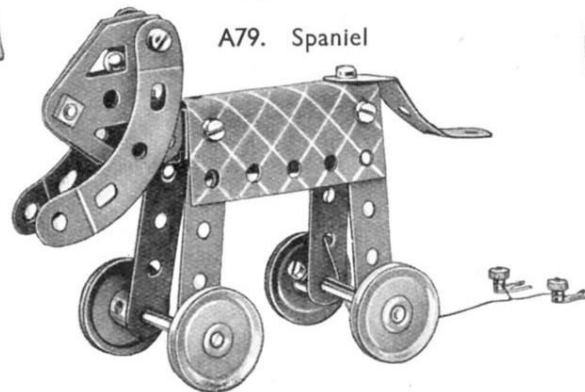
A76. Mail Bag Hanger



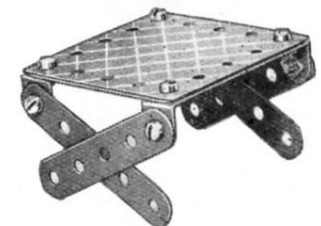
A82. Horizontal Engine



A79. Spaniel

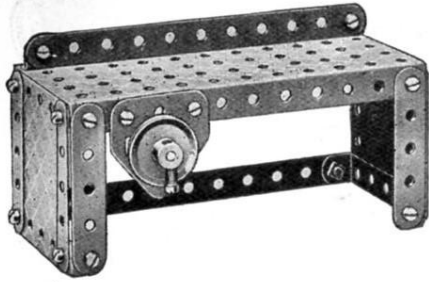
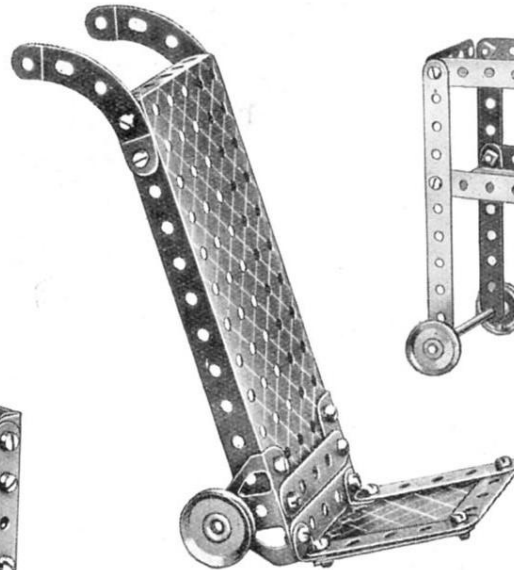
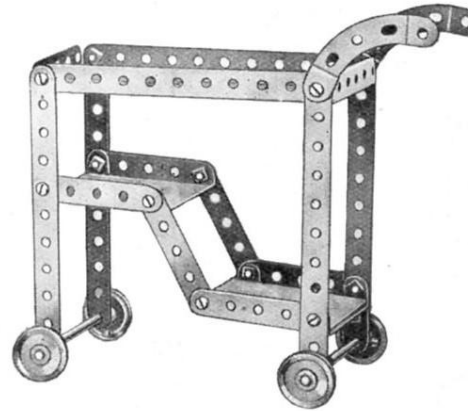
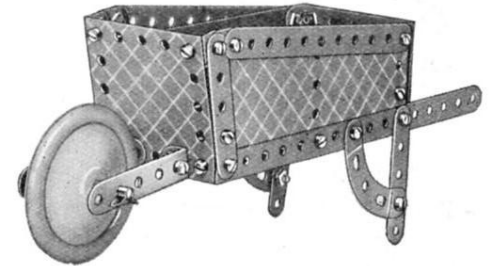
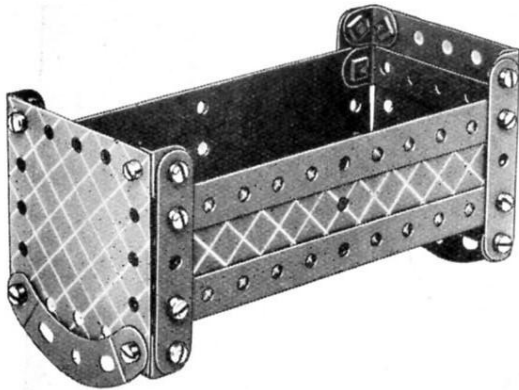
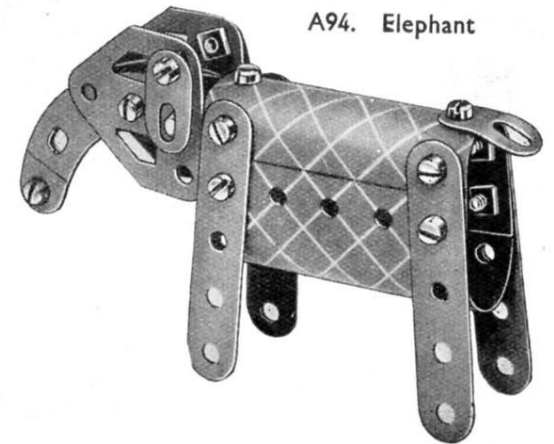
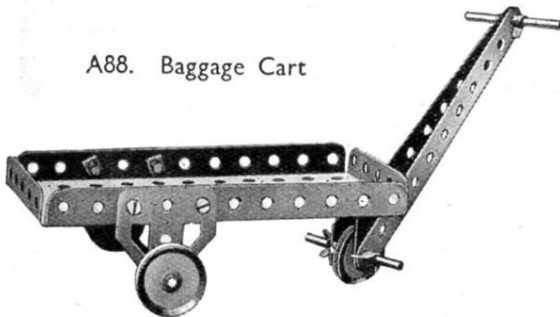
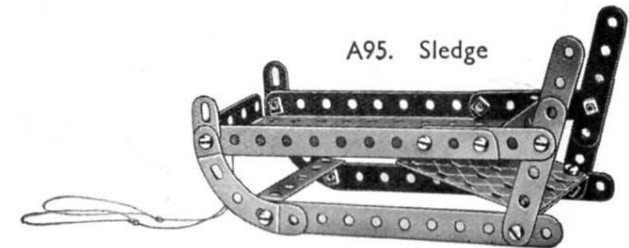


A85. Coffee Table



An alternative design of this model (A82M), fitted with the Magic Motor, is shown on page 9.

This page shows examples of the use of the Meccano Lighting Set, described on page 2 of cover

These Models can be built with **MECCANO Outfit A****A86. Joiner's Bench****A89. Porter's Trolley****A91. Dinner Wagon****A93. Wheelbarrow****A87. Cot****A94. Elephant****A92. Top****A90. Calf****A88. Baggage Cart****A95. Sledge****HOW TO CONTINUE**

When you have built the A Outfit Models illustrated, and fitted a number of them with the Meccano *Magic Motor* (see opposite page), your next step is to purchase an Aa Accessory Outfit. This converts your A Outfit into a B and enables you to build bigger and better models.



# **Outfit A Models fitted with the Magic Motor**

The greatest thrill in Meccano model-building is experienced when a model is set to work by means of a Meccano Motor. The illustrations below show how the new Meccano *Magic Motor* can be fitted without any difficulty to Outfit A 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. Models A52M, A62M and A82M are more elaborate variations of Manual models A52, A62 and A82. Try your hand at re-designing other models in a similar manner, and become a real inventor.

## **A96. BREAKDOWN CRANE**

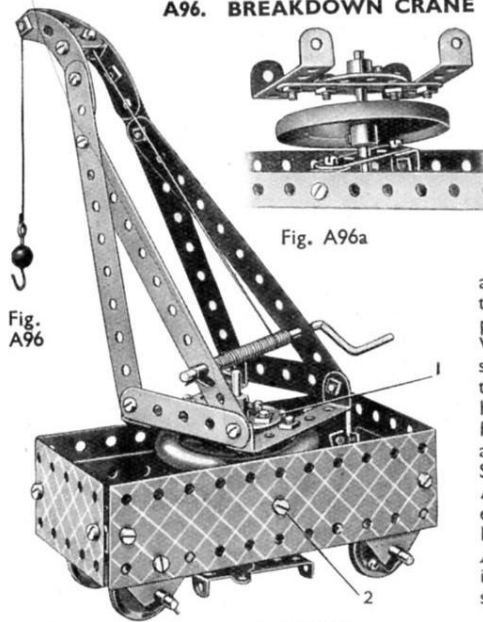


Fig. A96a



Fig. A96b

The crane swivels on an Axle Rod secured in the Bush Wheel 1 and passed through a Road Wheel before being inserted in a  $2\frac{1}{2}$ " Strip and through the centre hole of a  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flanged Plate. The arrangement of the  $2\frac{1}{2}$ " Strip can be seen in Fig. A96a, the Angle Brackets being fixed by the bolts 2 (Fig. A96). The *Magic Motor* is mounted in the same manner as shown in Fig. A62Ma.

## **A97. TRIP HAMMER**

The hammer is pivoted at 1 on two Angle Brackets that are bolted through the slots to the centre hole of the  $5\frac{1}{2}$ " Strip. A 2" Axle Rod passes through the Angle Brackets and is supported in Trunnions bolted to the Plate.

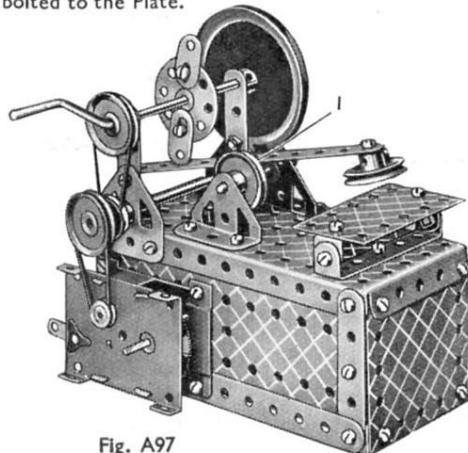


Fig. A97

## **A52M. DRILLING MACHINE**

The drill Rod is journaled at the top in a Flat Bracket bolted to two Angle Brackets, and at its lower end in two Angle Brackets 1 that are bolted to a Strip attached to the vertical member of the drill. The drill table is supported by a  $2\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strip 2. A Spring Clip retains the free Pulley 3 in place.

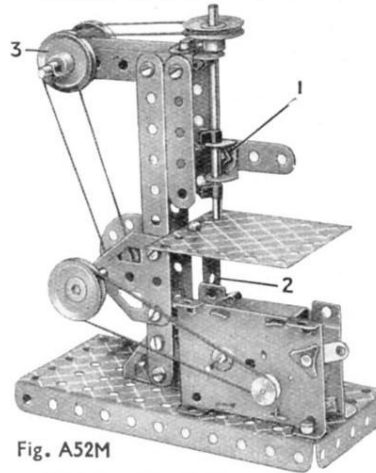


Fig. A52M

## **A82M. HORIZONTAL ENGINE**

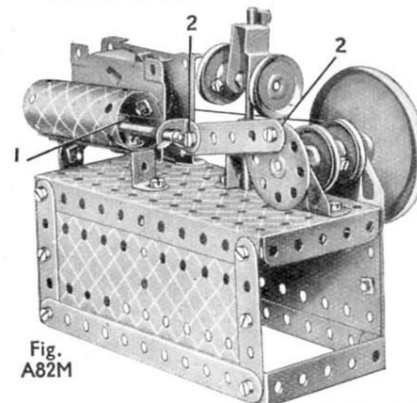


Fig. A82M

The cylinder is composed of a  $2\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flexible Plate and a  $2\frac{1}{2}$ "  $\times$   $1\frac{1}{2}$ " Flexible Plate, and two Angle Brackets are bolted inside the cylinder to serve as guides for the piston rod. One of the Brackets is seen at 1. The bolts 2 are locknitted (see page 49), to form pivots.

## **A62M. LUMBER TRUCK AND HORSE**

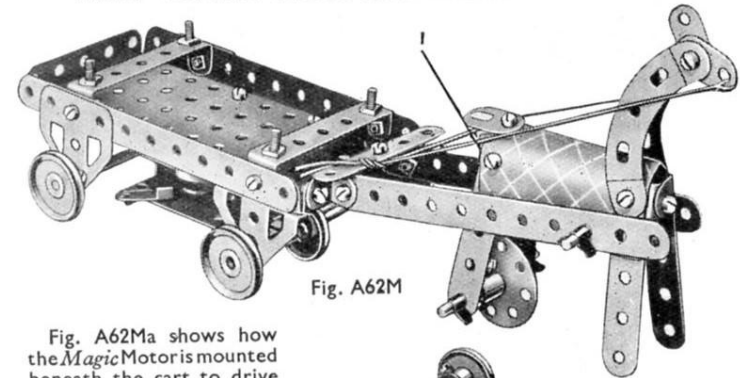


Fig. A62M

Fig. A62Ma shows how the *Magic Motor* is mounted beneath the cart to drive the front Wheels. The Pulley supplied with the Motor is mounted on the front Axle, and the rubber band should be fitted as shown. Two Angle Brackets secure the front legs of the horse, and this construction is duplicated at 1 for the hind legs. The forelegs are kept off the ground by means of the reins.

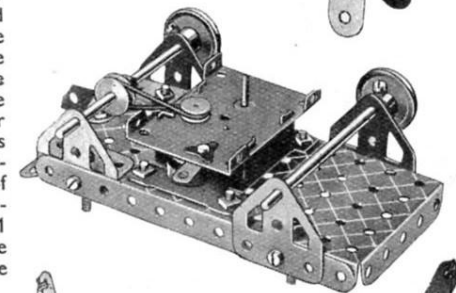


Fig. A62Ma

## **A98. ROUNDABOUT**

Fig. A98a shows how the bearing for the vertical Rod is formed. The Rod is driven from the *Magic Motor* by means of a rubber band passed round the 1" Pulley and round the Motor Pulley as can be seen in Fig. A98.

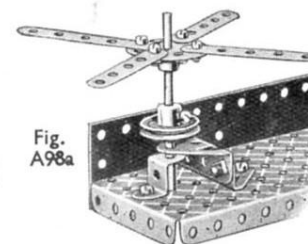


Fig. A98a

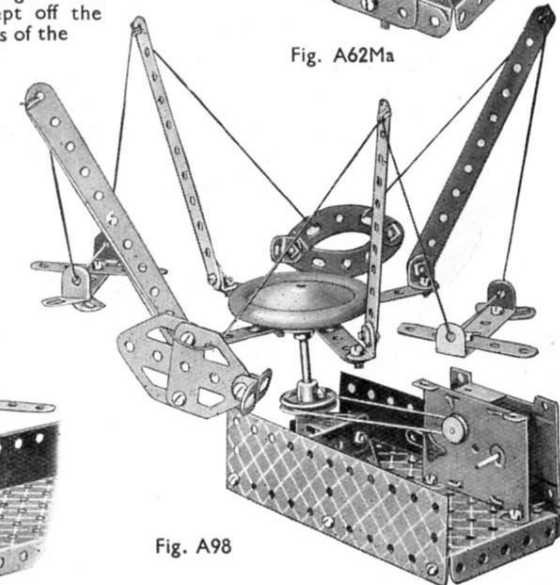
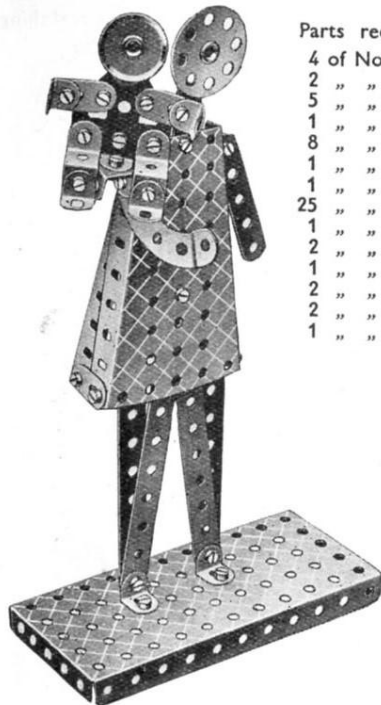
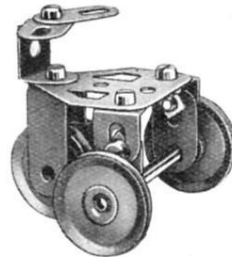


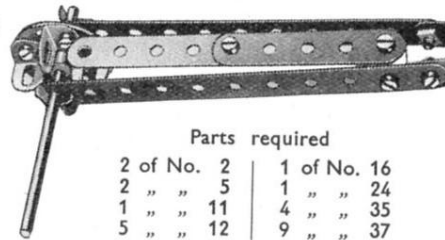
Fig. A98

**B1. Man and Boy**

Parts required	
4 of No.	2
2 " "	5
5 " "	10
1 " "	11
8 " "	12
1 " "	22
1 " "	24
25 " "	34
1 " "	52
2 " "	54a
1 " "	90a
2 " "	111c
2 " "	125
1 " "	126a

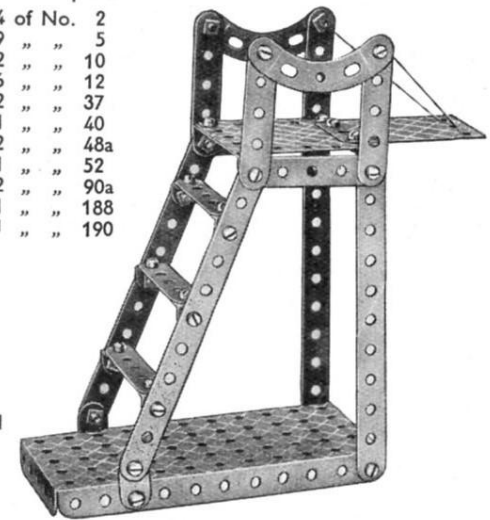
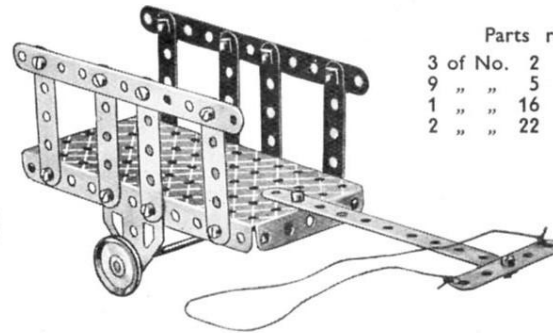
**B4. Tricycle**

Parts required	
4 of No.	10
1 " "	11
2 " "	12
1 " "	17
3 " "	22
6 " "	37
1 " "	45
1 " "	111c
1 " "	126a

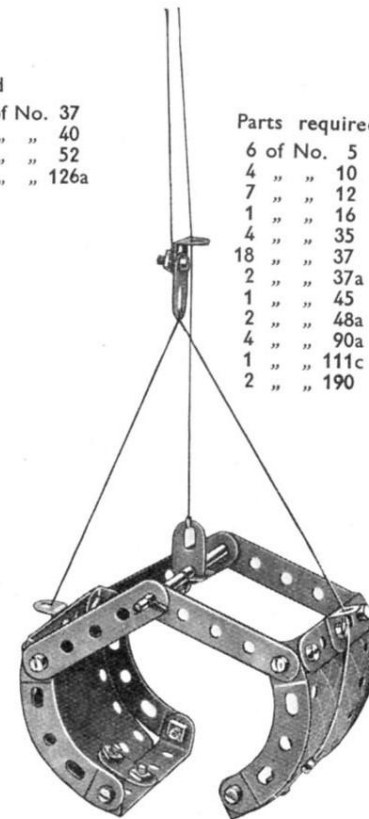
**B7. Rattle**

Parts required	
2 of No.	2
2 " "	5
1 " "	11
5 " "	12
1 of No.	16
1 " "	24
4 " "	35
9 " "	37

Parts required	
4 of No.	2
9 " "	5
2 " "	10
6 " "	12
32 " "	37
1 " "	40
2 " "	48a
1 " "	52
2 " "	90a
1 " "	188
1 " "	190

**B9. High Diving Board****B5. Bullock Cart**

Parts required	
3 of No.	2
9 " "	5
1 " "	16
2 " "	22
18 of No.	37
1 " "	40
1 " "	52
2 " "	126a

**B8. Crane Grab**

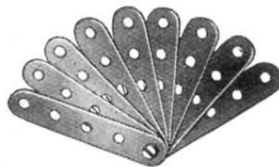
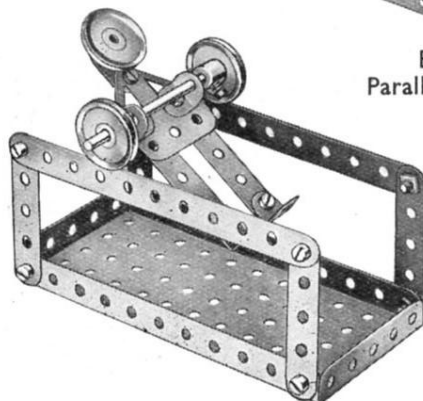
Parts required	
6 of No.	5
4 " "	10
7 " "	12
1 " "	16
4 " "	35
18 " "	37
2 " "	37a
1 " "	45
2 " "	48a
4 " "	90a
1 " "	111c
2 " "	190

**B10. Drafting Table**

Parts required	
4 of No.	5
12 " "	37
1 " "	48a
1 of No.	52
4 " "	90a
2 " "	126a

**B2. Fan**

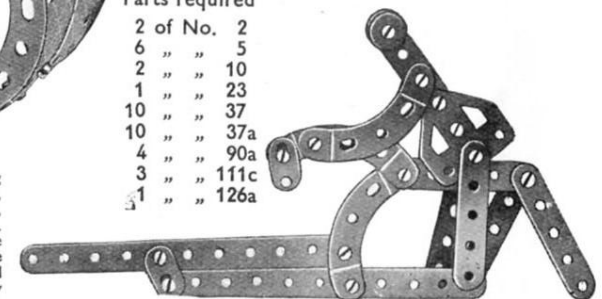
Parts required	
9 of No.	5
1 " "	37a
1 " "	111c

**B3. Parallel Bars**

Parts required	
2 of No.	2
6 " "	5
1 " "	10
4 " "	12
1 " "	16
3 " "	22
2 " "	35
13 " "	37
1 " "	52
1 " "	111c
1 " "	126a

**B6. Walking Man**

Parts required	
5 of No.	5
3 " "	10
2 " "	12
1 " "	22
5 " "	37
1 " "	37a
3 " "	90a
2 " "	111c

**B11. Bucking Broncho**

Parts required	
2 of No.	2
6 " "	5
2 " "	10
1 " "	23
10 " "	37
10 " "	37a
4 " "	90a
3 " "	111c
1 " "	126a

The  $\frac{3}{16}$ " Bolts used for connecting the  $5\frac{1}{2}$ " Strips, the horse's legs, and the rider's legs and arms, are all locknutted (see page 49). The lower  $5\frac{1}{2}$ " Strip should be held rigidly and the upper one jerked forward: the horse will then throw its rider completely over its head.

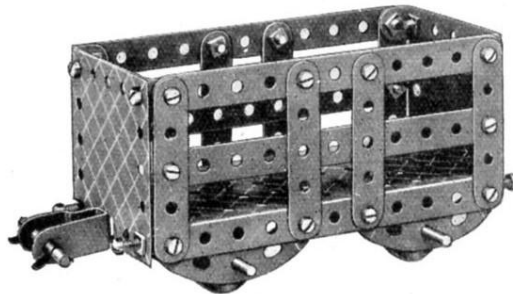


B12. Catapult



Parts required  
4 of No. 37  
4 " " 90a  
A short length  
of elastic

B15. Cattle Truck



Parts required	
4 of No. 2	9 of No. 37a
8 " " 5	1 " " 45
2 " " 16	2 " " 48a
1 " " 18a	1 " " 52
4 " " 22	4 " " 90a
2 " " 35	4 " " 111c
25 " " 37	2 " " 190

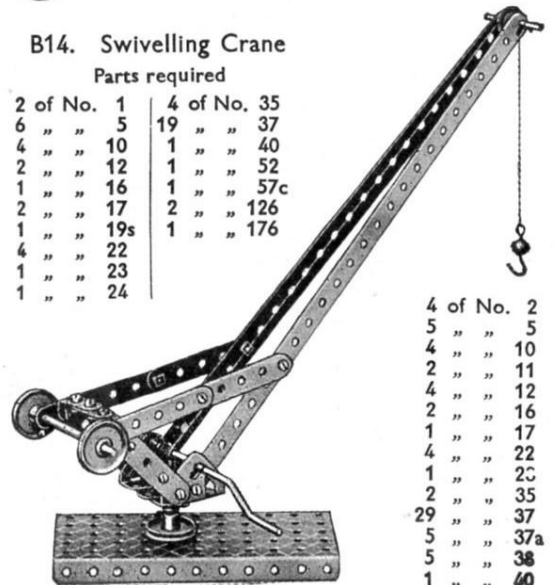
B13. Coster's Barrow

Parts required	
2 of No. 2	13 of No. 37
4 " " 5	1 " " 45
2 " " 10	2 " " 48a
1 " " 11	1 " " 52
2 " " 12	
1 " " 17	
1 " " 24	



B14. Swivelling Crane

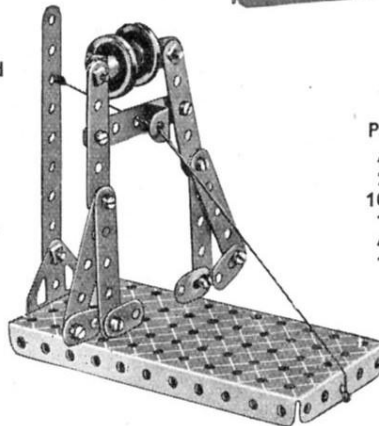
Parts required	
2 of No. 1	4 of No. 35
6 " " 5	19 " " 37
4 " " 10	1 " " 40
2 " " 12	1 " " 52
1 " " 16	1 " " 57c
2 " " 17	2 " " 126
1 " " 19s	1 " " 176
4 " " 22	
1 " " 23	
1 " " 24	



4 of No. 2	5
5 " " 5	10
4 " " 10	11
2 " " 11	12
4 " " 12	16
2 " " 16	17
1 " " 17	22
4 " " 22	23
1 " " 23	35
2 " " 35	37
29 " " 37	37a
5 " " 37a	38
5 " " 38	40
1 " " 40	

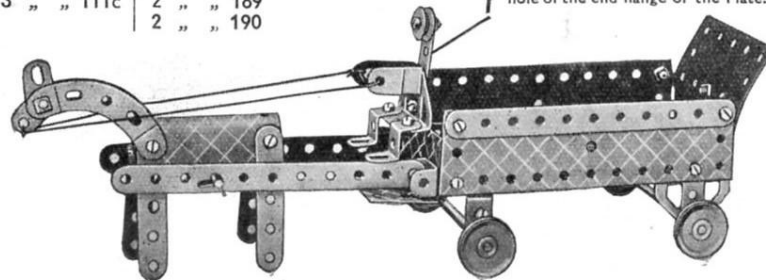
B16. Wrestlers

Parts required	
1 of No. 2	5
7 " " 5	10
4 " " 10	12
2 " " 12	22
2 " " 22	37
3 " " 37	37a
6 " " 37a	40
1 " " 40	52
1 " " 52	111c
4 " " 111c	125
1 " " 125	126a
1 " " 126a	



Parts required

1 of No. 44	2 of No. 125
1 " " 48a	1 " " 126
1 " " 52	2 " " 126a
2 " " 90a	2 " " 188
3 " " 111c	2 " " 189
	2 " " 190



The fun is greatly increased if this model is fitted with a Meccano Magic Motor. The method of incorporating this motor is shown on page 9 (Model A62M). If the Motor is fitted, a Bush Wheel should be mounted on a 2" Rod fitted between the hind legs of the horse. The 2 1/2" Strip 1 forming the driver's body is bolted to the centre hole of the end flange of the Plate.

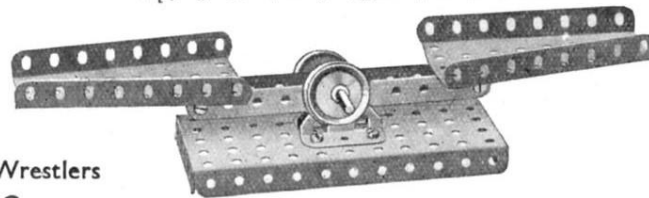
B18. Single Sheave Pulley Block



Parts required  
1 of No. 23  
11 " " 37a  
1 " " 57c  
4 " " 111c  
2 " " 126a

B19. Scales

Parts required		
2 of No. 2	2 of No. 22	1 of No. 52
2 " " 11	10 " " 37	2 " " 54a
1 " " 17	4 " " 38	2 " " 126

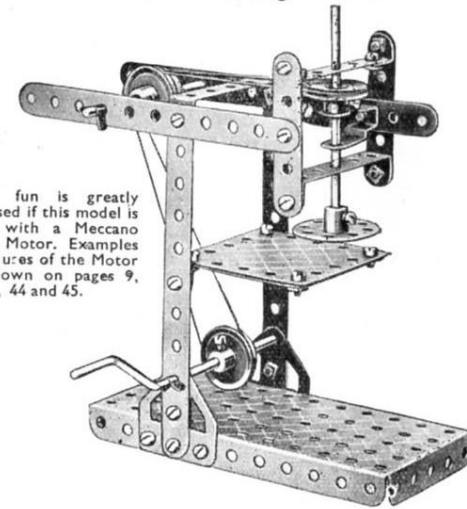


B20. Card Table

Parts required	
4 of No. 5	12
2 " " 12	37
10 " " 37	48a
1 " " 48a	90a
4 " " 90a	190
1 " " 190	



B21. Drilling Machine

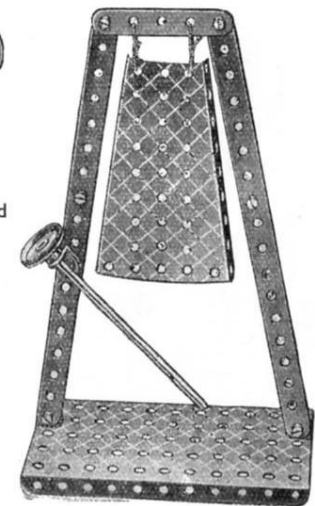


The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of the Motor are shown on pages 9, 24, 25, 44 and 45.

Parts required

4 of No. 2	28 of No. 37
8 " " 5	1 " " 37a
6 " " 12	1 " " 40
2 " " 16	1 " " 45
1 " " 19s	2 " " 48a
4 " " 22	1 " " 52
1 " " 24	2 " " 126a
6 " " 35	1 " " 190

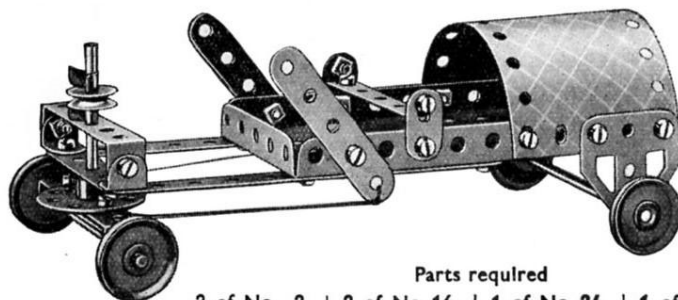
B22. Gong



Parts required

4 of No. 2	5
1 " " 5	12
3 " " 12	16
1 " " 16	22
1 " " 22	37
9 " " 37	40
1 " " 40	52
1 " " 52	54a
1 " " 54a	

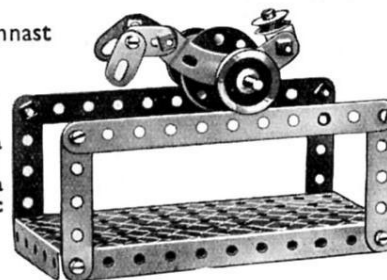
B23. Coaster



Parts required

2 of No. 2	2 of No. 16	1 of No. 24	1 of No. 40
4 " " 5	1 " " 17	2 " " 35	2 " " 48a
2 " " 10	4 " " 22	24 " " 37	1 " " 52
4 " " 12	1 " " 23	2 " " 37a	2 " " 126a
			1 " " 191

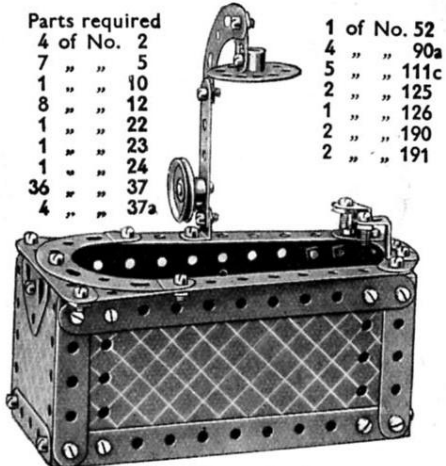
B26. Gymnast



Parts required

2 of No. 2	1 of No. 24
4 " " 5	13 " " 37
4 " " 10	1 " " 37a
1 " " 12	1 " " 52
1 " " 16	1 " " 90a
2 " " 22	1 " " 111c
1 " " 23	

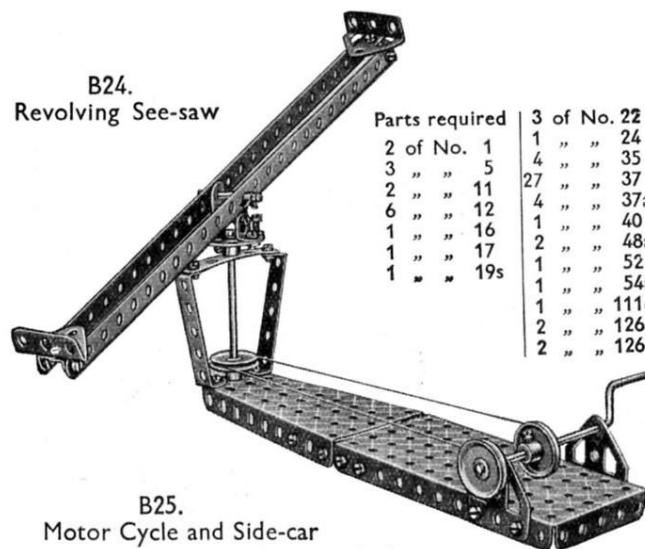
B29. Bath with Shower



Parts required

4 of No. 2	1 of No. 52
7 " " 5	4 " " 90a
1 " " 10	5 " " 111c
8 " " 12	2 " " 125
1 " " 22	1 " " 126
1 " " 23	2 " " 190
1 " " 24	2 " " 191
36 " " 37	
4 " " 37a	

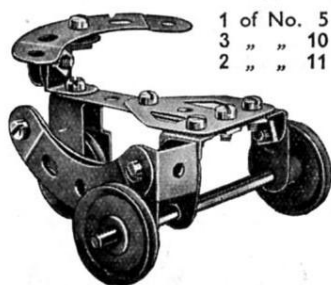
B24. Revolving See-saw



Parts required

3 of No. 22
2 of No. 1
3 " " 5
2 " " 11
6 " " 12
1 " " 16
1 " " 17
1 " " 19s
1 " " 24
4 " " 35
27 " " 37
4 " " 37a
1 " " 40
2 " " 48a
1 " " 52
1 " " 54a
1 " " 111c
2 " " 126
2 " " 126a

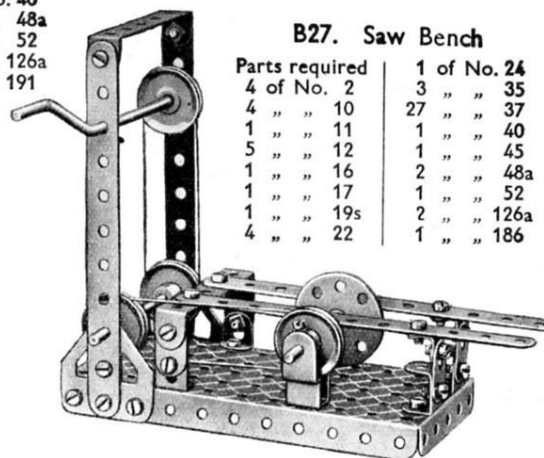
B25. Motor Cycle and Side-car



Parts required

1 of No. 5	2 of No. 12
3 " " 10	1 " " 16
2 " " 11	3 " " 22
	1 " " 23
	10 " " 37
	2 " " 37a
	1 " " 44
	3 " " 90a
	2 " " 111c
	1 " " 126a

B27. Saw Bench



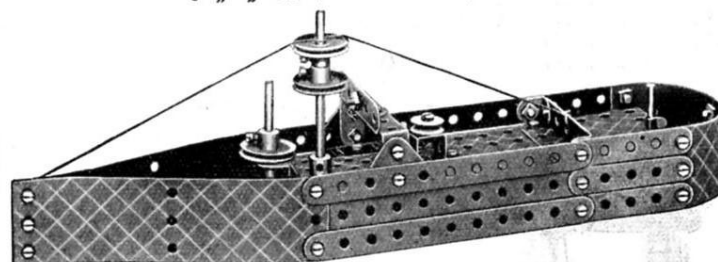
Parts required

4 of No. 2	1 of No. 24
4 " " 10	3 " " 35
1 " " 11	27 " " 37
5 " " 12	1 " " 40
1 " " 16	1 " " 45
1 " " 17	2 " " 48a
1 " " 19s	1 " " 52
4 " " 22	2 " " 126a
	1 " " 186

B28. Battleship

Parts required

4 of No. 2	1 of No. 23	1 of No. 52
9 " " 5	1 " " 24	4 " " 111c
4 " " 10	5 " " 35	2 " " 125
1 " " 11	36 " " 37	2 " " 126
5 " " 12	4 " " 37a	2 " " 188
1 " " 16	1 " " 40	2 " " 189
2 " " 17	2 " " 48a	1 " " 190
3 " " 22		

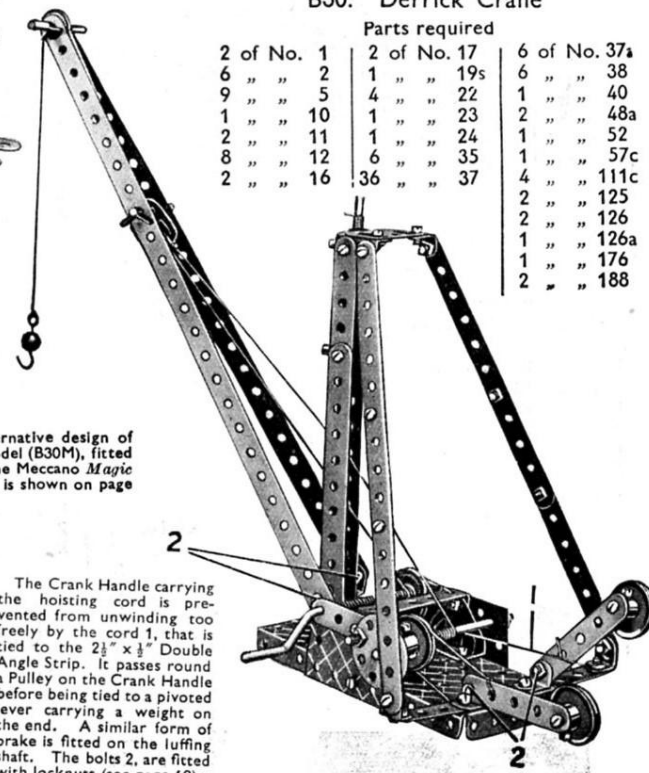


An alternative design of this model (B30M), fitted with the Meccano *Magie* Motor, is shown on page 25.

B30. Derrick Crane

Parts required

2 of No. 1	2 of No. 17	6 of No. 37a
6 " " 2	1 " " 19s	6 " " 38
9 " " 5	4 " " 22	1 " " 40
1 " " 10	1 " " 23	2 " " 48a
2 " " 11	1 " " 24	1 " " 52
8 " " 12	6 " " 35	1 " " 57c
2 " " 16	36 " " 37	4 " " 111c
		2 " " 125
		2 " " 126
		1 " " 126a
		1 " " 176
		2 " " 188



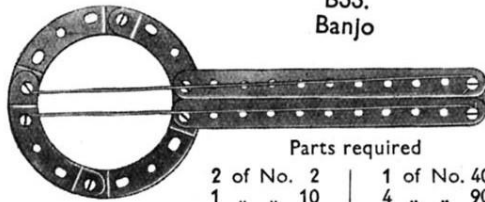
The Crank Handle carrying the hoisting cord is prevented from unwinding too freely by the cord 1, that is tied to the  $2\frac{1}{2} \times \frac{1}{2}$  Double Angle Strip. It passes round a Pulley on the Crank Handle before being tied to a pivoted lever carrying a weight on the end. A similar form of brake is fitted on the luffing shaft. The bolts 2, are fitted with locknuts (see page 49):

B31. Arm Chair



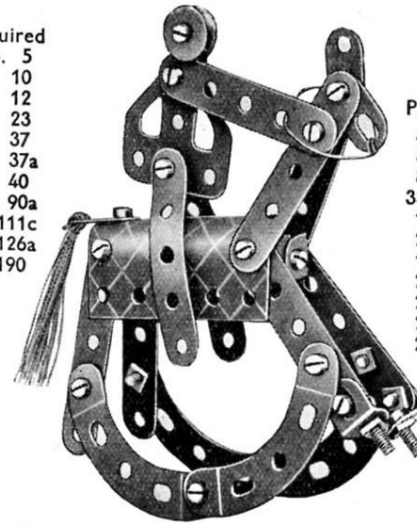
Parts required		
2 of No.	2	
8 "	5	
21 "	37	
2 "	48a	
1 "	52	
4 "	90a	
1 "	190	

B33. Banjo



Parts required		
2 of No.	2	1 of No. 40
1 "	10	4 " 90a
8 "	37	

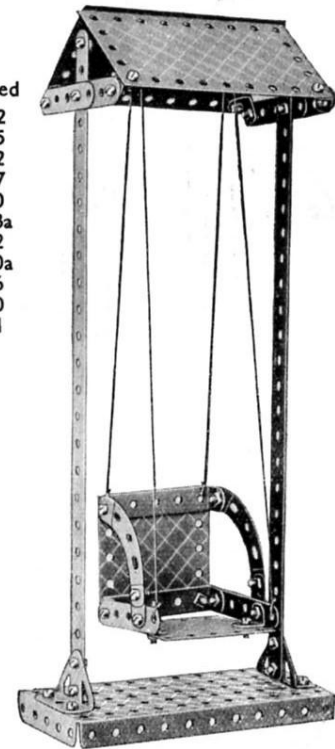
B36. Rocking Horse



Parts required		
9 of No.	5	
4 "	10	
6 "	12	
1 "	23	
17 "	37	
8 "	37a	
1 "	40	
4 "	90a	
5 "	111c	
1 "	126a	
1 "	190	

Parts required		
4 of No.	2	
8 "	5	
8 "	12	
33 "	37	
1 "	40	
2 "	48a	
1 "	52	
2 "	90a	
2 "	126	
2 "	190	
2 "	191	

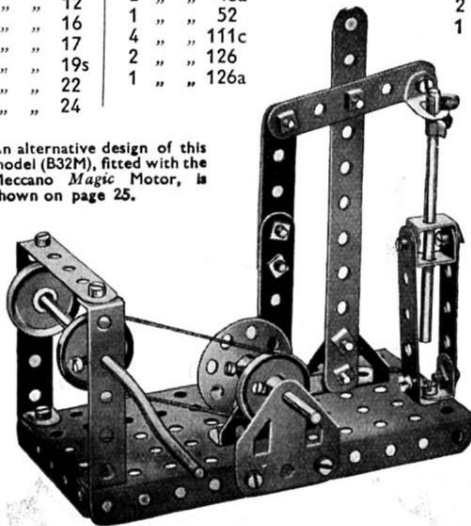
B38. Swing



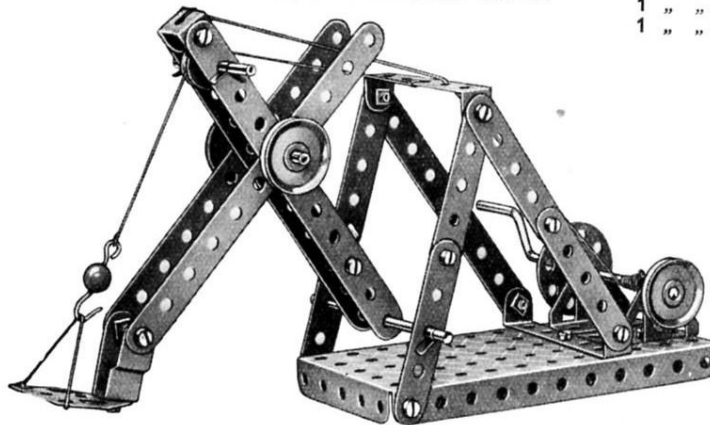
B32. Pump

Parts required		
2 of No.	35	
1 of No.	2	19 " 37
6 "	5	8 " 37a
2 "	11	1 " 40
3 "	12	2 " 48a
1 "	16	1 " 52
1 "	17	4 " 111c
1 "	19s	2 " 126
3 "	22	1 " 126a
1 "	24	

An alternative design of this model (B32M), fitted with the Meccano Magic Motor, is shown on page 25.



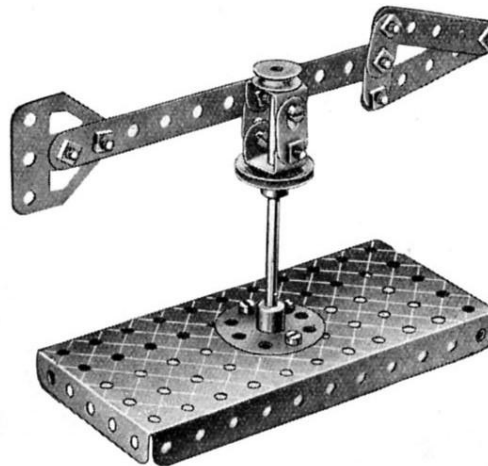
B34. Mechanical Shovel



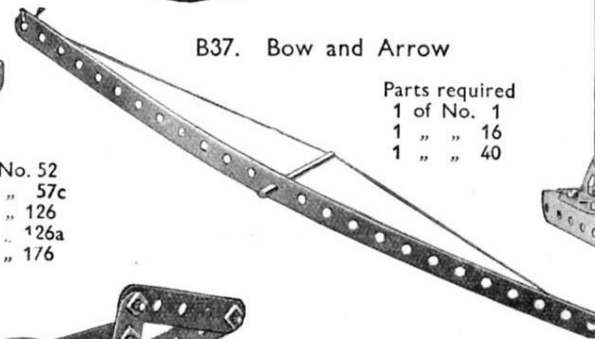
Parts required		
2 of No.	17	5 of No. 35
4 of No.	2	1 " 19s
8 "	5	3 " 22
2 "	11	1 " 23
1 "	16	1 " 24
		20 " 37
		1 " 40
		1 " 45
		2 " 48a
		1 " 52
		1 " 57c
		2 " 126
		1 " 126a
		1 " 176

B35. Weather Vane

Parts required		
1 of No.	2	
2 "	5	
4 "	10	
2 "	11	
1 "	16	
1 "	22	
1 "	23	
1 "	24	
12 "	37	
1 "	52	
1 "	126a	



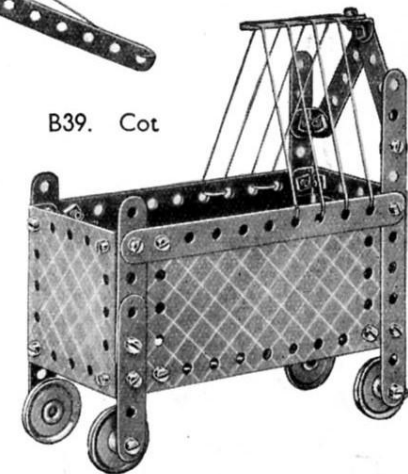
B37. Bow and Arrow



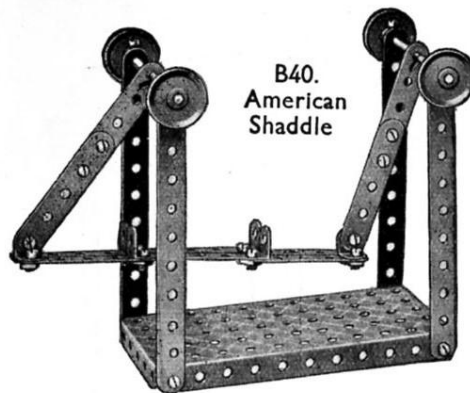
Parts required		
1 of No.	1	
1 "	16	
1 "	40	

B39. Cot

Parts required		
4 of No.	2	
7 "	5	
3 "	12	
4 "	22	
30 "	37	
1 "	40	
2 "	48a	
1 "	52	
4 "	111c	
2 "	190	
2 "	191	



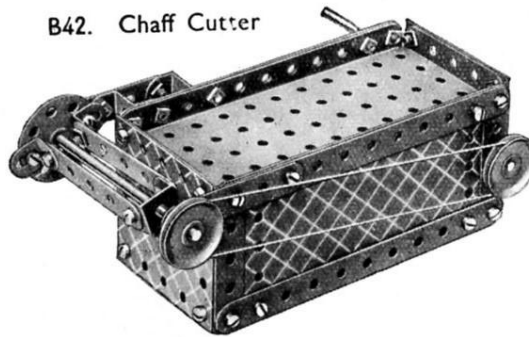




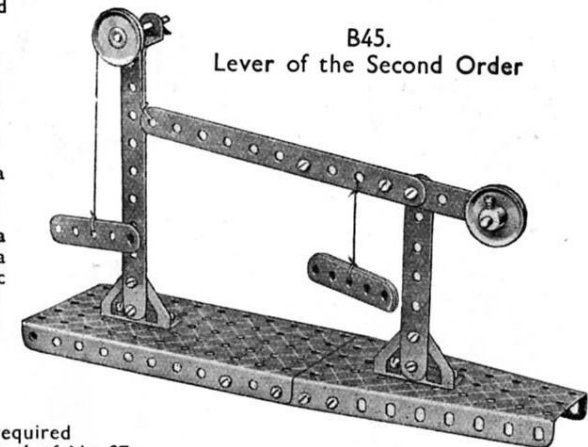
B40.  
American  
Shackle

Parts required		
4 of No. 2		
8 " " 5		
1 " " 11		
6 " " 12		
1 " " 16		
1 " " 19s		
2 " " 22		
1 " " 24		
2 " " 35		
33 " " 37		
1 " " 40		
1 " " 52		
2 " " 125		
2 " " 190		
2 " " 191		

B42. Chaff Cutter



Parts required		
2 of No. 2		
9 " " 5		
2 " " 17		
2 " " 22		
1 " " 23		
2 " " 35		
21 " " 37		
2 " " 37a		
5 " " 38		
1 " " 40		
1 " " 52a		
1 " " 54a		
1 " " 111c		
1 " " 125		
2 " " 126		



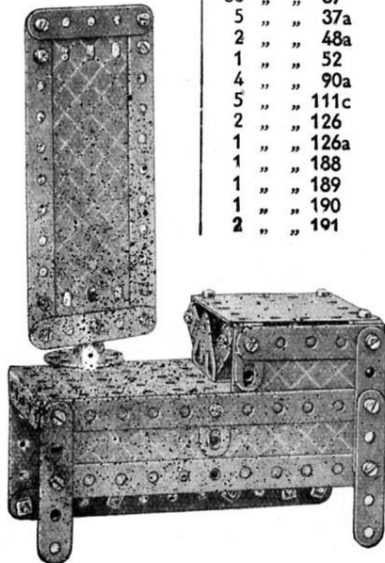
B45.  
Lever of the Second Order

Parts required		
4 of No. 2	2 of No. 12	18 of No. 37
9 " " 5	2 " " 16	2 " " 37a
4 " " 10	4 " " 22	2 " " 48a
2 " " 11	4 " " 35	1 " " 52

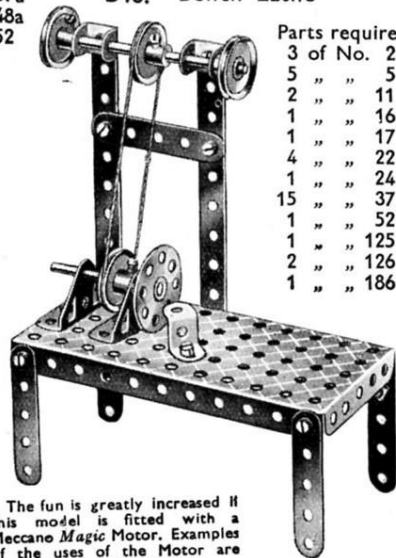
B41.  
Modern Dressing Table

Parts required

4 of No. 2	4 of No. 12
9 " " 5	1 " " 17
4 " " 10	1 " " 24
1 " " 11	2 " " 35
	36 " " 37
	5 " " 37a
	2 " " 48a
	1 " " 52
	4 " " 90a
	5 " " 111c
	2 " " 126
	1 " " 126a
	1 " " 188
	1 " " 189
	1 " " 190
	2 " " 191



B43. Bench Lathe



Parts required		
3 of No. 2		
5 " " 5		
2 " " 11		
1 " " 16		
1 " " 17		
4 " " 22		
1 " " 24		
15 " " 37		
1 " " 52		
1 " " 125		
1 " " 126		
1 " " 186		

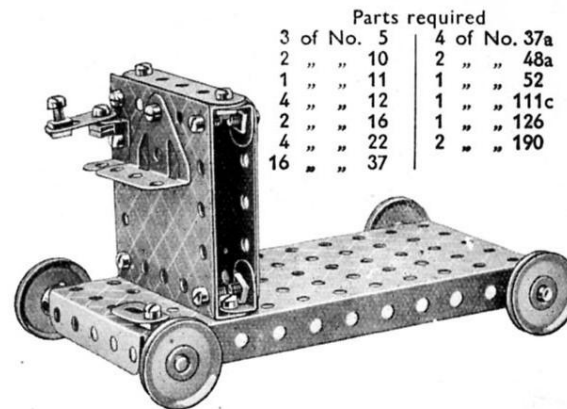
The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of the Motor are shown on pages 9, 24 and 25.

B44. Motor Boat

Parts required		
2 of No. 2	1 of No. 23	
2 " " 5	7 " " 37	
3 " " 10	1 " " 37a	
1 " " 11	1 " " 111c	



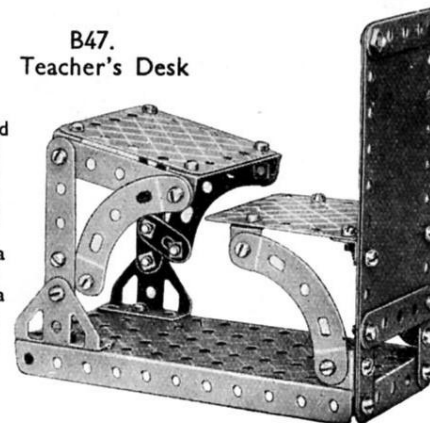
B46. Electric Trolley



Parts required		
3 of No. 5	4 of No. 37a	
2 " " 10	2 " " 48a	
1 " " 11	1 " " 52	
4 " " 12	1 " " 111c	
2 " " 16	1 " " 126	
4 " " 22	2 " " 190	
16 " " 37		

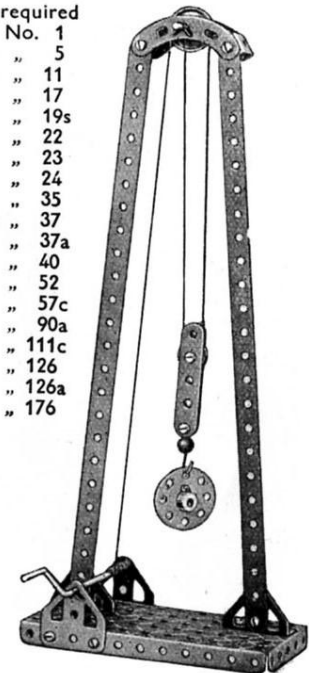
B47.  
Teacher's Desk

Parts required		
2 of No. 2		
9 " " 5		
2 " " 10		
6 " " 12		
34 " " 37		
2 " " 48a		
1 " " 52		
4 " " 90a		
2 " " 126		
2 " " 190		
1 " " 191		

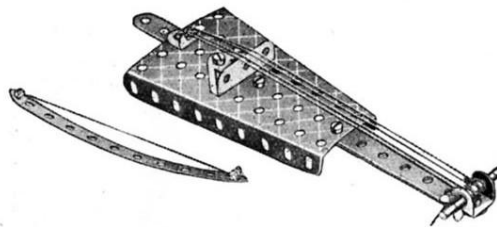


B48. Pulley Block

Parts required		
2 of No. 1		
2 " " 5		
2 " " 11		
1 " " 17		
1 " " 19s		
1 " " 22		
1 " " 23		
1 " " 24		
4 " " 35		
14 " " 37		
2 " " 37a		
1 " " 40		
1 " " 52		
1 " " 57c		
2 " " 90a		
2 " " 111c		
2 " " 126		
2 " " 126a		
1 " " 176		



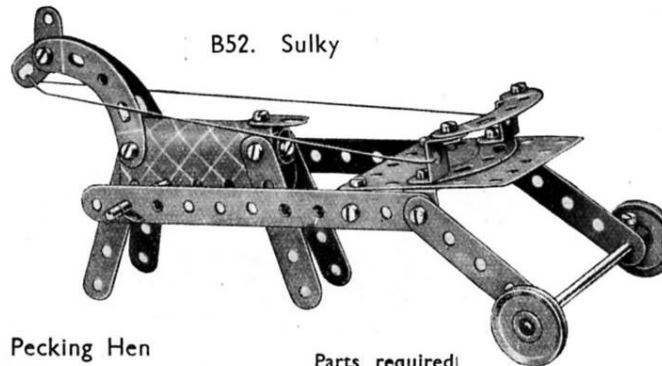
B49. Violin and Bow



## Parts required

4 of No. 2
1 " " 11
1 " " 12
1 " " 17
2 " " 35
5 " " 37
1 " " 40
1 " " 54a
1 " " 126

B52. Sulky



## Parts required

2 of No. 2	2 of No. 22	1 of No. 48a
6 " " 5	4 " " 35	4 " " 90a
3 " " 10	17 " " 37	1 " " 111c
6 " " 12	1 " " 37a	2 " " 125
2 " " 16	1 " " 40	2 " " 190

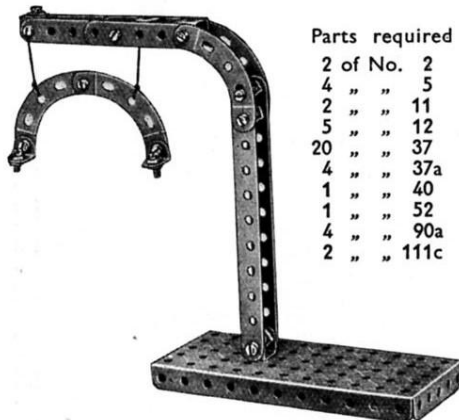
B56. Rocking Chair

## Parts required

9 of No. 5
4 " " 10
8 " " 12
16 " " 37
2 " " 37a
2 " " 48a
4 " " 90a
2 " " 111c
2 " " 190



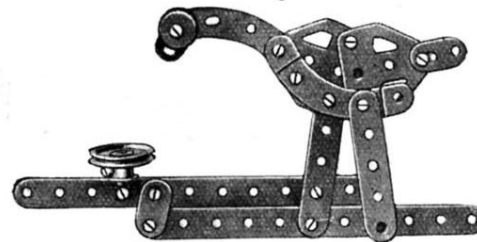
B50. Loading Gauge



## Parts required

2 of No. 2
4 " " 5
2 " " 11
5 " " 12
20 " " 37
4 " " 37a
1 " " 40
1 " " 52
4 " " 90a
2 " " 111c

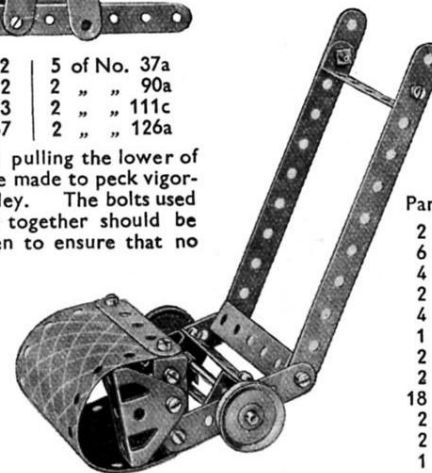
B53. Pecking Hen



Parts required	1 of No. 12	5 of No. 37a
2 of No. 2	1 " " 22	2 " " 90a
2 " " 5	1 " " 23	2 " " 111c
3 " " 10	11 " " 37	2 " " 126a

By alternately pushing and pulling the lower of the  $5\frac{1}{2}$ " Strips, the hen can be made to peck vigorously at the "bowl," a 1" Pulley. The bolts used for securing the  $5\frac{1}{2}$ " Strips together should be locknutted, care being taken to ensure that no "side play" is permitted.

B54. Grass Cutter



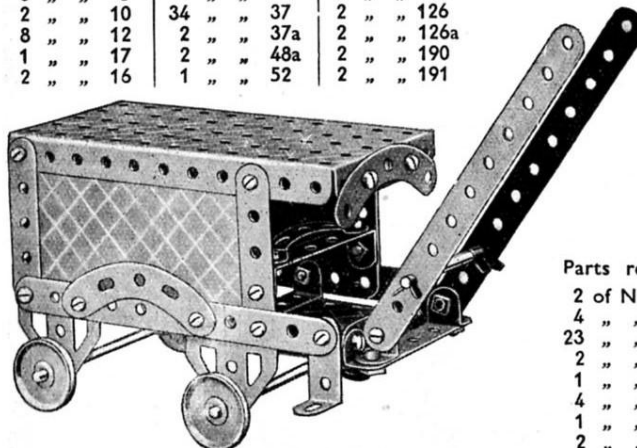
## Parts required

2 of No. 2
6 " " 5
4 " " 10
2 " " 11
4 " " 12
1 " " 16
2 " " 22
2 " " 35
18 " " 37
2 " " 48a
2 " " 126
1 " " 191

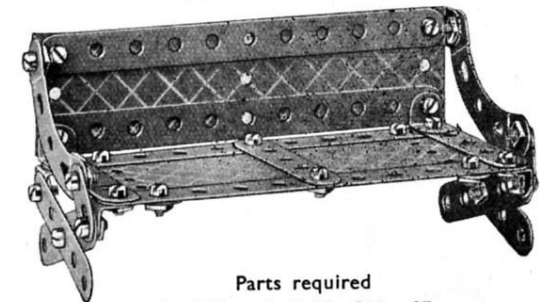
B51. Bread Van

## Parts required

4 of No. 2	4 of No. 22	4 of No. 90a
8 " " 5	4 " " 35	1 " " 125
2 " " 10	34 " " 37	2 " " 126
8 " " 12	2 " " 37a	2 " " 126a
1 " " 17	2 " " 48a	2 " " 190
2 " " 16	1 " " 52	2 " " 191



B57. Station Seat



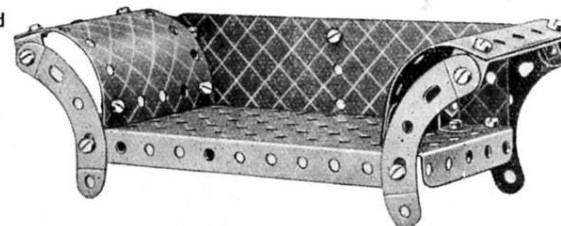
## Parts required

4 of No. 2	24 of No. 37
9 " " 5	2 " " 90a
2 " " 10	1 " " 189
8 " " 12	1 " " 191

B55. Couch

## Parts required

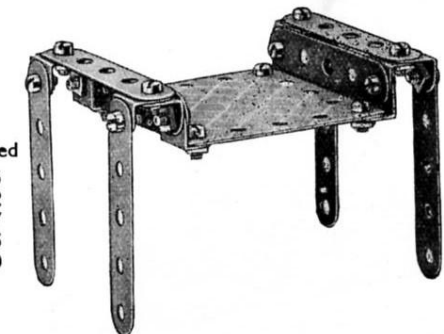
2 of No. 2
4 " " 12
23 " " 37
2 " " 48a
1 " " 52
4 " " 90a
1 " " 189
2 " " 190



## Parts required

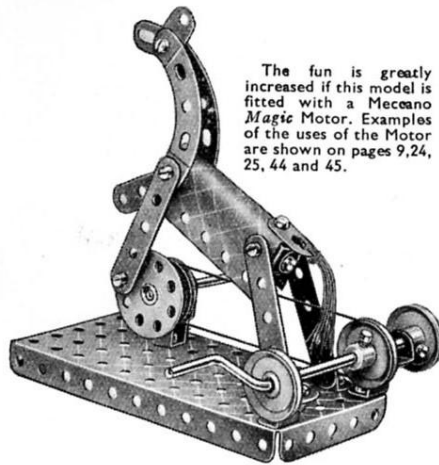
8 of No. 5
8 " " 12
16 " " 37
2 " " 125
1 " " 190

B58. Stool for Dressing Table



An alternative design of this model (B51M), fitted with the Meccano Magic Motor, is shown on page 25.

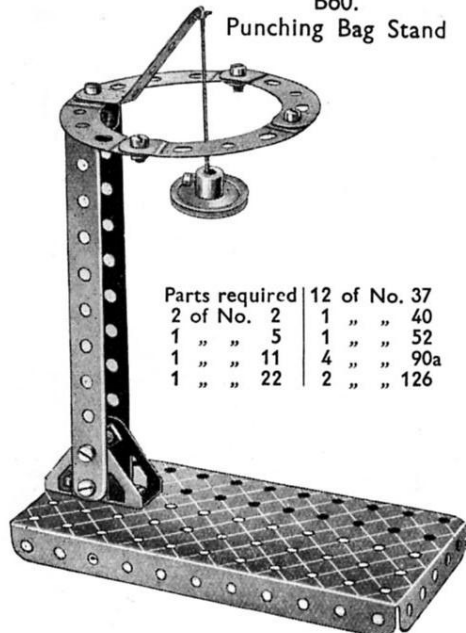
## B59. Prancing Horse



The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of the Motor are shown on pages 9, 24, 25, 44 and 45.

Parts required		
4 of No. 2	4 of No. 5	1 of No. 52
3 " " 10	1 " " 24	2 " " 90a
8 " " 12	14 " " 37	4 " " 111c
1 " " 17	8 " " 37a	2 " " 125
1 " " 19s	1 " " 40	1 " " 186
	1 " " 44	1 " " 190

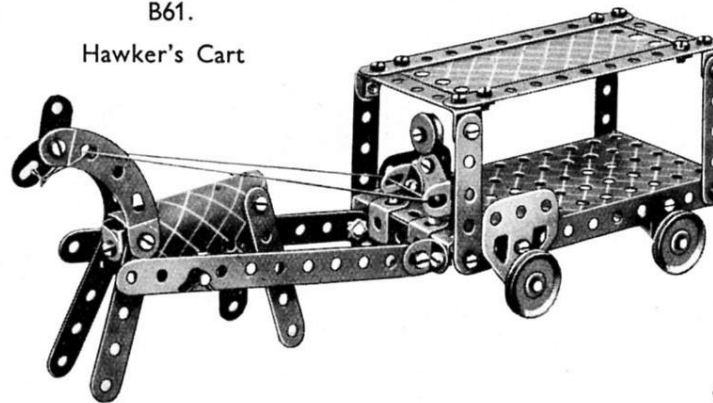
## B60. Punching Bag Stand



Parts required		
2 of No. 2	12 of No. 37	1 " " 40
1 " " 5	1 " " 52	1 " " 52
1 " " 11	4 " " 90a	1 " " 11
1 " " 22	2 " " 126	2 " " 126

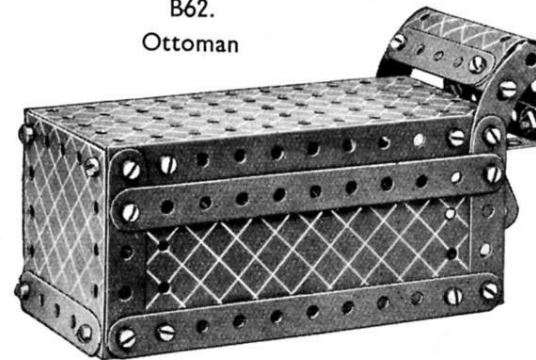
Parts required		
4 of No. 2	4 of No. 5	1 of No. 52
8 " " 10	1 " " 24	2 " " 90a
8 " " 12	14 " " 37	4 " " 111c
2 " " 16	8 " " 37a	2 " " 125
1 " " 17	1 " " 40	1 " " 186
4 " " 22	1 " " 44	1 " " 190
1 " " 23		
1 " " 35		
35 " " 37		
4 " " 37a		
1 " " 40		
2 " " 48a		
1 " " 52		
2 " " 90a		
2 " " 111c		
2 " " 125		
2 " " 126		
2 " " 126a		
1 " " 190		
1 " " 191		

## B61. Hawker's Cart



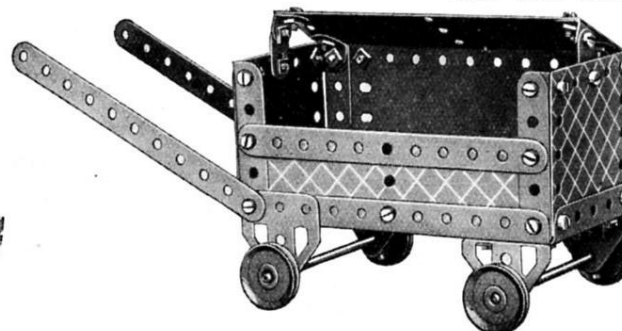
The fun is greatly increased if this model is fitted with a Meccano Magic Motor. For examples of the uses of the Motor see pages 9, 24, 25, 44 and 45. If the Motor is fitted, a Bush Wheel should be mounted on a 2" Rod fitted between the hind legs of the horse.

## B62. Ottoman



Parts required		
4 of No. 2	4 of No. 5	1 of No. 52
7 " " 10	1 " " 24	2 " " 90a
2 " " 11	14 " " 37	4 " " 111c
4 " " 12	8 " " 37a	2 " " 125
34 " " 37	1 " " 40	1 " " 186
1 " " 48a	1 " " 44	1 " " 190
1 " " 52		
2 " " 90a		
2 " " 190		
2 " " 191		

## B63. Ash Cart



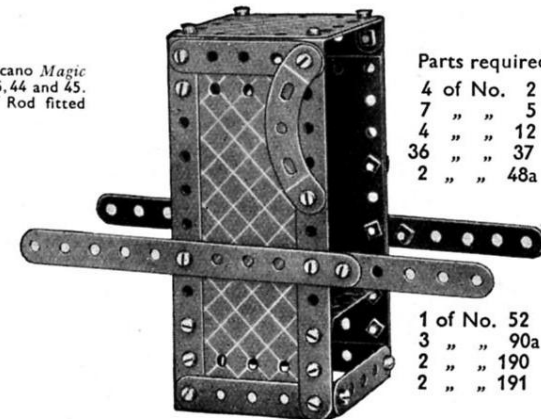
Parts required		
4 of No. 2	4 of No. 5	1 of No. 52
4 " " 10	1 " " 24	2 " " 90a
2 " " 11	14 " " 37	4 " " 111c
4 " " 12	8 " " 37a	2 " " 125
2 " " 16	1 " " 40	1 " " 186
4 " " 22	1 " " 44	1 " " 190
34 " " 37		
2 " " 37a		
2 " " 48a		
1 " " 52		
2 " " 111c		
2 " " 126		
2 " " 126a		
2 " " 189		
2 " " 190		
1 " " 191		

## B64. Shepherd's Crook



Parts required		
2 of No. 1	7 " " 37	4 " " 90a

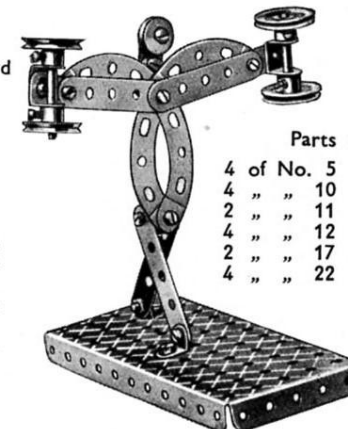
## B65. Sedan Chair



Parts required		
4 of No. 2	4 of No. 5	1 of No. 52
7 " " 10	1 " " 24	2 " " 90a
4 " " 12	14 " " 37	4 " " 111c
36 " " 37	8 " " 37a	2 " " 125
2 " " 48a	1 " " 40	1 " " 186
	1 " " 44	1 " " 190

Parts required		
1 of No. 52	3 " " 90a	2 " " 190
2 " " 191		

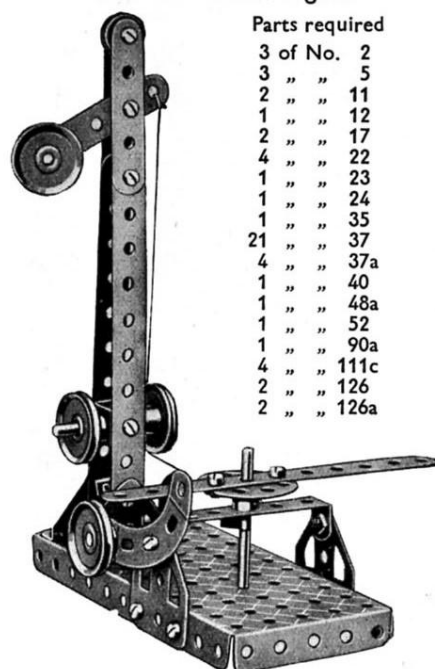
## B66. Strong Man



Parts required		
4 of No. 5	12 of No. 37	1 of No. 52
4 " " 10	1 " " 24	2 " " 90a
2 " " 11	14 " " 37	4 " " 111c
4 " " 12	8 " " 37a	2 " " 125
2 " " 16	1 " " 40	1 " " 186
4 " " 22	1 " " 44	1 " " 190



B67. Automatic Signals

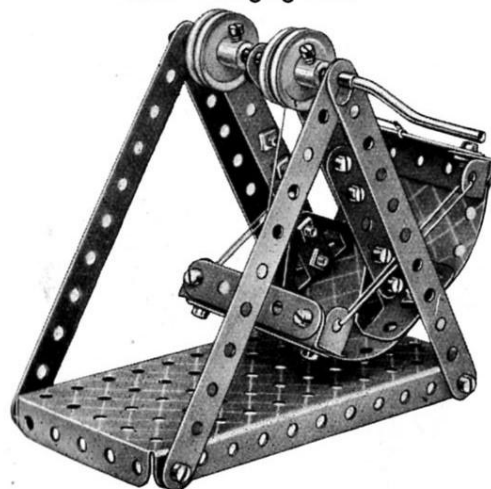


## Parts required

3 of No.	2
3 "	5
2 "	11
1 "	12
2 "	17
4 "	22
1 "	23
1 "	24
1 "	35
21 "	37
4 "	37a
1 "	40
1 "	48a
1 "	52
1 "	90a
4 "	111c
2 "	126
2 "	126a

The weighted Curved Strip is locknotted (see page 49) to the Flat Trunnion. When the horizontal  $5\frac{1}{2}$ " Strip is tripped by the locomotive the signal is raised to "danger" until the mechanism is re-set.

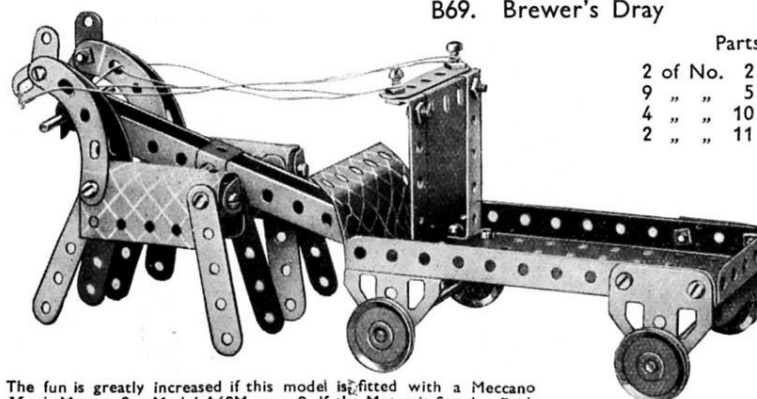
B68. Swinging Boat



## Parts required

4 of No.	2
8 "	5
1 "	10
4 "	12
1 "	19s
4 "	22
6 "	35
22 "	37
4 "	37a
1 "	40
2 "	48a
1 "	52
2 "	126
1 "	191

B69. Brewer's Dray



The fun is greatly increased if this model is fitted with a Meccano Magic Motor. See Model A62M, page 9. If the Motor is fitted, a Bush Wheel should be mounted on a 2in. Rod fitted between the inner hind legs of the two horses.

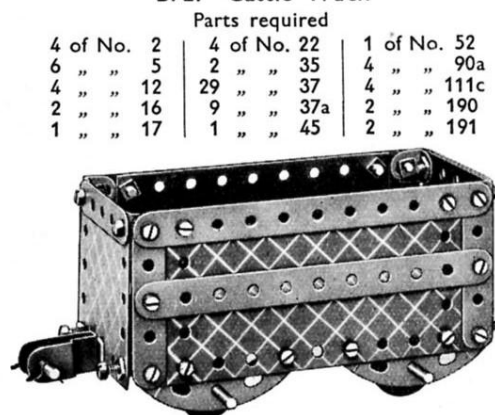
B70. Chair



## Parts required

8 of No.	5
4 "	12
16 "	37
2 "	48a
2 "	190

B72. Cattle Truck



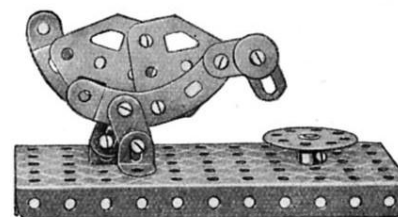
## Parts required

4 of No.	2	4 of No.	22	1 of No.	52
6 "	5	2 "	35	4 "	90a
4 "	12	29 "	37	4 "	111c
2 "	16	9 "	37a	2 "	190
1 "	17	1 "	45	2 "	191

## Parts required

2 of No.	2	8 of No.	12
9 "	5	2 "	16
4 "	10	2 "	17
2 "	11	4 "	22
		6 "	35
		29 "	37
		8 "	37a
		1 "	40
		2 "	48a
		1 "	52
		4 "	90a
		4 "	111c
		2 "	126
		2 "	126a
		2 "	190
		1 "	191

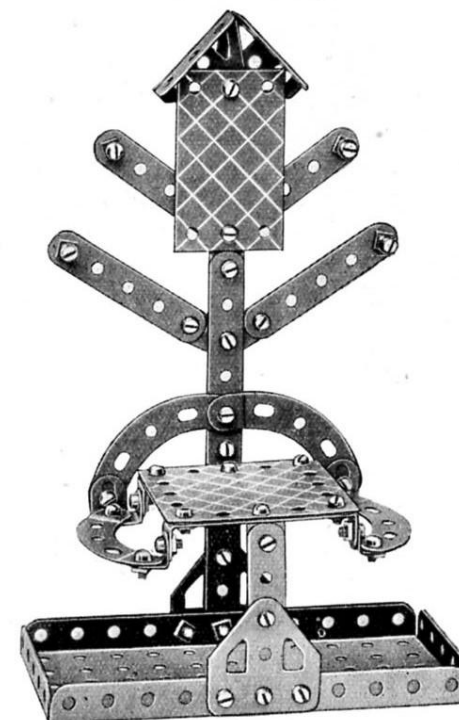
B71. Goose



## Parts required

4 of No.	10	2 of No.	37a
2 "	12	1 "	52
1 "	23	2 "	90a
1 "	24	3 "	111c
6 "	37	2 "	126a

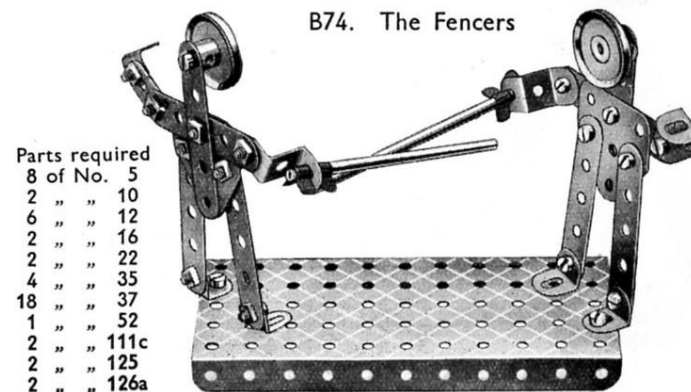
B73. Hat Rack



## Parts required

2 of No.	2	8 of No.	37a	2 of No.	126
9 "	5	2 "	48a	2 "	126a
2 "	10	1 "	52	1 "	188
8 "	12	4 "	90a	1 "	190
34 "	37	4 "	111c		

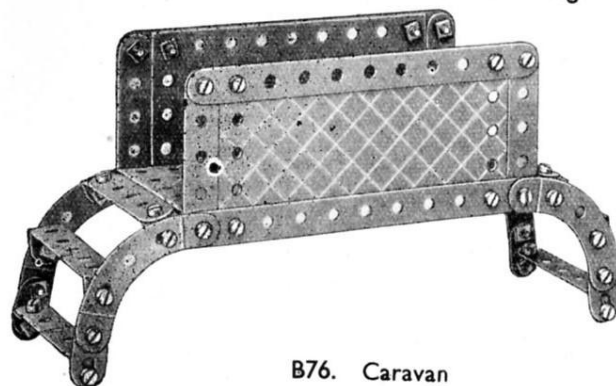
B74. The Fencers



## Parts required

8 of No.	5
2 "	10
6 "	12
2 "	16
2 "	22
2 "	35
4 "	37
18 "	37
1 "	52
2 "	111c
2 "	125
2 "	126a

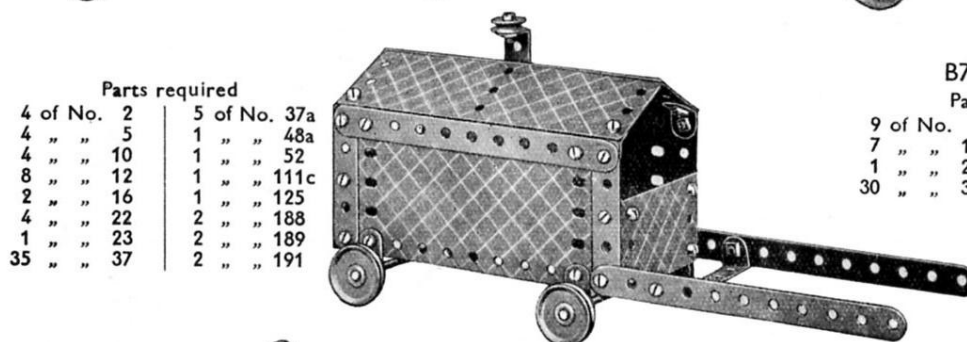
B75. Footbridge



## Parts required

4 of No.	2
8 "	5
4 "	10
8 "	12
36 "	37
4 "	37a
2 "	48a
1 "	52
4 "	90a
4 "	111c
2 "	191

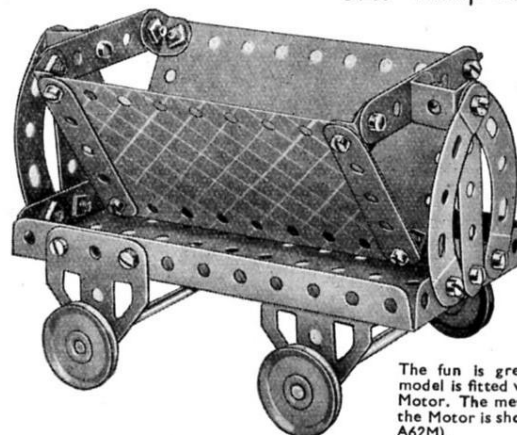
B76. Caravan



## Parts required

4 of No.	2	5 of No.	37a
4 "	5	1 "	48a
4 "	10	1 "	52
8 "	12	1 "	111c
2 "	16	1 "	125
4 "	22	2 "	188
1 "	23	2 "	189
35 "	37	2 "	191

B78. Dump Car

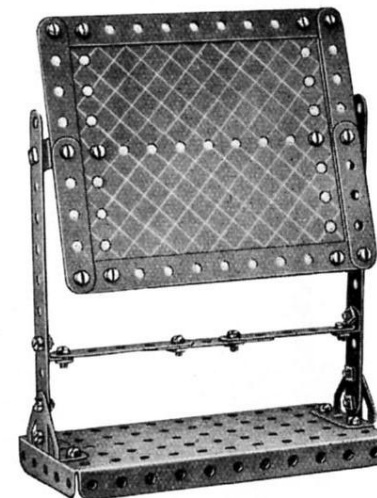


## Parts required

8 of No.	5
2 "	11
6 "	12
2 "	16
4 "	22
29 "	37
4 "	37a
1 "	52
4 "	90a
1 "	111c
2 "	126
2 "	126a
2 "	191

The fun is greatly increased if this model is fitted with a Meccano Magic Motor. The method of incorporating the Motor is shown on page 9 (Model A62M).

B81. School Blackboard



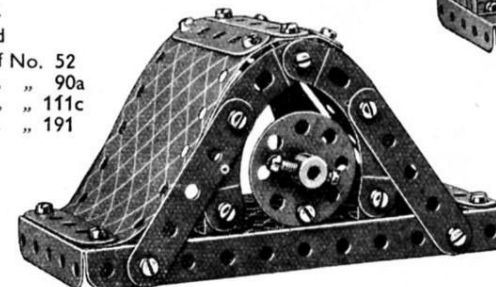
## Parts required

4 of No.	2
7 "	5
2 "	10
4 "	12
28 "	37
2 "	37a
1 "	52
2 "	126
2 "	191

B79. Clock

## Parts required

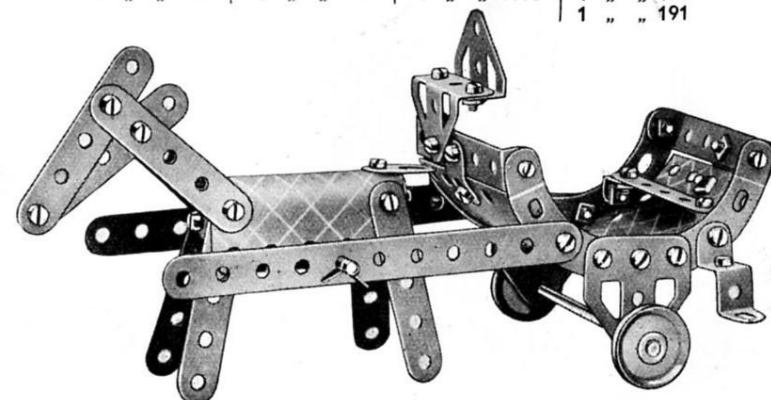
9 of No.	5	1 of No.	52
7 "	12	4 "	90a
1 "	24	2 "	111c
30 "	37	2 "	191



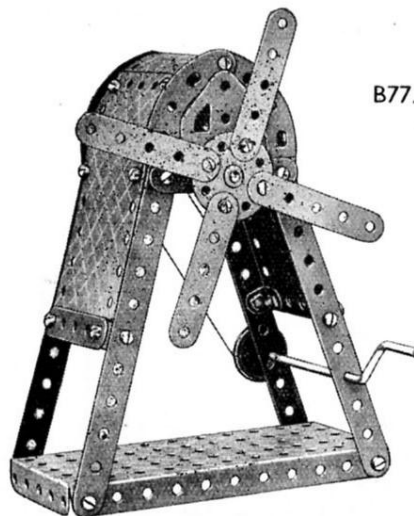
B82. Two-wheeled Trap

## Parts required

2 of No.	2	2 of No.	16	1 of No.	37a	2 of No.	125
9 "	5	2 "	22	2 "	48a	2 "	126
3 "	10	4 "	35	4 "	90a	2 "	126a
8 "	12	35 "	37	1 "	111c	1 "	190
						1 "	191



B77. Windmill



## Parts required

4 of No.	2
8 "	5
4 "	10
4 "	12
1 "	16
1 "	19s
2 "	22
1 "	24
1 "	35
36 "	37
2 "	37a
2 "	48a
1 "	52
4 "	90a
2 "	111c
2 "	126a
1 "	186
1 "	190
2 "	191

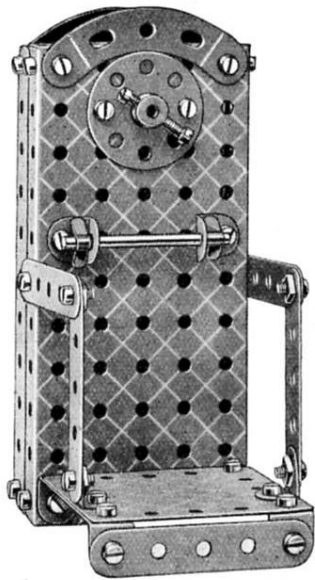
An alternative design of this model (B77M), fitted with the Meccano Magic Motor, is shown on page 24.

B80. Boxer



## Parts required

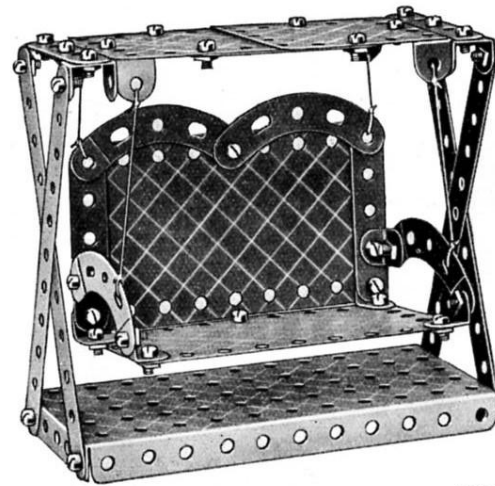
4 of No.	5
4 "	10
2 "	11
4 "	12
1 "	23
15 "	37
1 "	37a
1 "	52
1 "	111c



**B83.**  
Weighing  
Machine

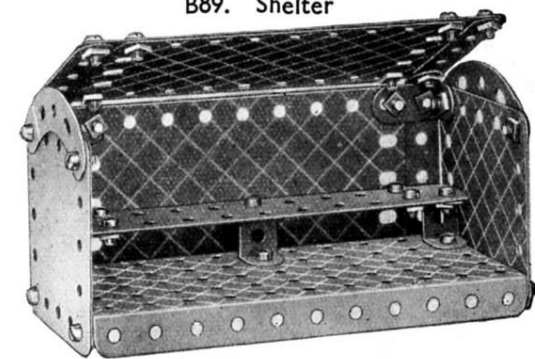
Parts required

4 of No.	2
7 " "	5
4 " "	10
8 " "	12
1 " "	17
2 " "	24
2 " "	35
36 " "	37
2 " "	37a
2 " "	48a
1 " "	52
2 " "	90a
3 " "	111c
1 " "	190
1 " "	191



**B86.**  
Swinging  
Garden Seat  
Parts required

4 of No.	2
8 " "	5
2 " "	11
8 " "	12
34 " "	37
1 " "	40
2 " "	48a
1 " "	52
4 " "	90a
2 " "	126a
2 " "	190
2 " "	191



**B89.** Shelter

Parts required

4 of No.	2	4 of No.	12	1 of No.	125
8 " "	5	34 " "	37	2 " "	190
4 " "	10	1 " "	52	2 " "	191
2 " "	11	2 " "	90a		

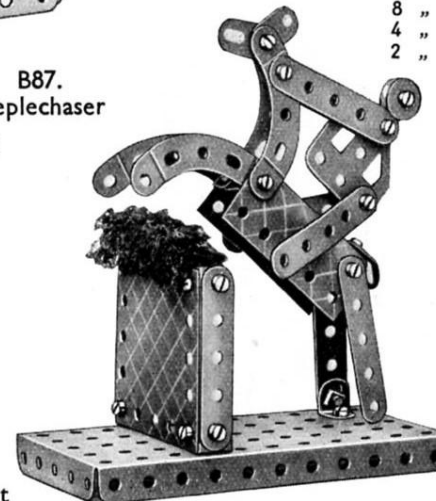
**B84.**  
Chesterfield Chair



Parts required

9 of No.	5	2 of No.	48a
2 " "	10	2 " "	90a
2 " "	11	2 " "	125
8 " "	12	2 " "	190
32 " "	37	2 " "	191

**B87.**  
Steeplechaser

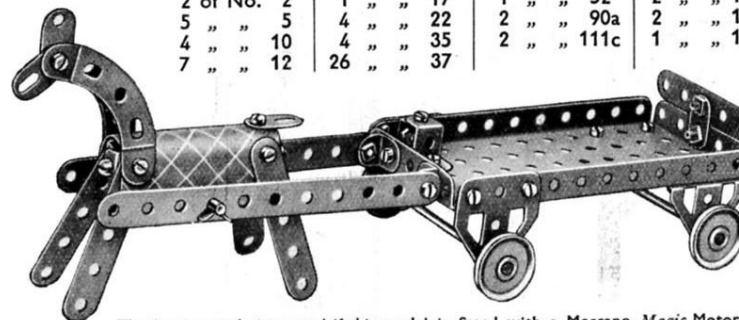


Parts required

9 of No.	5
4 " "	10
7 " "	12
1 " "	23
20 " "	37
8 " "	37a
2 " "	48a
1 " "	52
4 " "	90a
4 " "	111c
1 " "	126a
2 " "	190

**B88.**

Horse and Cart



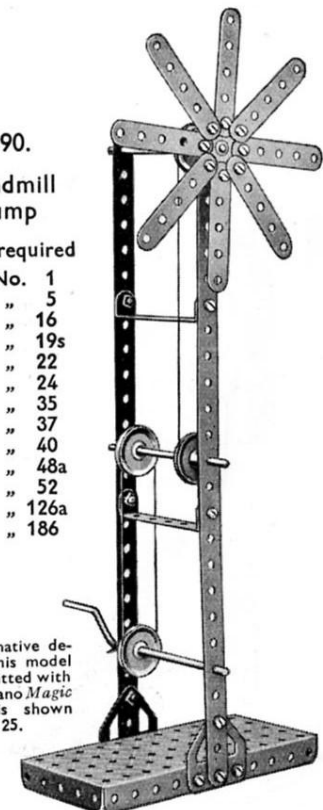
Parts required	2 of No. 16	2 of No. 37a	1 of No.125
2 of No. 2	1 " " 17	1 " " 52	2 " " 126
5 " " 5	4 " " 22	2 " " 90a	2 " " 126a
4 " " 10	4 " " 35	2 " " 111c	1 " " 190
7 " " 12	26 " " 37		

**B90.**

Windmill  
Pump

Parts required

2 of No.	1
8 " "	5
2 " "	16
1 " "	19s
4 " "	22
1 " "	24
1 " "	35
20 " "	37
1 " "	40
2 " "	48a
1 " "	52
2 " "	126a
1 " "	186

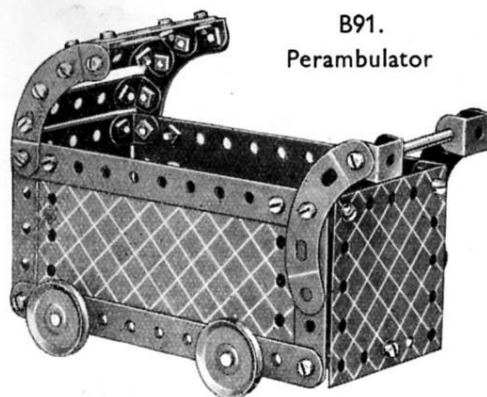


An alternative design of this model (B90M), fitted with the Meccano Magic Motor, is shown on page 25.

The fun is greatly increased if this model is fitted with a Meccano Magic Motor. The method of incorporating the Motor is shown on page 9 (A62M). If the Motor is fitted, a Bush Wheel should be mounted on a 2" Rod fitted between the hind legs of the horse.



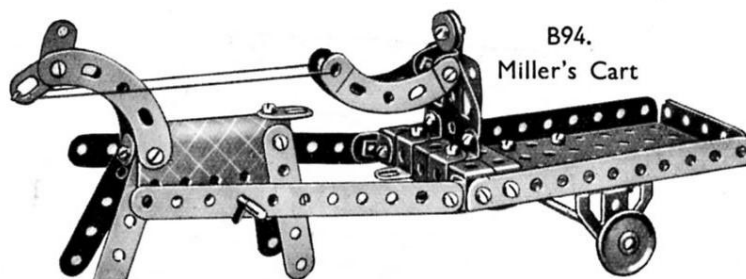
## These Models can be built with MECCANO Outfit B (or Outfits A and Aa)



B91.  
Perambulator

## Parts required

4 of No.	2
8 "	5
2 "	11
8 "	12
2 "	16
1 "	17
4 "	22
36 "	37
2 "	48a
1 "	52
4 "	90a
2 "	190
2 "	191



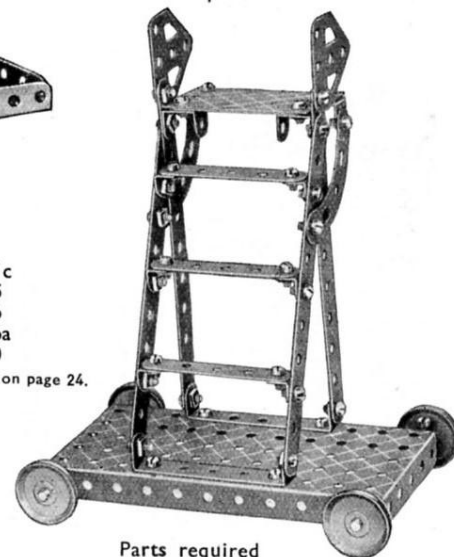
B94.  
Miller's Cart

## Parts required

2 of No.	2	2 of No.	16	2 of No.	37a	2 of No.	111c
4 "	5	2 "	22	1 "	40	2 "	125
4 "	10	1 "	23	2 "	48a	2 "	126
1 "	11	4 "	35	1 "	52	2 "	126a
8 "	12	26 "	37	4 "	90a	1 "	190

An alternative design of this model (B94M), fitted with the Meccano Magic Motor, is shown on page 24.

B97. Step Ladder on Wheels



## Parts required

4 of No.	2	2 of No.	16	1 of No.	52
5 "	5	4 "	22	2 "	90a
2 "	11	32 "	37	2 "	126a
8 "	12	2 "	48a	1 "	188

B92.  
Watchman's Hut and Fire

## Parts required

2 of No.	2	2 of No.	35	3 of No.	111c
9 "	5	34 "	37	2 "	126
2 "	10	3 "	37a	2 "	126a
6 "	12	2 "	48a	1 "	188
1 "	16	1 "	52	1 "	190
1 "	23	4 "	90a	2 "	191

B95.  
Revolving  
Office Chair

## Parts required

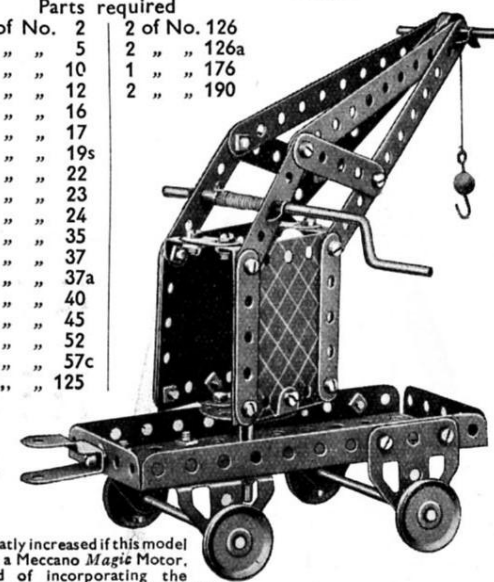
6 of No.	5
4 "	10
3 "	12
1 "	17
2 "	22
1 "	24
26 "	37
4 "	37a
1 "	48a
4 "	90a
2 "	126
2 "	190



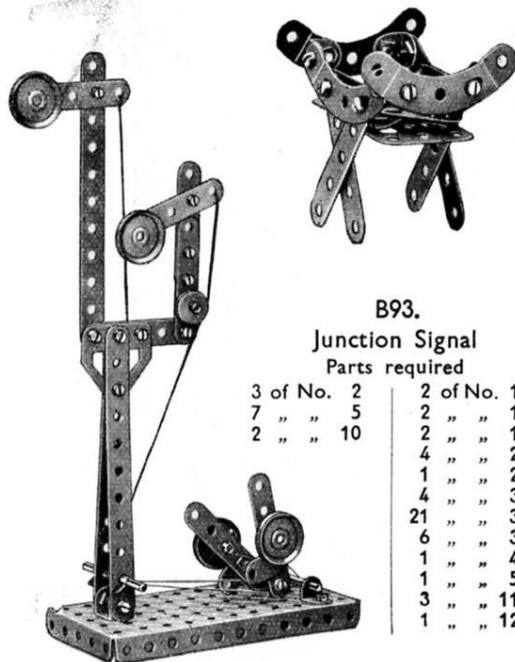
B98. Breakdown Crane

## Parts required

4 of No.	2	2 of No.	126
8 "	5	2 "	126a
3 "	10	1 "	176
8 "	12	2 "	190
2 "	16		
2 "	17		
1 "	19s		
4 "	22		
1 "	23		
1 "	24		
5 "	35		
32 "	37		
1 "	37a		
1 "	40		
1 "	45		
1 "	52		
1 "	57c		
1 "	125		



The fun is greatly increased if this model is fitted with a Meccano Magic Motor. The method of incorporating the Motor is shown on page 9. (Model A62M)

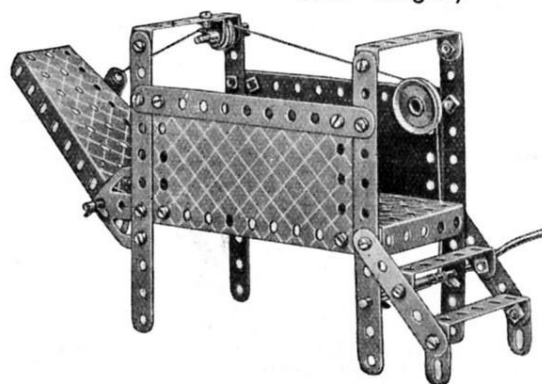


B93.  
Junction Signal

## Parts required

3 of No.	2	2 of No.	11
7 "	5	2 "	12
2 "	10	2 "	17
		4 "	22
		1 "	23
		4 "	35
		21 "	37
		6 "	37a
		1 "	40
		1 "	52
		3 "	111c
		1 "	126a

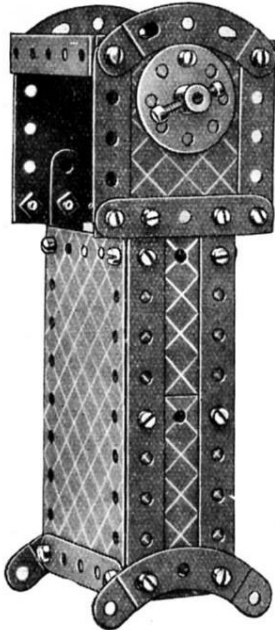
B96. Gangway



## Parts required

6 of No.	2
4 "	5
3 "	10
5 "	12
1 "	16
1 "	17
1 "	19s
1 "	22
1 "	23
6 "	35
32 "	37
1 "	37a
1 "	40
2 "	48a
1 "	52
1 "	54a
1 "	111c
2 "	126a
1 "	176
2 "	191

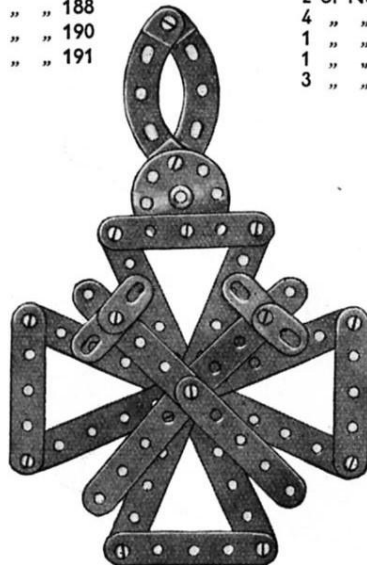
B99. Grandfather Clock



## Parts required

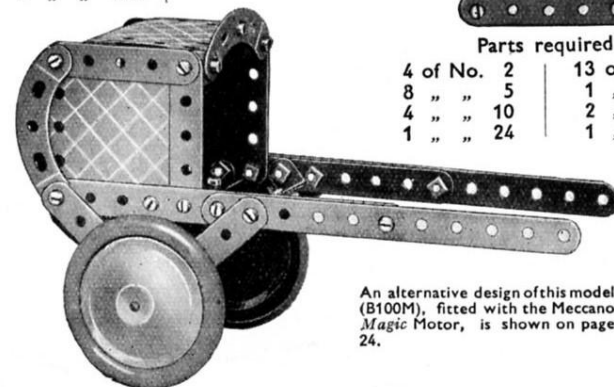
4	of No.	2
8	" "	5
8	" "	12
1	" "	24
31	" "	37
2	" "	48a
4	" "	90a
1	" "	111c
2	" "	188
2	" "	190
2	" "	191

B101. Medal



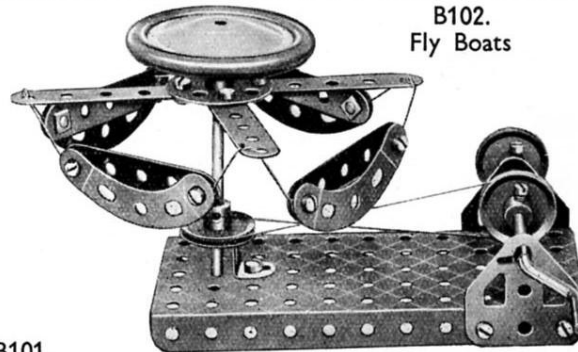
## Parts required

4	of No.	2	13	of No.	37
8	" "	5	1	" "	37a
4	" "	10	2	" "	90a
1	" "	24	1	" "	111c



An alternative design of this model (B100M), fitted with the Meccano Magic Motor, is shown on page 24.

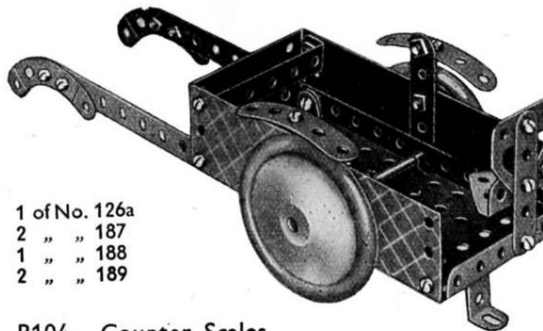
B102. Fly Boats



2	of No.	2	1	of No.	24	1	of No.	52
4	" "	5	2	" "	35	4	" "	90a
1	" "	15b	17	" "	37	1	" "	125
1	" "	19s	8	" "	37a	2	" "	126a
3	" "	22	1	" "	40	1	" "	187

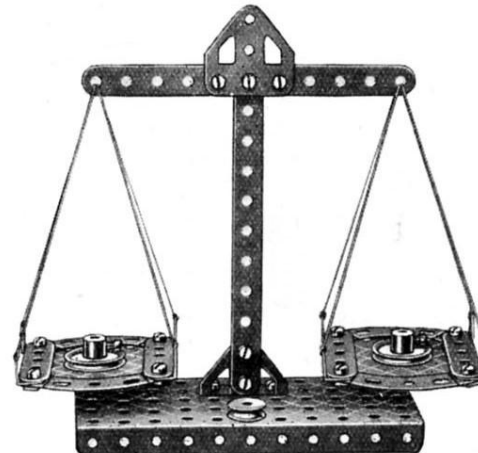
## Parts required

2	of No.	2	1	of No.	126a
6	" "	5	2	" "	187
5	" "	12	1	" "	188
1	" "	15b	2	" "	189
26	" "	37			
2	" "	48a			
1	" "	52			
2	" "	90a			
1	" "	125			
1	" "	126			



B103. Milk Float

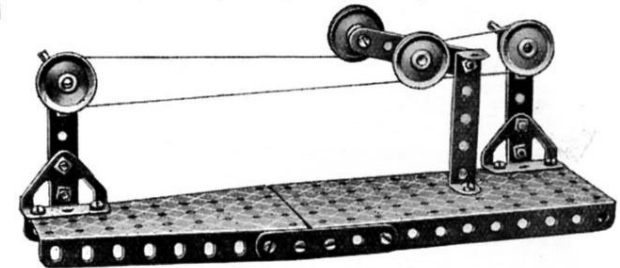
B104. Counter Scales



## Parts required

2	of No.	2
4	" "	5
8	" "	12
2	" "	22
1	" "	23
14	" "	37
2	" "	37a
1	" "	40
1	" "	52
4	" "	90a
1	" "	111c
1	" "	126
1	" "	126a
2	" "	190

B105. Jockey Pulley

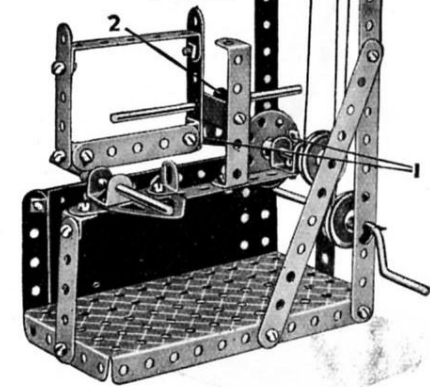


B106. Power Hack Saw

The Crank Handle drives an overhead shaft through 1" Pulleys and cord, and a similar arrangement conveys the drive to a 2" Rod carrying a Bush Wheel. A 2 1/2" Strip is pivoted to the Bush Wheel and to an Angle Bracket bolted to the saw frame. These pivots 1 are locknotted (see page 49). A Cranked Bent Strip 2 carries a 3 1/2" Rod on which the saw frame slides. An alternative design of this model (B106M) fitted with the Meccano Magic Motor, is shown on page 24.

## Parts required

2	of No.	1
3	" "	2
8	" "	5
2	" "	11
8	" "	12
2	" "	15b
2	" "	16
1	" "	17
1	" "	19s
4	" "	22
1	" "	24
6	" "	35
33	" "	37
2	" "	37a
2	" "	38
1	" "	40
1	" "	44
2	" "	48a
1	" "	52
1	" "	126a
1	" "	176
1	" "	191



B107.  
Coffee Stall



Parts required

4 of No. 2
8 " " 5
4 " " 10
8 " " 12
1 " " 22
35 " " 37
2 " " 48a
1 " " 52
1 " " 111c
2 " " 188
2 " " 189
2 " " 190
2 " " 191

Lighting Set  
(Not included in  
Outfit).

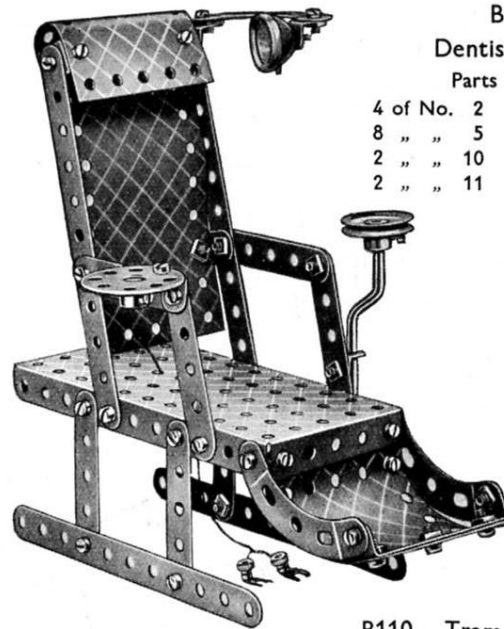
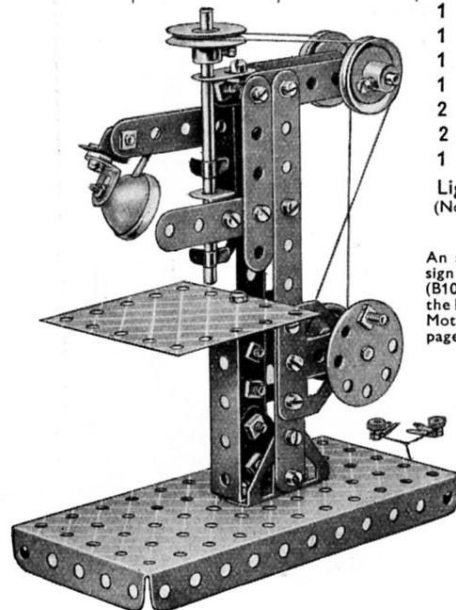
B108.  
Sensitive Drill

2 of No. 2	2 of No. 11	2 of No. 17
6 " " 5	3 " " 12	4 " " 22
2 " " 10	1 " " 16	1 " " 24

3 of No. 35
28 " " 37
5 " " 37a
1 " " 40
1 " " 48a
1 " " 52
1 " " 111c
2 " " 126
2 " " 126a
1 " " 190

Lighting Set  
(Not included in  
Outfit).

An alternative design of this model (B108M), fitted with the Meccano Magic Motor, is shown on page 24.



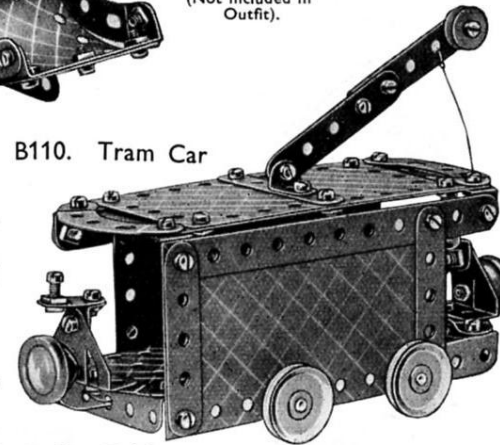
B109.  
Dentist's Chair

Parts required

4 of No. 2	7 of No. 12
8 " " 5	1 " " 19s
2 " " 10	1 " " 22
2 " " 11	1 " " 24
	3 " " 35
	36 " " 37
	6 " " 37a
	1 " " 48a
	1 " " 52
	3 " " 90a
	4 " " 111c
	1 " " 126a
	2 " " 190
	1 " " 191

Lighting Set  
(Not included in  
Outfit).

B110. Tram Car



Parts required

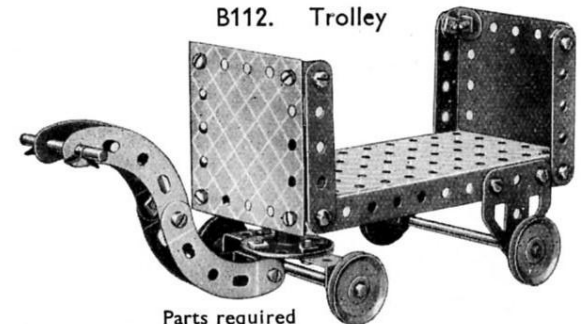
4 of No. 2	1 of No. 40
2 " " 10	2 " " 48a
2 " " 11	1 " " 52
3 " " 12	4 " " 90a
2 " " 16	3 " " 111c
4 " " 22	2 " " 126
1 " " 23	2 " " 190
34 " " 37	2 " " 191
6 " " 37a	Lighting Set (Not included in Outfit).

B111. Coffee Table

4 of No. 5
4 " " 12
8 " " 37
4 " " 90a
1 " " 190
Lighting Set (Not included in Outfit).

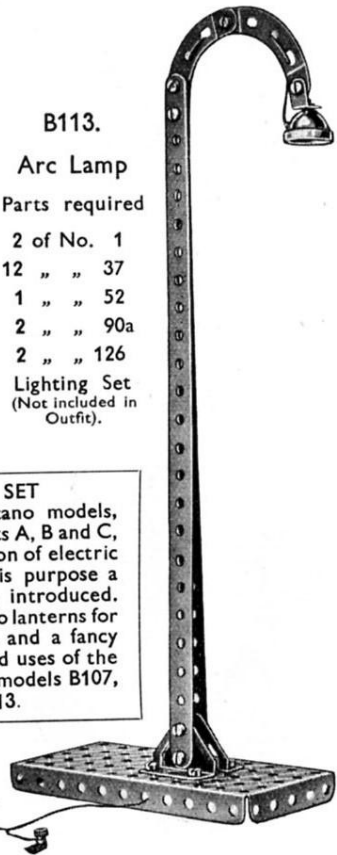


B112. Trolley



Parts required

4 of No. 5	4 of No. 22	1 of No. 52
1 " " 11	1 " " 24	4 " " 90a
4 " " 12	3 " " 35	2 " " 125
2 " " 16	28 " " 37	2 " " 126a
2 " " 17	1 " " 48a	2 " " 190



B113.  
Arc Lamp

Parts required

2 of No. 1
12 " " 37
1 " " 52
2 " " 90a
2 " " 126
Lighting Set (Not included in Outfit).

MECCANO LIGHTING SET

The appearance of many Meccano models, especially those built with Outfits A, B and C, is greatly improved by the addition of electric lights at suitable points. For this purpose a Meccano Lighting Set has been introduced. This consists of two pea-lamps, two lanterns for use as headlamps or spot lights, and a fancy stand lamp. The appearance and uses of the parts are shown on this page in models B107, B108, B109, B110, B111 and B113.



B114. Dressing Table



## Parts required

2	of No.	10
2	"	11
7	"	12
1	"	22
1	"	23
16	"	37
1	"	37a
1	"	52
4	"	90a
2	"	111c
2	"	126a

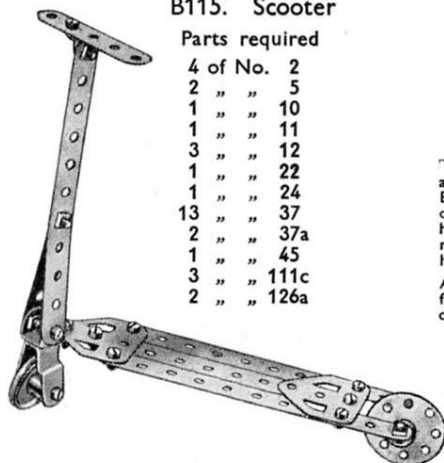
## Parts required

3	of No.	2	1	of No.	52
9	"	5	1	"	90a
4	"	10	1	"	111c
8	"	12	1	"	126a
1	"	23	2	"	190
33	"	37	2	"	191
3	"	37a			

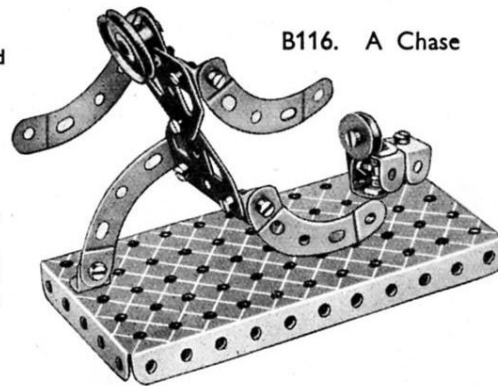
B115. Scooter

## Parts required

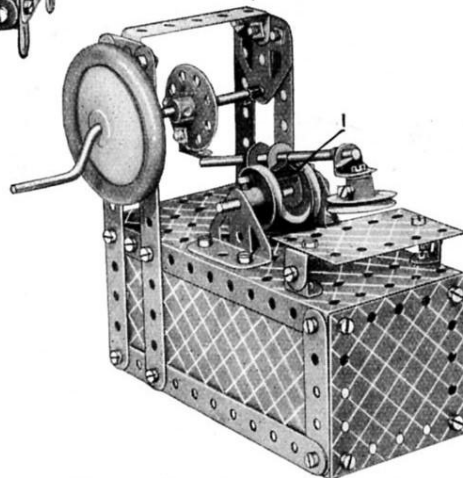
4	of No.	2
2	"	5
1	"	10
1	"	11
3	"	12
1	"	22
1	"	24
13	"	37
2	"	37a
1	"	45
3	"	111c
2	"	126a



B116. A Chase



B117. Trip Hammer



Two Double Brackets are bolted together at right angles as shown at 1. The lower Bracket pivots about a 2" Rod and the upper one carries a 3½" Rod to which the hammer head is fitted. An Angle Bracket bolted to a rotating Bush Wheel strikes the end of the hammer Rod and operates the hammer.

An alternative design of this model (B117M), fitted with the Meccano Magic Motor, is shown on page 25.

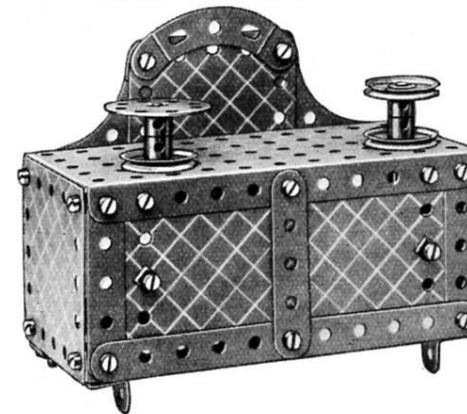
## Parts required

6	of No.	2
2	"	5
2	"	11
8	"	12
1	"	15b
1	"	17
1	"	19s
3	"	22
1	"	24
4	"	35
40	"	37
1	"	38
2	"	48a
1	"	52
1	"	111c
2	"	126
2	"	126a
1	"	176
1	"	187
1	"	188
2	"	190
2	"	191

## Parts required

4	of No.	2
6	"	5
4	"	10
2	"	11
4	"	12
2	"	16
2	"	22
1	"	23
2	"	35
22	"	37
3	"	37a
1	"	40

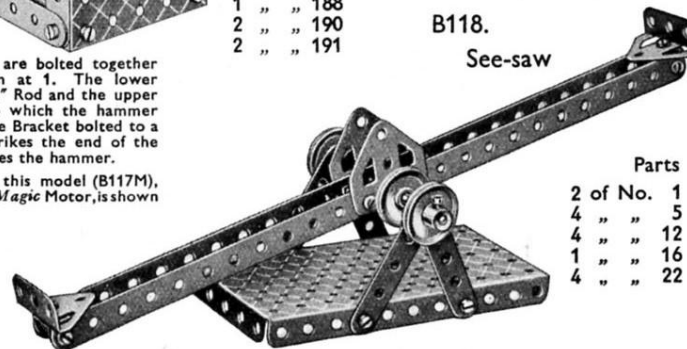
B120. Sideboard



Parts required	3 of No.	22	1 of No.	52
2 of No.	2	1	"	24
5	"	5	2	"
8	"	12	28	"
2	"	17	2	"

B118.

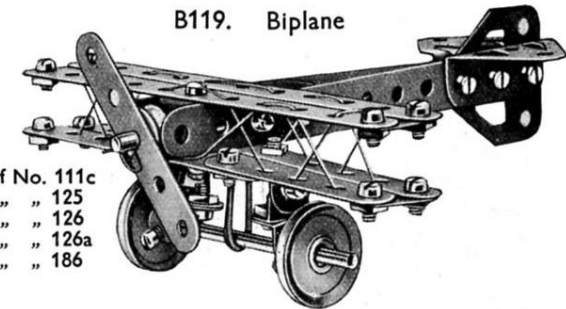
## See-saw



## Parts required

2	of No.	1	14	of No.	34
4	"	5	1	"	52
4	"	12	2	"	126
1	"	16	2	"	126a
4	"	22			

B119. Biplane



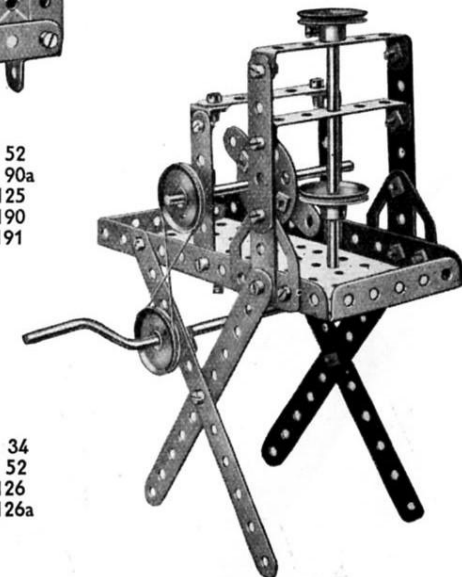
## 3 of No. 111c

2	"	125
2	"	126
1	"	126a
1	"	186

B121. Stamping Machine

## Parts required

4	of No.	2	1	of No.	24
7	"	5	2	"	35
2	"	10	20	"	37
2	"	12	2	"	48a
2	"	16	1	"	52
1	"	19s	2	"	126a
4	"	22	1	"	186



## HOW TO CONTINUE

When you have built the B Outfit Models illustrated, and fitted a number of them with the Meccano Magic Motor (see following two pages), your next step is to purchase a Ba Accessory Outfit. This converts your B Outfit into a C and enables you to build bigger and better models.

The greatest thrill in Meccano model-building is experienced when a model is set to work by means of a Meccano Motor. The models featured on this and the opposite page are more elaborate variations of a selection of Outfit B Models, showing how the new Meccano *Magic Motor* can be fitted to give more realism and to increase the fun. The numbers of these re-designed models are the same as those of the corresponding models in the preceding pages, with the addition of the letter M. Try your hand at re-designing other models in a similar manner and become a real inventor.

B100M. Rickshaw

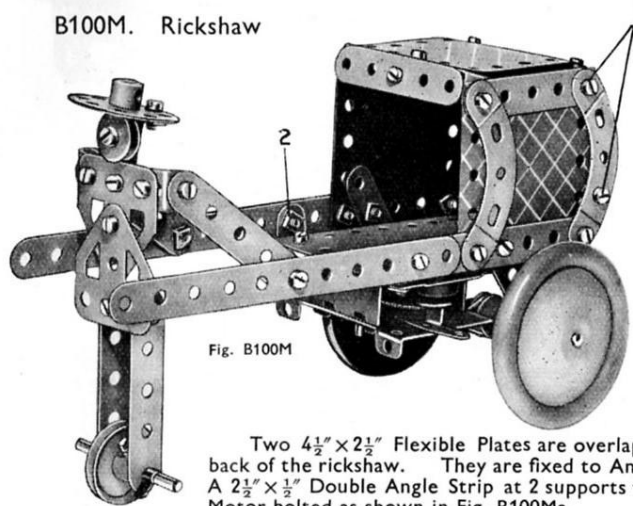
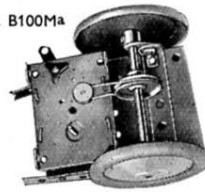


Fig. B100M

Two  $4\frac{1}{2}'' \times 2\frac{1}{2}''$  Flexible Plates are overlapped  $\frac{1}{2}''$  to form the top and back of the rickshaw. They are fixed to Angle Brackets at the points 1. A  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strip at 2 supports the floor and also the *Magic Motor* bolted as shown in Fig. B100Ma.

Fig. B100Ma



Parts required

4 of No. 2	34 of No. 37
9 " " 5	1 " " 37a
1 " " 10	2 " " 48a
1 " " 11	4 " " 90a
8 " " 12	1 " " 111c
1 " " 15b	2 " " 126a
1 " " 17	2 " " 187
1 " " 22	2 " " 190
1 " " 23	2 " " 191
1 " " 24	
2 " " 35	

B108M. Sensitive Drill

The  $3\frac{1}{2}''$  Rod 1 representing the drill is journaled at the top in a  $2\frac{1}{2}''$  Strip and at the bottom in a Flat Bracket. The Flat Bracket is secured to an Angle Bracket held by the bolt 2. One of the two  $1''$  Pulleys forming guides for the cord is free on its Rod.

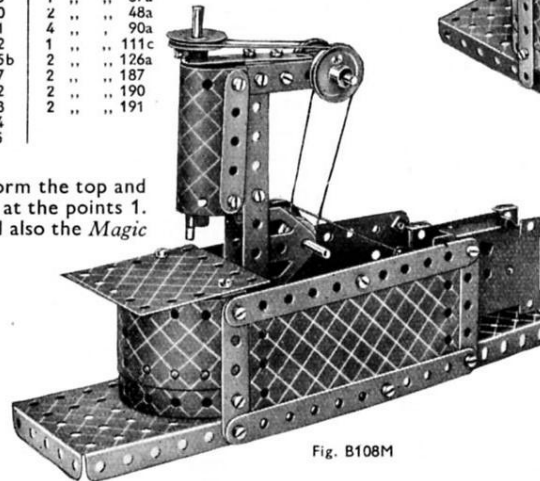


Fig. B108M

Parts required

6 of No. 2	
9 " " 5	
2 " " 10	
2 " " 11	
7 " " 12	
1 " " 15b	
2 " " 17	
4 " " 22	
1 " " 23	
2 " " 35	
36 " " 37	
6 " " 37a	
1 " " 40	
1 " " 48a	
1 " " 52	
1 " " 54a	
6 " " 111c	
2 " " 126	
2 " " 126a	
2 " " 189	
2 " " 190	
2 " " 191	

Magic Motor

B106M.

Power Hacksaw

The saw frame slides on a  $3\frac{1}{2}''$  Axle Rod held in a Cranked Bent Strip and is driven to and fro by a  $2\frac{1}{2}''$  Strip connected to a revolving Bush Wheel. The bolts 1 are provided with locknuts to form pivots.

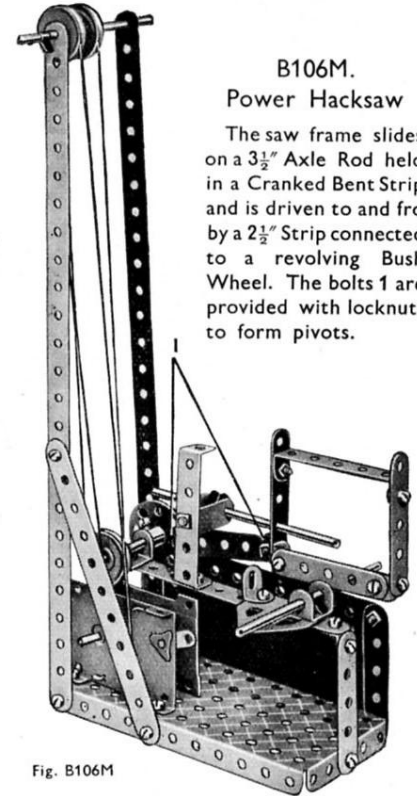


Fig. B106M

Parts required

2 of No. 1	6 of No. 12	2 of No. 38
3 " " 2	1 " " 15b	1 " " 40
6 " " 5	2 " " 16	1 " " 44
2 " " 11	1 " " 17	2 " " 48a
	3 " " 22	1 " " 52
	1 " " 24	1 " " 126
	5 " " 35	1 " " 176
	30 " " 37	1 " " 190
	2 " " 37a	

B77M. Windmill

The  $\frac{1}{2}''$  Pulley on the intermediate Rod drives a  $1''$  Pulley on the Axle Rod carrying the "sails." (See Fig. B77Ma.)

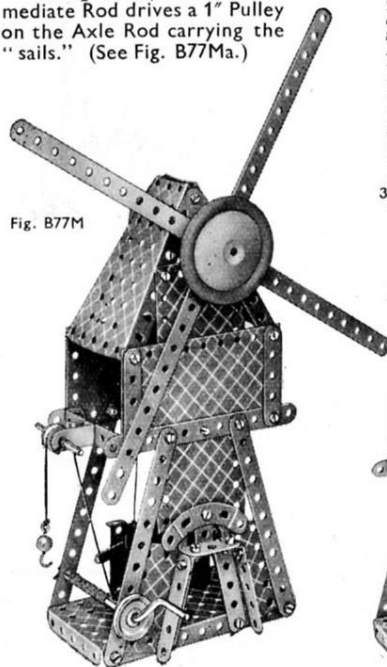
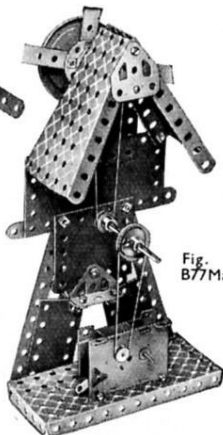


Fig. B77M

Parts required

2 of No. 1	1 of No. 44
6 " " 2	2 " " 48a
8 " " 5	1 " " 52
4 " " 12	2 " " 54a
1 " " 15b	1 " " 57c
1 " " 16	1 " " 90a
1 " " 17	2 " " 126
1 " " 19a	2 " " 126a
4 " " 22	1 " " 176
1 " " 23	1 " " 187
1 " " 24	2 " " 188
4 " " 35	2 " " 190
38 " " 37	2 " " 191
1 " " 40	

Fig. B77Ma



B94M. Miller's Cart

Fig. B94Ma shows how the *Magic Motor* is arranged to drive the Road Wheels. A Bush Wheel is mounted between the hind legs of the horse and the forelegs are kept off the ground by means of the reins.

Parts required

6 of No. 2	1 of No. 188
6 " " 5	2 " " 189
5 " " 10	1 " " 190
1 " " 11	
8 " " 12	
1 " " 15b	
2 " " 17	
1 " " 22	
1 " " 23	
1 " " 24	
4 " " 35	
36 " " 37	
3 " " 37a	
6 " " 38	
1 " " 40	
2 " " 48a	
1 " " 52	
4 " " 90a	
3 " " 111c	
2 " " 125	
2 " " 126	
1 " " 126a	
2 " " 187	

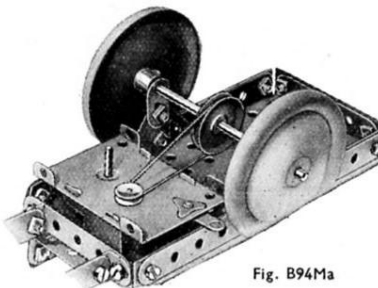


Fig. B94Ma

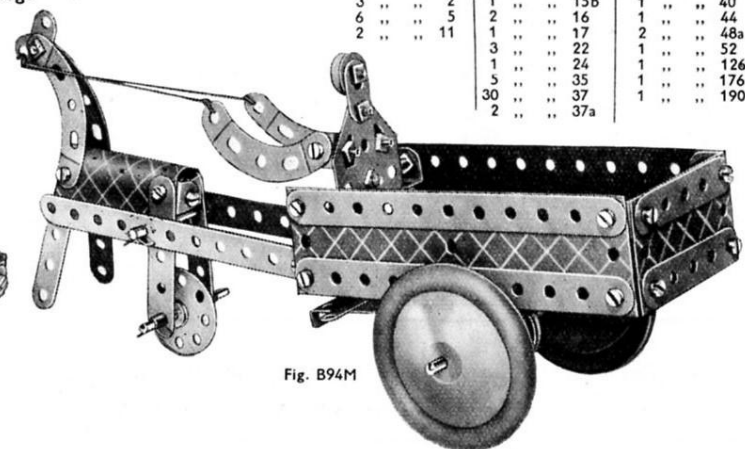
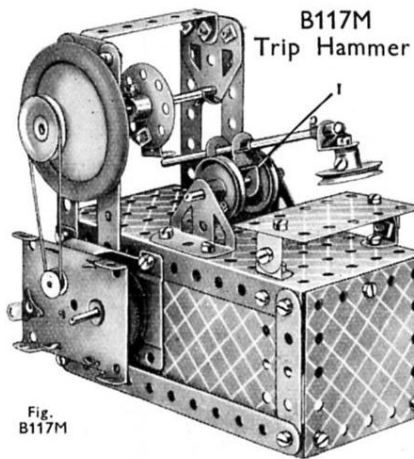


Fig. B94M



**B117M**  
Trip Hammer

Parts required	
6 of No.	2
2 " "	5
2 " "	11
8 " "	12
1 " "	15b
1 " "	16
1 " "	17
4 " "	22
1 " "	24
5 " "	35
36 " "	37
1 " "	37a
2 " "	48a
1 " "	52
1 " "	111c
2 " "	126
2 " "	126a
1 " "	176
1 " "	187
1 " "	188
2 " "	190
2 " "	191

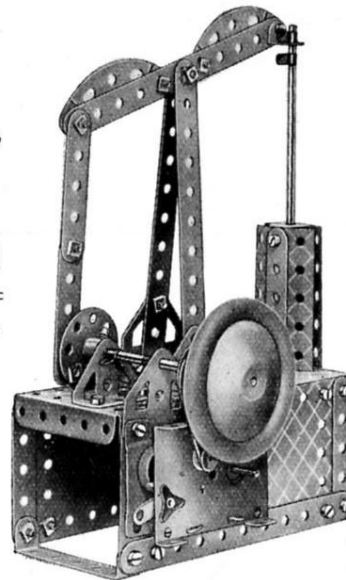


Fig. B32M

**B32M. Pump**

Parts required	
5 of No.	2
8 " "	5
2 " "	11
3 " "	12
1 " "	15b
1 " "	16
1 " "	22
1 " "	24
4 " "	35
34 " "	37
8 " "	37a
3 of No.	38
2 " "	48a
1 " "	52
2 " "	90a
6 " "	111c
2 " "	126
2 " "	126a
1 " "	186
1 " "	187
2 " "	188
2 " "	191

Fig. B32Ma

The construction of the pump cylinder will be clear from Fig. B32Ma. The Magic Motor drives a 1" Pulley on the crankshaft that is fitted with a Bush Wheel forming the crank. The bolts 1 are locknotted to form pivots.

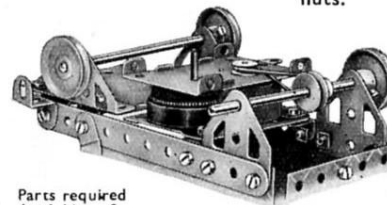


Fig. B51Ma

Parts required	
4 of No.	2
6 " "	5
3 " "	10
1 " "	11
8 " "	12
2 " "	16
2 " "	17
4 " "	22
1 " "	23
4 " "	35
35 " "	37
1 " "	40
2 " "	48a
1 " "	52
4 " "	90a
1 " "	125
2 " "	126
2 " "	126a
1 " "	186
2 " "	188
2 " "	190
2 " "	191

Parts required	
2 of No.	1
5 " "	2
9 " "	5
2 " "	11
7 " "	12
1 " "	15b
2 " "	16
1 " "	19s
4 " "	22
1 " "	24
6 " "	35
36 " "	37
5 " "	37a
2 " "	38
1 " "	40
2 " "	48a
1 " "	52
4 " "	90a
1 " "	111c
1 " "	126
2 " "	126a
1 " "	185
2 " "	188
2 " "	189
2 " "	190

The Motor drives a Crank Handle that is fitted with the separate Pulley Wheel. It carries also a 1" Pulley, to the boss of which an Angle Bracket is secured, two Washers being placed on the securing bolt as shown in Fig. B90Ma. In this way a crank is formed and is connected to the pivoted beam that operates the pump. The bolts 1 are pivotally attached by means of locknuts.

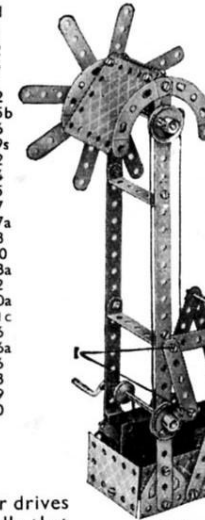


Fig. B90Ma

**B90M.**  
Windmill Pump

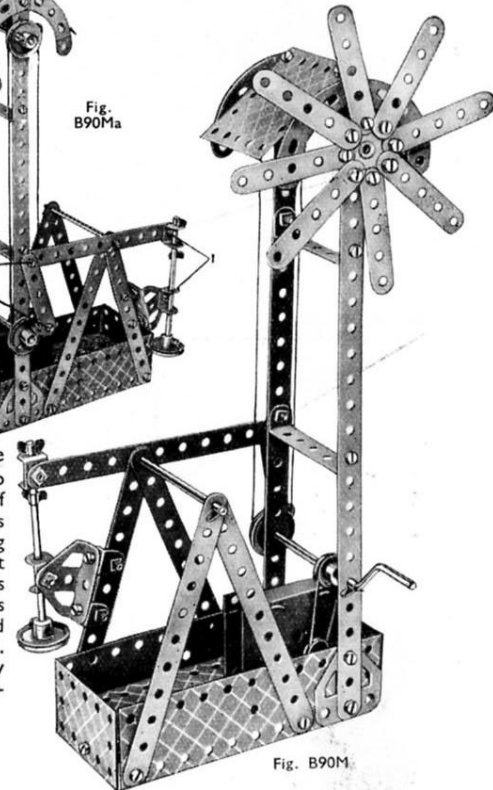


Fig. B90M

**B51M. Bread Van**

The method of mounting the Magic Motor in position is shown in Fig. B51Ma. The horse travels on a 3/4" loose Pulley mounted between its hind legs, and the forelegs should be kept clear of the ground by tying the reins to the Angle Bracket 1.

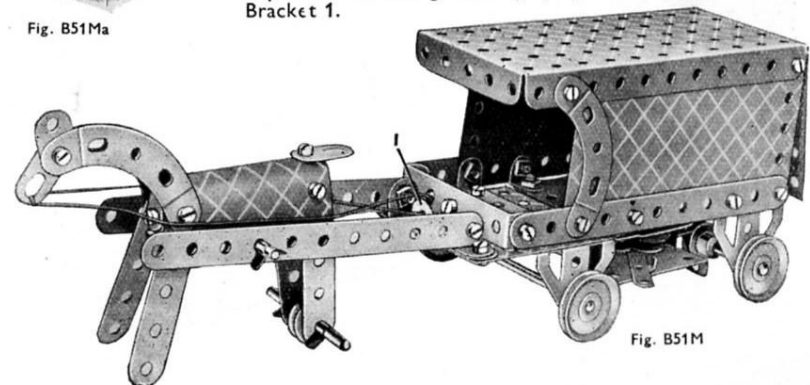


Fig. B51M

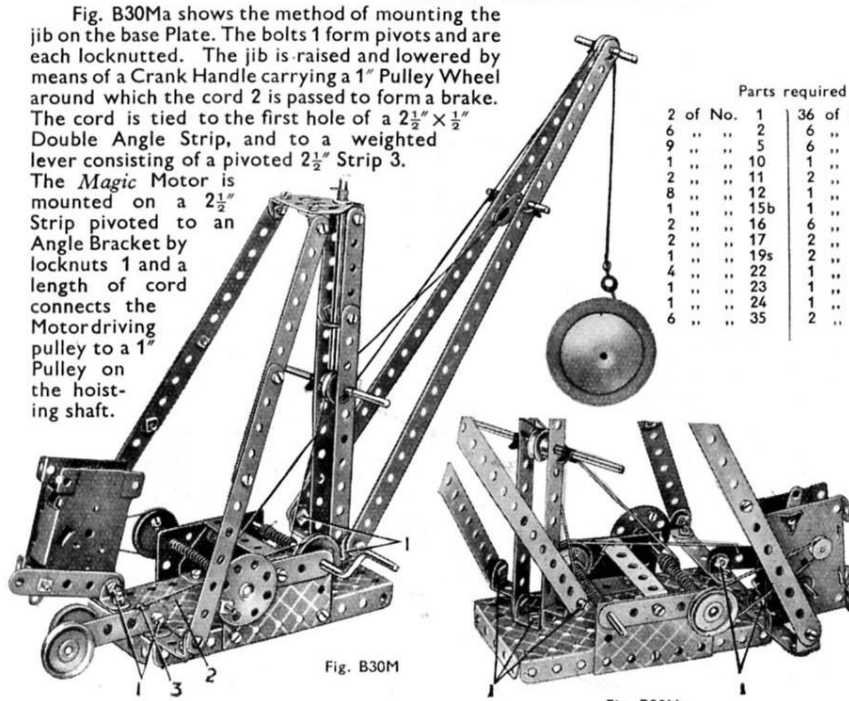


Fig. B30M

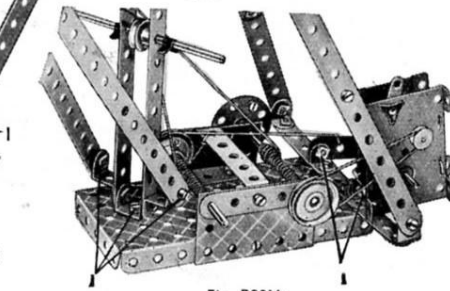


Fig. B30Ma

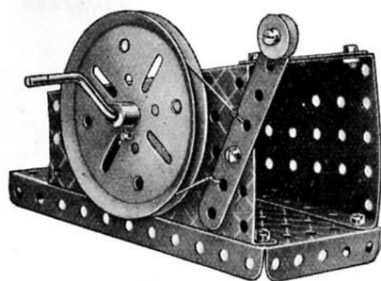
**B30M. Derrick Crane**

Fig. B30Ma shows the method of mounting the jib on the base Plate. The bolts 1 form pivots and are each locknotted. The jib is raised and lowered by means of a Crank Handle carrying a 1" Pulley Wheel around which the cord 2 is passed to form a brake. The cord is tied to the first hole of a 2 1/2" x 1/2" Double Angle Strip, and to a weighted lever consisting of a pivoted 2 1/2" Strip 3. The Magic Motor is mounted on a 2 1/2" Strip pivoted to an Angle Bracket by locknuts 1 and a length of cord connects the Motor driving pulley to a 1" Pulley on the hoisting shaft.

Parts required	
2 of No.	1
6 " "	2
9 " "	5
1 " "	10
1 " "	11
8 " "	12
1 " "	15b
2 " "	16
2 " "	17
1 " "	19s
4 " "	22
1 " "	23
1 " "	24
6 " "	35
36 of No.	37
6 " "	37a
6 " "	38
1 " "	40
2 " "	48a
1 " "	52
1 " "	57c
6 " "	111c
2 " "	125
2 " "	126
1 " "	126a
1 " "	176
1 " "	187
2 " "	188



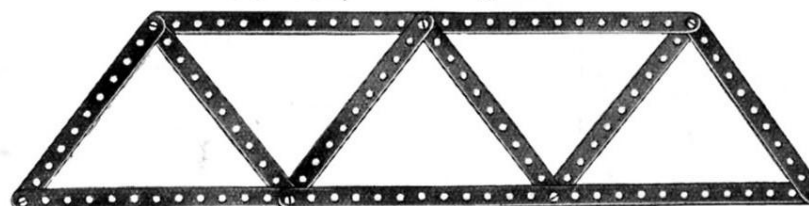
C1. Band Brake



## Parts required

1	of	No. 3
2	"	5
1	"	19s
1	"	19b
1	"	22
1	"	23
9	"	37
2	"	37a
3	"	38
1	"	40
1	"	52
2	"	54a
1	"	111c
1	"	191

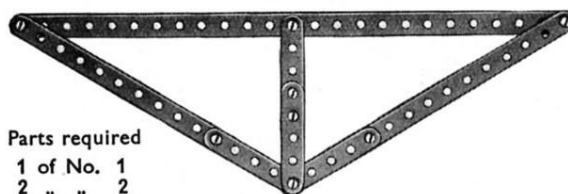
C4. Compound Triangulated Truss



## Parts required

3 of No. 1 | 6 of No. 2 | 7 of No. 37

C2. Triangulated Truss



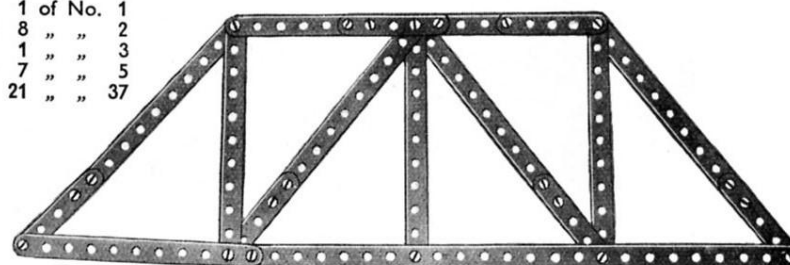
## Parts required

1	of	No. 1
2	"	2
4	"	5
8	"	37

## Parts required

1	of	No. 1
8	"	2
1	"	3
7	"	5
21	"	37

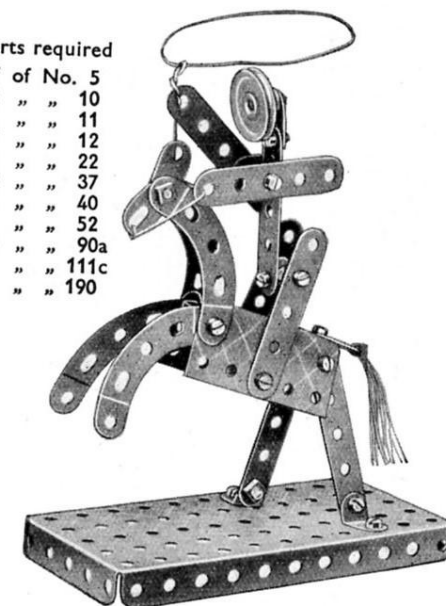
C5. Howe Truss



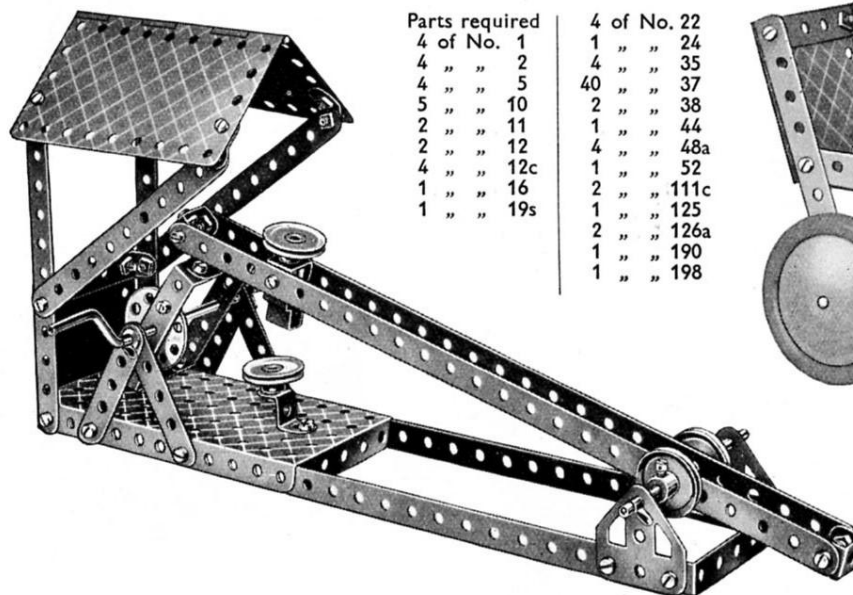
C7. Mounted Cowboy

## Parts required

7	of	No. 5
4	"	10
2	"	11
7	"	12
1	"	22
22	"	37
1	"	40
1	"	52
4	"	90a
1	"	111c
1	"	190



C3. Helve Hammer



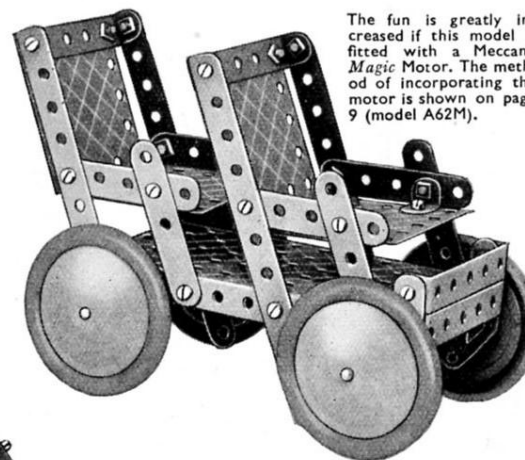
## Parts required

4	of	No. 1
4	"	2
4	"	5
5	"	10
2	"	11
2	"	12
4	"	12c
1	"	16
1	"	19s

## 4 of No. 22

1	"	24
4	"	35
40	"	37
2	"	38
1	"	44
4	"	48a
1	"	52
2	"	111c
1	"	125
2	"	126a
1	"	190
1	"	198

C6. Tandem Car



The fun is greatly increased if this model is fitted with a Meccano Magic Motor. The method of incorporating the motor is shown on page 9 (model A62M).

## Parts required

4	of	No. 2	4	of	No. 48a
8	"	5	1	"	52
4	"	12	2	"	126a
2	"	15b	4	"	187
34	"	37	4	"	190

C8. Bath Chair

## Parts required

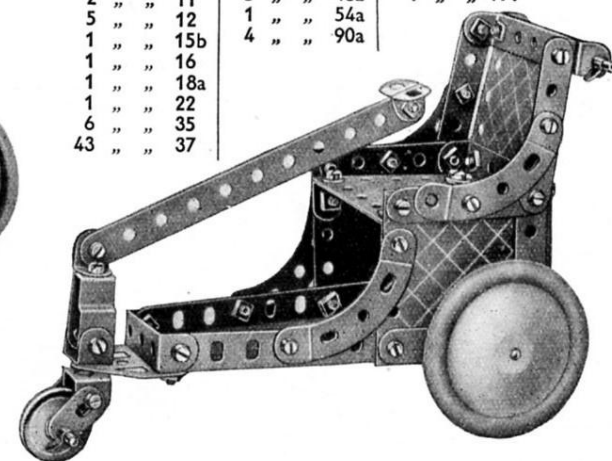
1	of	No. 2
9	"	5
4	"	10
2	"	11
5	"	12
1	"	15b
1	"	16
1	"	18a
1	"	22
6	"	35
43	"	37

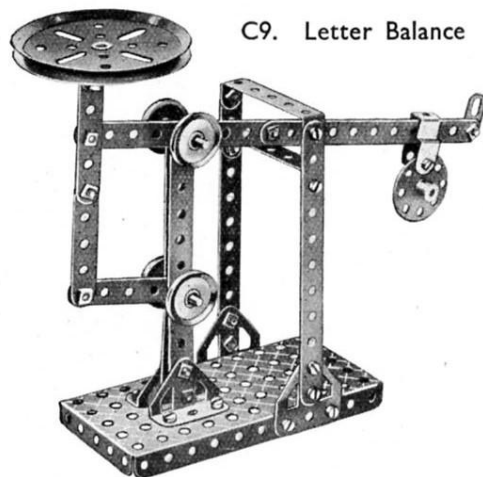
## 4 of No. 37a

8	"	38
1	"	44
1	"	48
5	"	48a
1	"	54a
4	"	90a

## 1 of No. 111c

1	"	126a
2	"	187
3	"	190
1	"	191



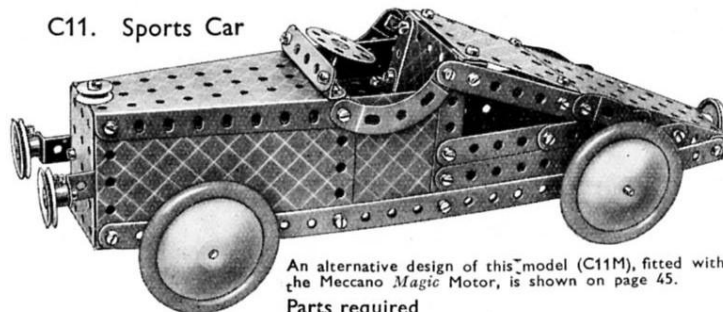


C9. Letter Balance

## Parts required

6 of No.	2
4 " "	5
1 " "	10
1 " "	12
2 " "	18a
1 " "	19b
4 " "	22
1 " "	24
2 " "	35
26 " "	37
4 " "	37a
2 " "	38
1 " "	44
2 " "	48a
1 " "	52
2 " "	111c
2 " "	126
2 " "	126a

C11. Sports Car



An alternative design of this model (C11M), fitted with the Meccano Magic Motor, is shown on page 45.

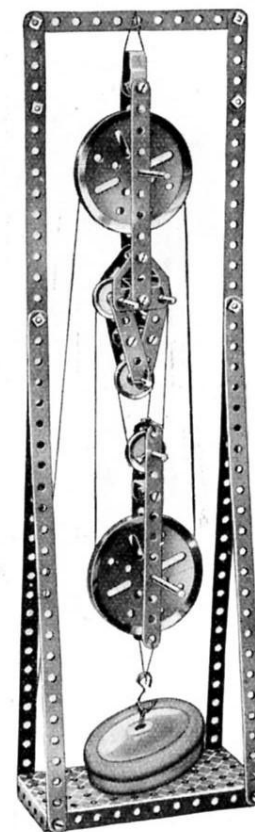
## Parts required

2 of No.	1	4 of No.	22	1 of No.	48	4 of No.	111c
4 " "	2	1 " "	23	2 " "	48a	2 " "	125
9 " "	5	1 " "	24	1 " "	51	2 " "	126a
2 " "	10	2 " "	35	1 " "	52	4 " "	187
8 " "	12	55 " "	37	2 " "	54a	4 " "	190
2 " "	15b	1 " "	37a	4 " "	90a	2 " "	191
1 " "	16	2 " "	38				

C13. Pulley Block, 5:1

## Parts required

4 of No.	1
7 " "	2
6 " "	5
2 " "	11
2 " "	12
2 " "	16
2 " "	17
2 " "	18a
2 " "	19b
4 " "	22
6 " "	35
24 " "	37
2 " "	38
1 " "	40
1 " "	44
1 " "	52
1 " "	57c
2 " "	126a
2 " "	187

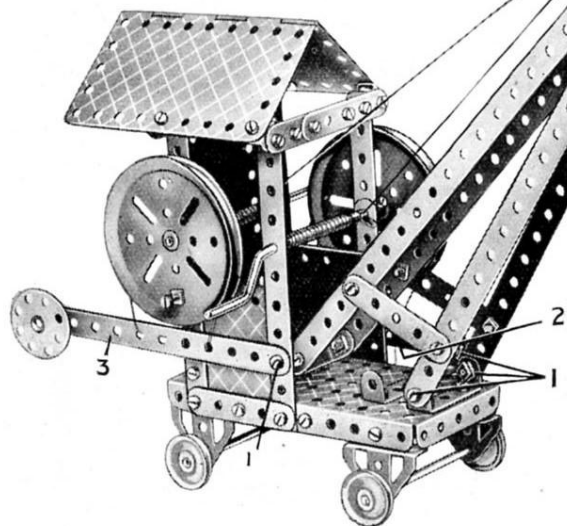


C10. Travelling Crane

## Parts required

4 of No.	1	4 of No.	22	1 of No.	111a
5 " "	2	1 " "	23	1 " "	111c
9 " "	5	1 " "	24	2 " "	125
1 " "	11	4 " "	35	2 " "	126
8 " "	12	55 " "	37	2 " "	126a
1 " "	15b	6 " "	37a	1 " "	176
2 " "	16	1 " "	48	2 " "	190
1 " "	18a	3 " "	48a	1 " "	191
1 " "	19s	1 " "	52	1 " "	197
2 " "	19b	1 " "	57c		

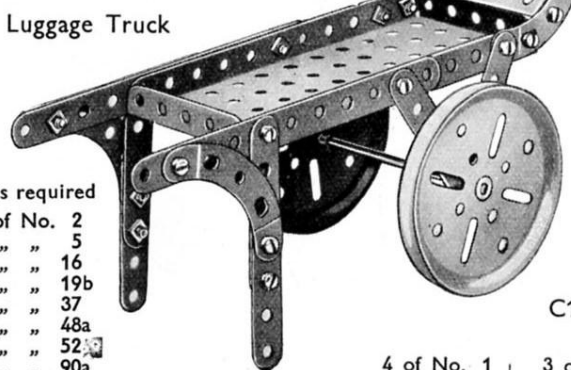
The bolts 1 are locknuted to form pivots for the jib and for the two brake levers 2 and 3.



C12. Luggage Truck

## Parts required

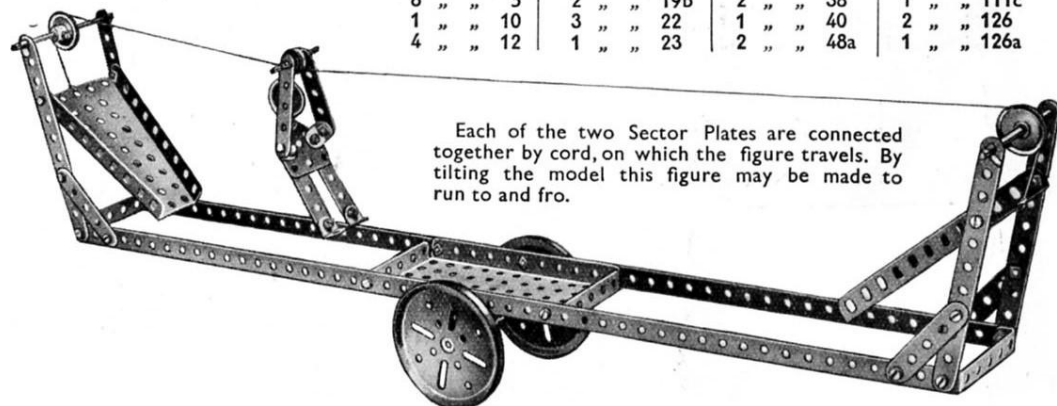
2 of No.	2
8 " "	5
1 " "	16
2 " "	19b
18 " "	37
2 " "	48a
1 " "	52
4 " "	90a



C14. Aerial Flight

## Parts required

4 of No.	1	3 of No.	16	6 of No.	35	1 of No.	52
4 " "	2	1 " "	18a	33 " "	37	2 " "	54a
8 " "	5	2 " "	19b	2 " "	38	1 " "	111c
1 " "	10	3 " "	22	1 " "	40	2 " "	126
4 " "	12	1 " "	23	2 " "	48a	1 " "	126a



Each of the two Sector Plates are connected together by cord, on which the figure travels. By tilting the model this figure may be made to run to and fro.

Loops of cord are tied to the brake levers and are passed round 3" Pulleys on the hoisting and luffing shafts to form band brakes. The lower ends of the upper pair of 12 1/2" Strips forming the jib are held apart by two 1/2" Reversed Angle Brackets bolted together.

C15. Butter Churn

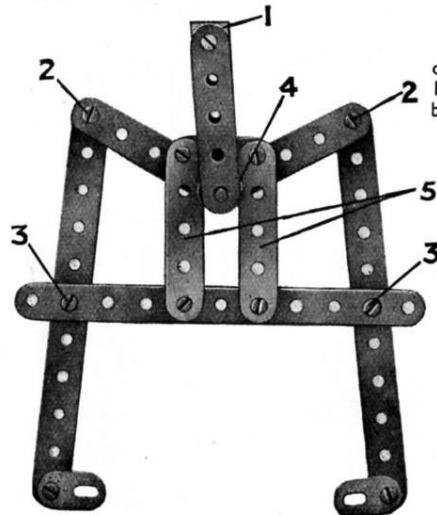


## Parts required

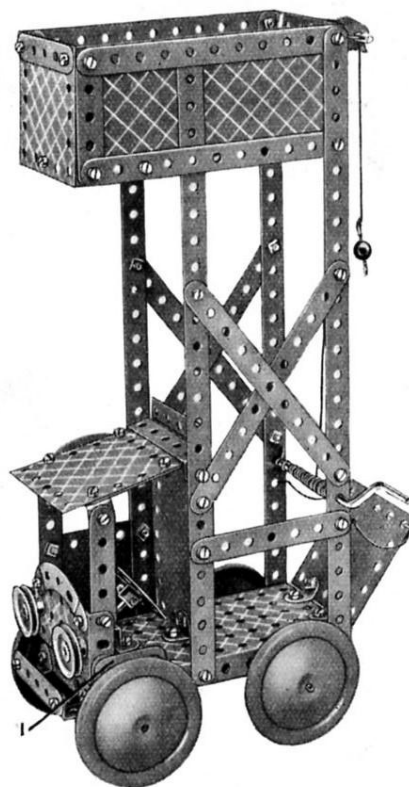
4 of No. 1	1
8 " " 2	2
1 " " 3	3
9 " " 5	5
2 " " 11	11
7 " " 12	12
2 " " 12c	12c
1 " " 15b	15b
1 " " 16	16
2 " " 18a	18a
1 " " 19s	19s
2 " " 22	22
1 " " 23	23
1 " " 24	24
6 " " 35	35
61 " " 37	37
3 " " 38	38
1 " " 40	40
1 " " 44	44
6 " " 48a	48a
1 " " 51	51
1 " " 52	52
1 " " 57c	57c
2 " " 90a	90a
2 " " 111c	111c
1 " " 125	125
2 " " 126	126
2 " " 126a	126a
4 " " 187	187
4 " " 190	190
1 " " 191	191
2 " " 192	192

## Parts required

8 of No. 2	1 of No. 48a
4 " " 5	1 " " 51
4 " " 12	1 " " 52
1 " " 22	2 " " 54a
1 " " 24	2 " " 126a
32 " " 37	1 " " 190
8 " " 38	2 " " 191



C16. Tower Wagon



The headlamps (1" Pulleys) are fixed in position by means of  $\frac{3}{8}$ " Bolts secured by the Set Screws in the bosses of the Pulleys. The front axle is carried in Flat Trunnions 1 bolted by their centre holes to the Flanged Plate.

C17.

## Friction Grip Tongs

The hoisting cord is attached to the Double Bracket 1. The joints 2, 3 are locknotted, so that when the grip is raised the  $\frac{1}{2}$ " loose Pulley Wheel 4 slides upward between the  $2\frac{1}{2}$ " Strips 5, and the grip closes upon the block of wood or other material placed between its jaws.

## Parts required

3 of No. 2	1 of No. 23
5 " " 5	2 " " 35
4 " " 10	12 " " 37
1 " " 11	4 " " 37a
1 " " 18a	4 " " 38

C18. Pneumatic Hammer

## Parts required

2 of No. 1	3 of No. 190
8 " " 2	2 " " 191
1 " " 3	1 " " 198
9 " " 5	
5 " " 10	
4 " " 12	
3 " " 12c	
2 " " 15b	
1 " " 16	
2 " " 18a	
1 " " 19s	
1 " " 19b	
4 " " 22	
1 " " 23	
1 " " 24	
6 " " 35	
52 " " 37	
2 " " 37a	
1 " " 40	
1 " " 44	
6 " " 48a	
1 " " 51	
1 " " 52	
4 " " 90a	
1 " " 111c	
1 " " 125	
2 " " 126a	
1 " " 176	

A 3" Pulley Wheel is driven from a 1" Pulley on the Crank Handle and is fitted to a Rod journaled in a  $2\frac{1}{2}$ " Strip and Double Bent Strip 2 that are bolted to a  $2\frac{1}{2}$ " x  $2\frac{1}{2}$ " Flexible Plate. A Bush Wheel is fitted on the other end of the Rod and a  $2\frac{1}{2}$ " Strip is pivoted on the bolt 1 fixed by two nuts locked against opposite sides of the Bush Wheel. Cord is tied to the  $2\frac{1}{2}$ " Strip, passes over guide Pulleys, and is tied to an Anchoring Spring on the upper end of the hammer Rod.

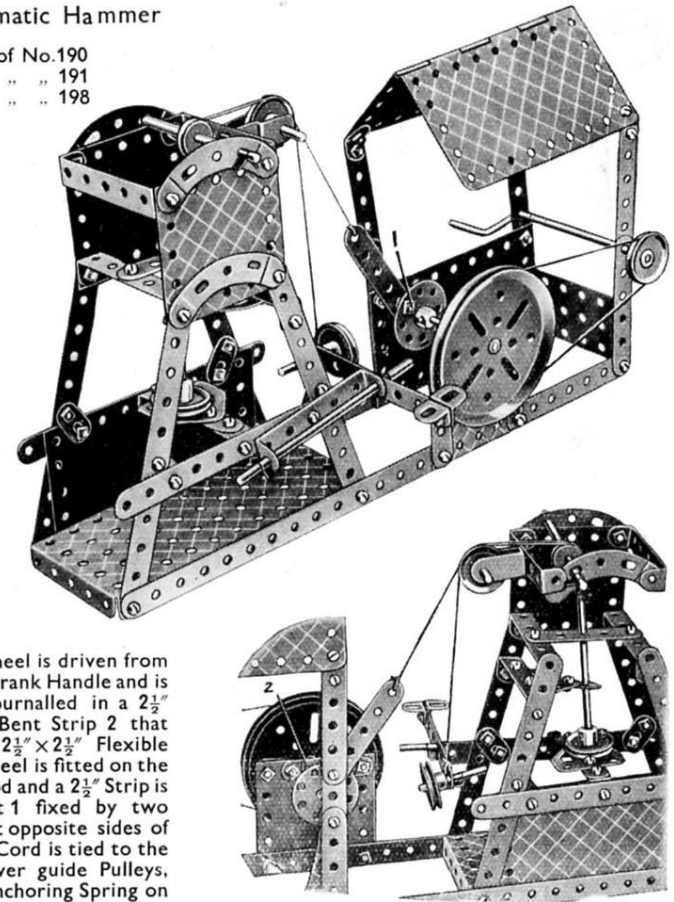
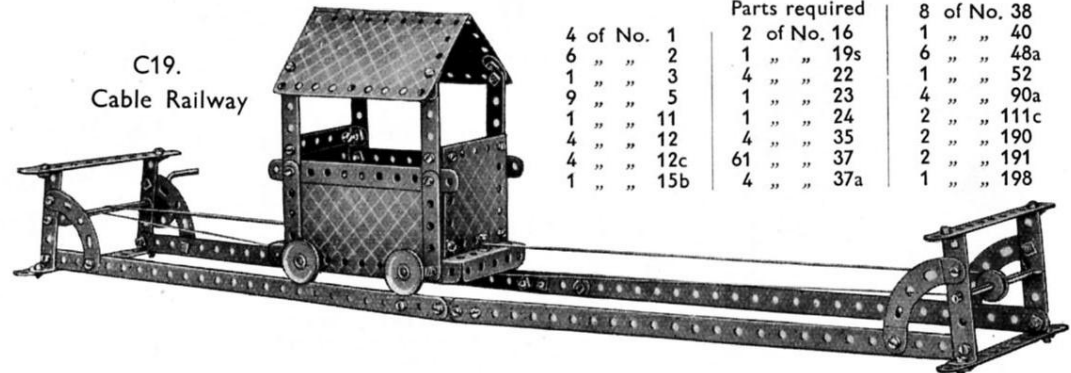


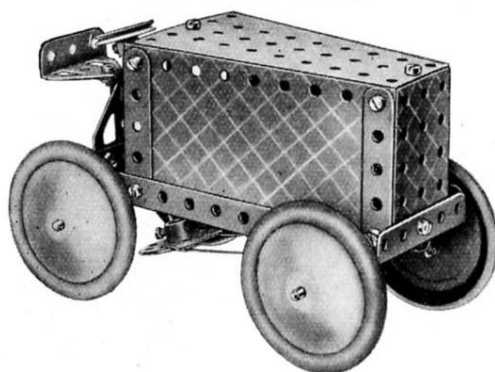
Fig. C18a

C19.  
Cable Railway

4 of No. 1	Parts required	8 of No. 38
6 " " 2	2 of No. 16	1 " " 40
1 " " 3	1 " " 19s	6 " " 48a
9 " " 5	4 " " 22	1 " " 52
1 " " 11	1 " " 23	4 " " 90a
4 " " 12	1 " " 24	2 " " 111c
4 " " 12c	4 " " 35	2 " " 190
1 " " 15b	61 " " 37	2 " " 191
	4 " " 37a	1 " " 198



C20. Motor Tractor

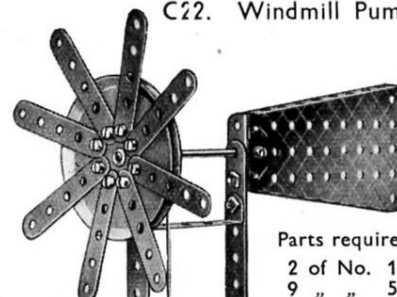


## Parts required

4 of No. 5
1 " " 10
2 " " 12
2 " " 15b
1 " " 16
1 " " 22
1 " " 24
1 " " 35
18 " " 37
2 " " 37a
1 " " 40
3 " " 48a
1 " " 51
1 " " 52
1 " " 54a
1 " " 111c
1 " " 126
1 " " 126a
4 " " 187
1 " " 191

An alternative design of this model (C22M), fitted with the Meccano Magic Motor, is shown on page 45.

C22. Windmill Pump



## Parts required

2 of No. 1
9 " " 5
2 " " 10
3 " " 12
3 " " 16
1 " " 19s
1 " " 19b
4 " " 22
1 " " 24
4 " " 35
26 " " 37
4 " " 37a
1 " " 40
2 " " 48a
1 " " 52
1 " " 54a
2 " " 111c
1 " " 126
2 " " 126a

## Parts required for C21 (continued)

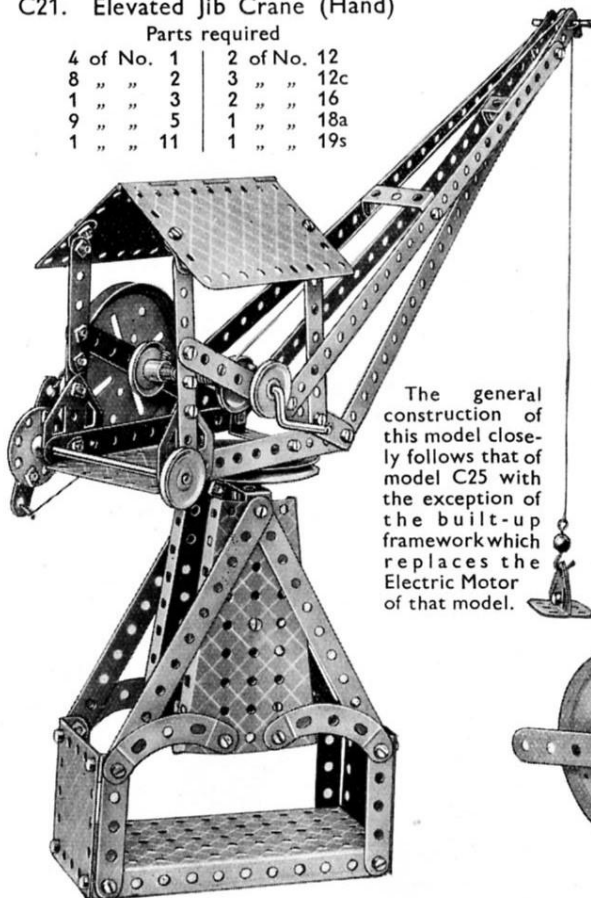
2 of No. 19b
4 " " 22
1 " " 23
1 " " 24
4 " " 35
56 " " 37
2 " " 37a
4 " " 38
1 " " 40
1 " " 48
6 " " 48a
1 " " 52
2 " " 54a
1 " " 57c
4 " " 90a
2 " " 111c
2 " " 126
2 " " 126a
1 " " 176
2 " " 190
1 " " 191
1 " " 198

The general construction of this model closely follows that of model C25 with the exception of the built-up framework which replaces the Electric Motor of that model.

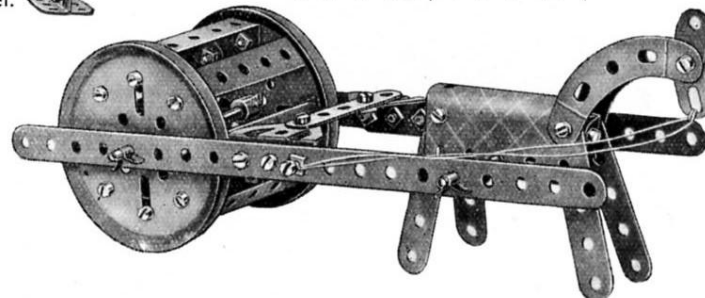
C21. Elevated Jib Crane (Hand)

## Parts required

4 of No. 1	2 of No. 12
8 " " 2	3 " " 12c
1 " " 3	2 " " 16
9 " " 5	1 " " 18a
1 " " 11	1 " " 19s

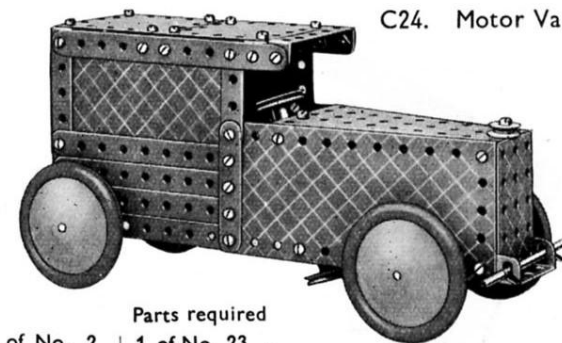


C23. Field Roller



Parts required	1 of No. 16	6 of No. 48a
4 of No. 2	2 " " 19b	2 " " 90a
7 " " 5	6 " " 35	1 " " 111c
2 " " 10	34 " " 37	2 " " 126
8 " " 12	2 " " 37a	1 " " 190
1 " " 15b	1 " " 40	

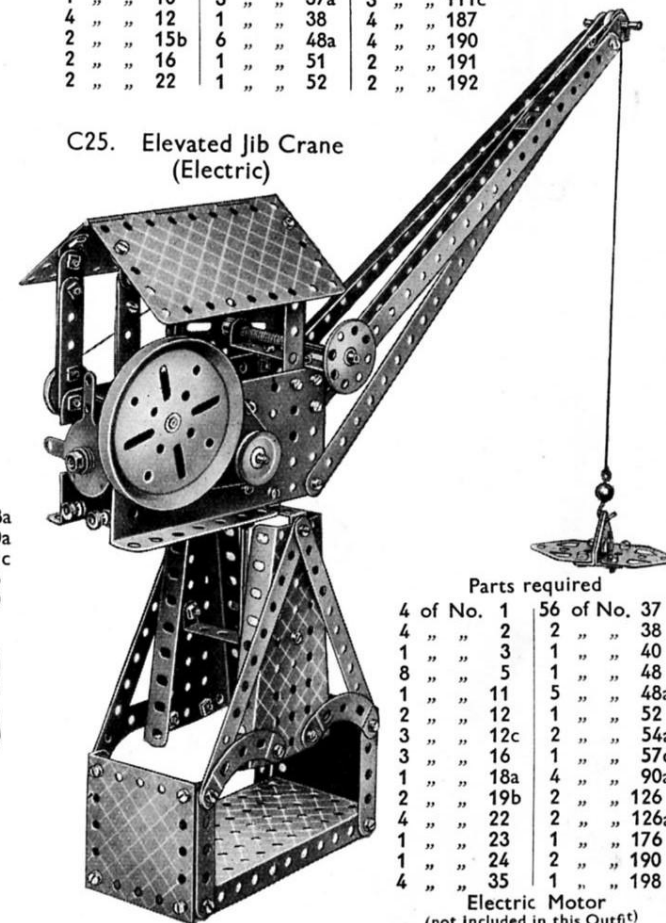
C24. Motor Van



## Parts required

8 of No. 2	1 of No. 23	
1 " " 3	4 " " 35	
9 " " 5	51 " " 37	2 of No. 54a
1 " " 10	3 " " 37a	3 " " 111c
4 " " 12	1 " " 38	4 " " 187
2 " " 15b	6 " " 48a	4 " " 190
2 " " 16	1 " " 51	2 " " 191
2 " " 22	1 " " 52	2 " " 192

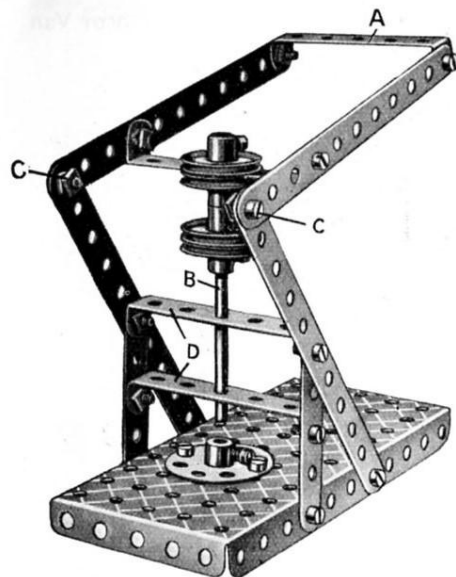
C25. Elevated Jib Crane (Electric)



## Parts required

4 of No. 1	56 of No. 37
4 " " 2	2 " " 38
1 " " 3	1 " " 40
8 " " 5	1 " " 48
1 " " 11	5 " " 48a
2 " " 12	1 " " 52
3 " " 12c	2 " " 54a
3 " " 16	1 " " 57c
1 " " 18a	4 " " 90a
2 " " 19b	2 " " 126
4 " " 22	2 " " 126a
1 " " 23	1 " " 176
1 " " 24	2 " " 190
4 " " 35	1 " " 198

Electric Motor  
(not included in this Outfit)

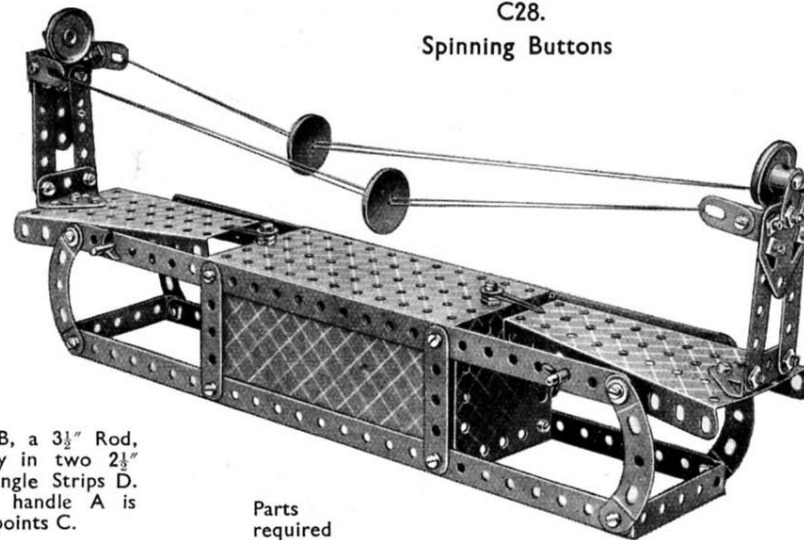


C26.  
Punching  
Machine

Parts required

4 of No.	2
2 "	5
1 "	16
4 "	22
1 "	24
16 "	37
4 "	37a
4 "	48a
1 "	52

The punch B, a  $3\frac{1}{2}$ " Rod, slides vertically in two  $2\frac{1}{2}$ " x  $\frac{1}{2}$ " Double Angle Strips D. The operating handle A is pivoted at the points C.



C28.  
Spinning Buttons

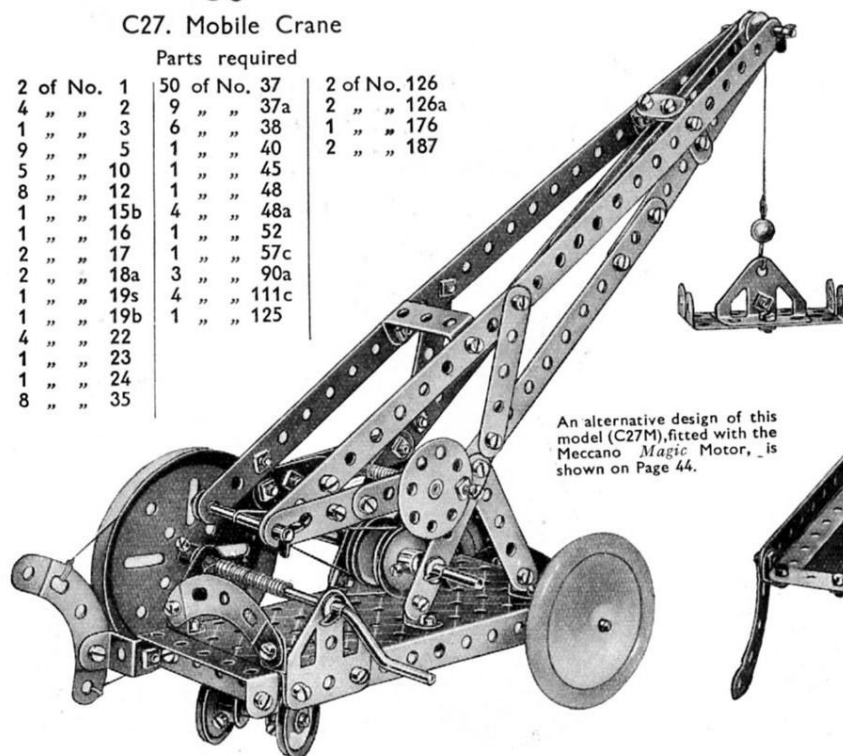
Parts  
required

4 of No.	1	47 of No.	37	4 of No.	90a
9 "	5	6 "	37a	4 "	111c
5 "	10	6 "	38	2 "	126
4 "	12	4 "	48a	2 "	126a
2 "	16	1 "	52	2 "	190
2 "	22	2 "	54a	2 "	192
4 "	35				

C27. Mobile Crane

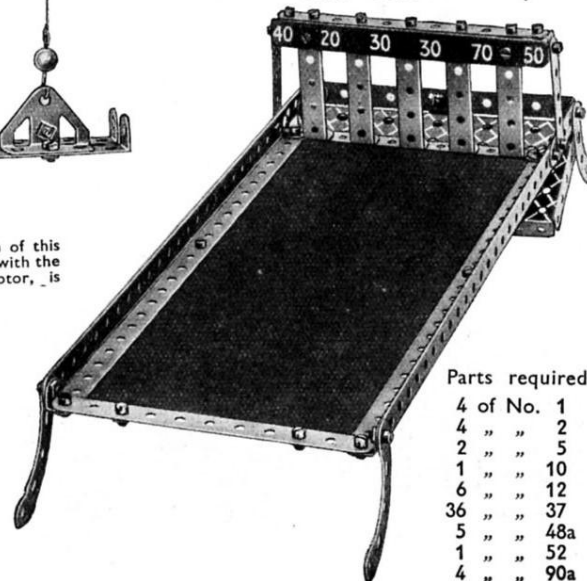
Parts required

2 of No.	1	50 of No.	37	2 of No.	126
4 "	2	9 "	37a	2 "	126a
1 "	3	6 "	38	1 "	176
9 "	5	1 "	40	2 "	187
5 "	10	1 "	45		
8 "	12	1 "	48		
1 "	15b	4 "	48a		
1 "	16	1 "	52		
2 "	17	1 "	57c		
2 "	18a	3 "	90a		
1 "	19s	4 "	111c		
1 "	19b	1 "	125		
4 "	22				
1 "	23				
1 "	24				
8 "	35				



An alternative design of this model (C27M), fitted with the Meccano Magic Motor, is shown on Page 44.

C29. Box Ball Alley



Parts required

4 of No.	1
4 "	2
2 "	5
1 "	10
6 "	12
36 "	37
5 "	48a
1 "	52
4 "	90a

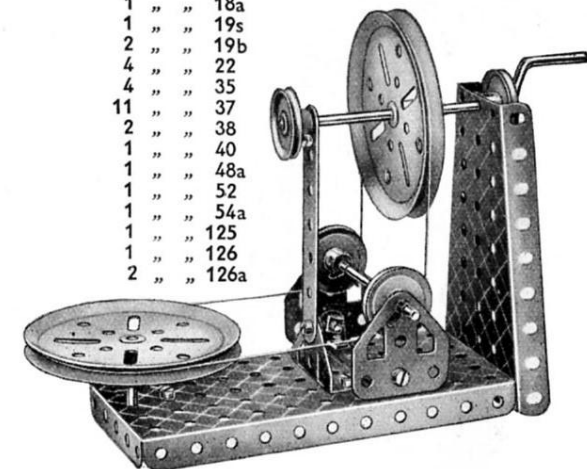
C30.  
Gramophone



Parts required

4 of No.	2
5 "	5
2 "	10
4 "	12
1 "	23
1 "	24
29 "	37
5 "	37a
5 "	48a
1 "	52
4 "	111c
2 "	126a
2 "	190
2 "	191

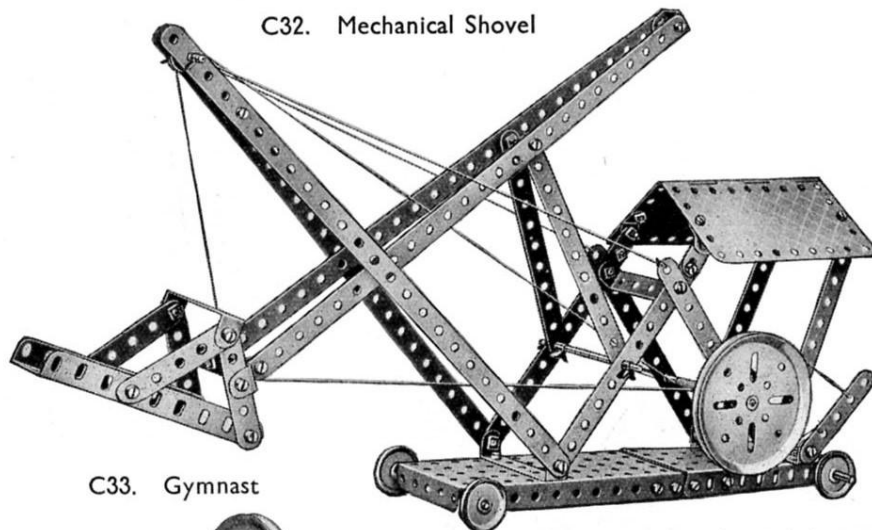
C31.  
Belt Gear



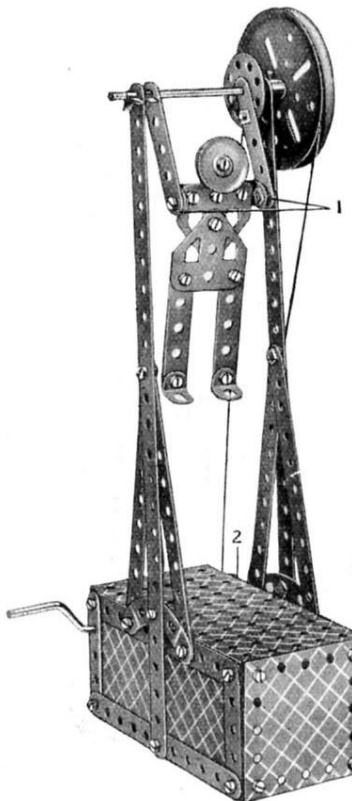
Parts required

1 of No.	3
1 "	16
1 "	18a
1 "	19s
2 "	19b
4 "	22
4 "	35
11 "	37
2 "	38
1 "	40
1 "	48a
1 "	52
1 "	54a
1 "	125
1 "	126
2 "	126a

C32. Mechanical Shovel



C33. Gymnast

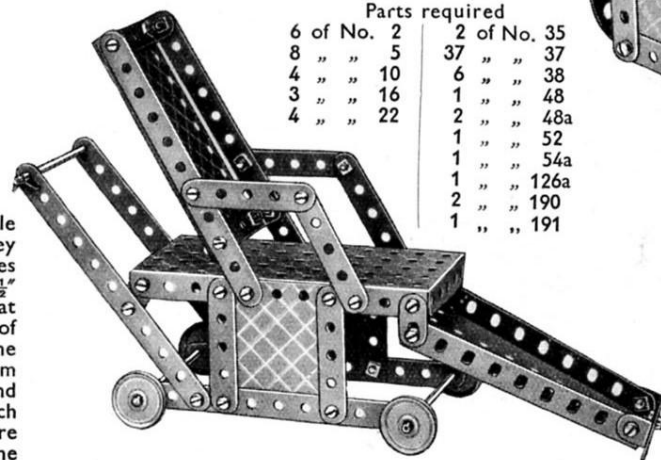


## Parts required

2 of No.	1
8 "	2
8 "	5
1 "	10
4 "	12
1 "	15b
1 "	19s
1 "	19b
2 "	22
1 "	24
2 "	35
36 "	37
2 "	37a
2 "	38
1 "	40
2 "	48a
1 "	52
2 "	90a
1 "	111c
2 "	126a
2 "	190
2 "	192

A Crank Handle carries a 1" Pulley Wheel 2 that drives a 3" Pulley on a 3½" Rod journalled at the top of a pair of 12½" Strips. The gymnast hangs from the Axle Rod, and the bolts 1 on which the arms pivot are each locked to the body by two nuts.

C34. Invalid Chair



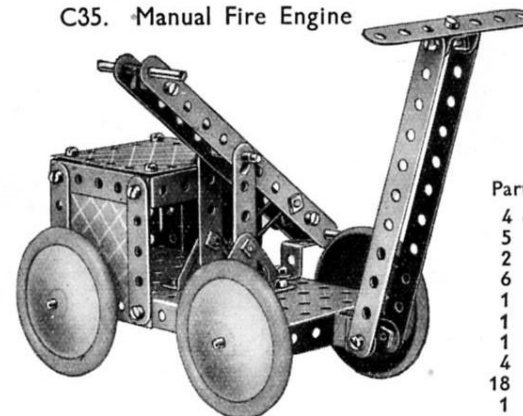
## Parts required

6 of No.	2	2 of No.	35
8 "	5	37 "	37
4 "	10	6 "	38
3 "	16	1 "	48
4 "	22	2 "	48a
		1 "	52
		1 "	54a
		1 "	126a
		2 "	190
		1 "	191

## Parts required

4 of No.	1
8 "	2
7 "	5
2 "	10
2 "	11
4 "	12c
3 "	16
1 "	18a
1 "	19s
1 "	19b
4 "	22
1 "	23
1 "	24
6 "	35
46 "	37
5 "	37a
1 "	40
1 "	48
6 "	48a
1 "	52
2 "	54a
2 "	111c
1 "	176
1 "	198

C35. Manual Fire Engine



## Parts required

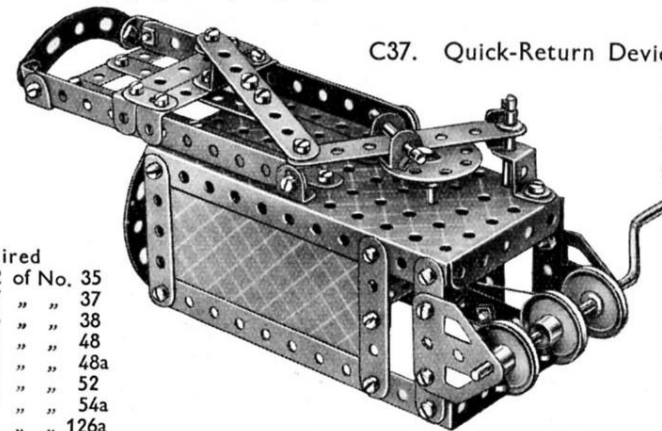
4 of No.	2	1 of No.	18a	1 of No.	52
1 "	3	6 "	35	2 "	111c
8 "	5	34 "	37	1 "	125
2 "	11	6 "	37a	2 "	126
6 "	12	1 "	38	1 "	186
2 "	15b	1 "	45	4 "	187
2 "	17	2 "	48a	4 "	190

C36. Telescopic Mast

## Parts required

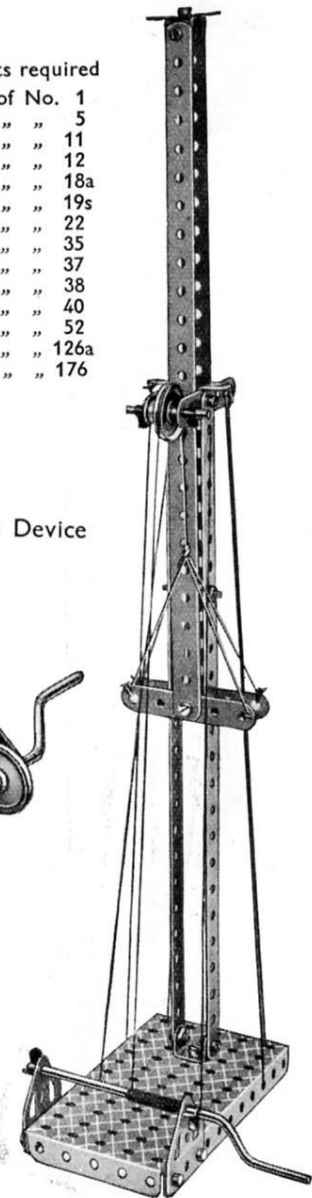
4 of No.	1
5 "	5
2 "	11
6 "	12
1 "	18a
1 "	19s
1 "	22
4 "	35
18 "	37
1 "	38
1 "	40
2 "	52
1 "	126a
1 "	176

C37. Quick-Return Device



## Parts required

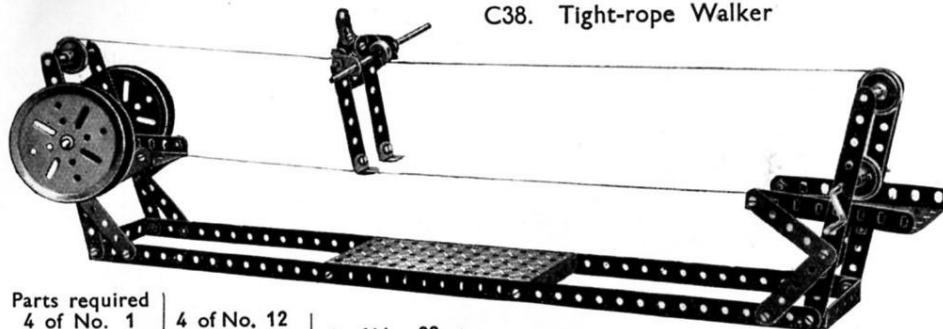
6 of No.	2	46 of No.	37
1 "	3	4 "	37a
8 "	5	4 "	38
2 "	10	6 "	48a
2 "	11	1 "	52
4 "	12	3 "	90a
2 "	17	1 "	111c
1 "	18a	1 "	125
1 "	19s	2 "	126a
4 "	22	1 "	186
1 "	24	1 "	190
6 "	35	2 "	191





## These Models can be built with MECCANO Outfit C (or Outfits B and Ba)

C38. Tight-rope Walker



Parts required	4 of No. 1
4 of No. 1	4 of No. 1
4 " " 2	2 " " 2
1 " " 3	2 " " 3
9 " " 5	1 " " 5
3 " " 10	2 " " 10

4 of No. 12	4 of No. 16
4 of No. 12	2 " " 16
2 " " 16	2 " " 17
1 " " 17	1 " " 19s
2 " " 19b	2 " " 19b

4 of No. 22	6 of No. 38
4 of No. 22	1 " " 40
1 " " 23	1 of No. 52
8 " " 35	2 " " 54a
32 " " 37	1 of No. 126a

6 of No. 38	1 of No. 52
6 of No. 38	2 " " 54a
1 " " 40	
2 " " 48a	

1 of No. 52	1 of No. 126a
1 of No. 52	
2 " " 54a	

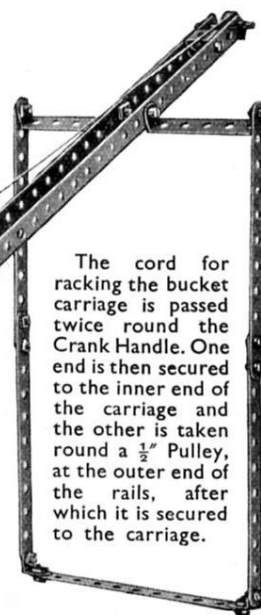
The endless cord is first passed round four 1" fast Pulleys the two ends then being attached to one foot of the figure that is supported by a 1/2" Pulley running along the upper section of the cord.

4 of No. 1	4 of No. 22
4 of No. 1	4 of No. 22
7 " " 2	1 " " 23
1 " " 3	1 " " 24
9 " " 5	8 " " 35
5 " " 10	66 " " 37
2 " " 11	5 " " 37a
6 " " 12	3 " " 38
2 " " 12c	1 " " 40
1 " " 15b	5 " " 48a
2 " " 16	1 " " 52
2 " " 17	
1 " " 18a	
1 " " 19s	
2 " " 19b	

Parts required	4 of No. 22
Parts required	4 of No. 22
4 of No. 22	1 " " 23
1 " " 23	1 " " 24
1 " " 24	8 " " 35
8 " " 35	66 " " 37
66 " " 37	5 " " 37a
5 " " 37a	3 " " 38
3 " " 38	1 " " 40
1 " " 40	5 " " 48a
5 " " 48a	1 " " 52

C42. Extended Ash Tip

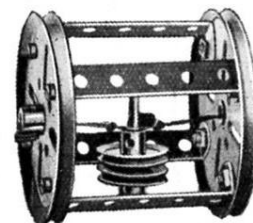
4 of No. 90a	4 of No. 111c
4 of No. 90a	4 of No. 111c
3 " " 111c	2 " " 125
2 " " 125	2 " " 126a
2 " " 126a	1 " " 176
1 " " 176	3 " " 190
3 " " 190	2 " " 192
2 " " 192	1 " " 198



The cord for racking the bucket carriage is passed twice round the Crank Handle. One end is then secured to the inner end of the carriage and the other is taken round a 1/2" Pulley, at the outer end of the rails, after which it is secured to the carriage.

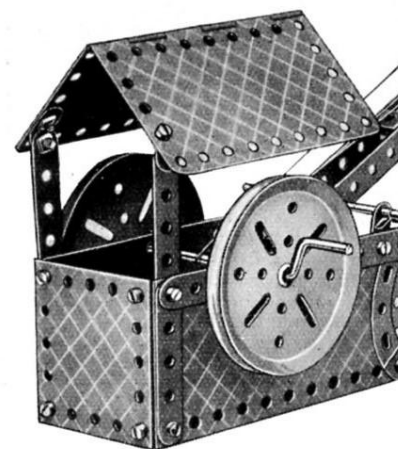
C39. Guillotine

Parts required	2 of No. 1
Parts required	2 of No. 1
2 of No. 1	1 " " 3
1 " " 3	9 " " 5
9 " " 5	2 " " 10
2 " " 10	2 " " 11
2 " " 11	1 " " 16
1 " " 16	1 " " 22
1 " " 22	2 " " 35
2 " " 35	24 " " 37
24 " " 37	6 " " 38
6 " " 38	1 " " 40
1 " " 40	3 " " 48a
3 " " 48a	1 " " 52



Parts required	1 of No. 18a
Parts required	1 of No. 18a
1 of No. 18a	2 " " 19b
2 " " 19b	2 " " 22
2 " " 22	1 " " 35
1 " " 35	8 " " 37
8 " " 37	4 " " 48a
4 " " 48a	1 " " 186

A Driving Band is doubled and stretched between the centres of the 3" Pulley Wheels. A weight, consisting of two 1" fast Pulley Wheels and a 1/2" Rod, is suspended from it in the middle of the drum. When the Cum Bak is rolled along any smooth level surface, the elastic becomes twisted and stores up sufficient energy to return the drum to its starting point. If the mechanism is concealed by a thin cardboard covering, the model will cause much amusement by its mystifying behaviour.



C43. Telephone

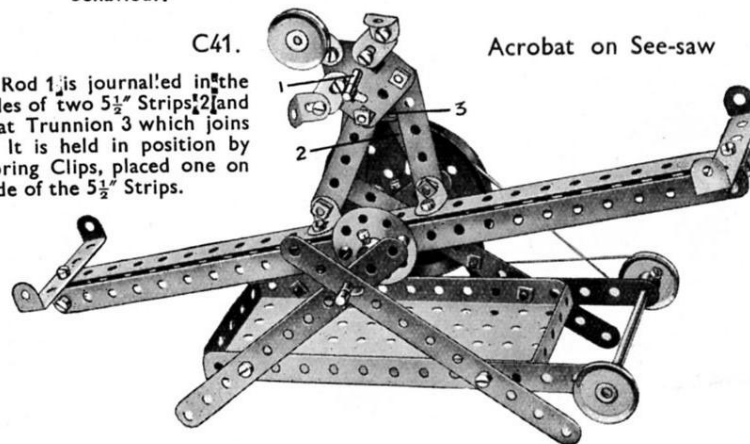
8 of No. 2	1 of No. 19b
8 of No. 2	1 of No. 19b
1 " " 3	1 " " 22
4 " " 5	1 " " 24
5 " " 10	4 " " 35
2 " " 11	37 " " 37
8 " " 12	20 " " 37a
2 " " 16	4 " " 38

1 of No. 40	1 of No. 44
1 of No. 40	1 of No. 44
1 " " 44	5 " " 48a
5 " " 48a	1 " " 52
1 " " 52	4 " " 111c
4 " " 111c	2 " " 125
2 " " 125	1 " " 126

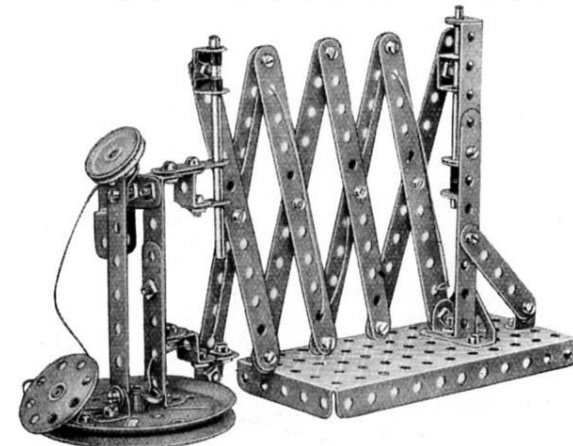
C41.

Acrobat on See-saw

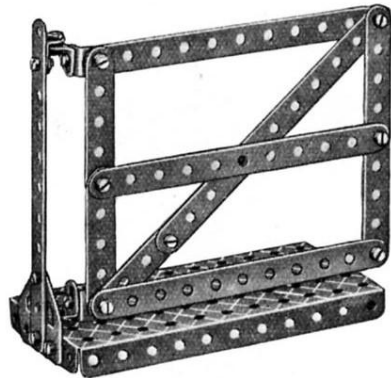
A 1" Rod is journalled in the end holes of two 5 1/2" Strips and in a Flat Trunnion 3 which joins them. It is held in position by two Spring Clips, placed one on each side of the 5 1/2" Strips.



Parts required	3 of No. 1
Parts required	3 of No. 1
3 of No. 1	6 " " 2
6 " " 2	4 " " 5
4 " " 5	3 " " 10
3 " " 10	2 " " 11
2 " " 11	4 " " 12
4 " " 12	2 " " 16
2 " " 16	1 " " 18a
1 " " 18a	1 " " 19b
1 " " 19b	3 " " 22
3 " " 22	1 " " 24
1 " " 24	5 " " 35
5 " " 35	25 " " 37
25 " " 37	4 " " 37a
4 " " 37a	2 " " 38
2 " " 38	1 " " 40
1 " " 40	2 " " 48a
2 " " 48a	1 " " 52
1 " " 52	1 " " 111c
1 " " 111c	1 " " 126a



C44. Gate



## Parts required

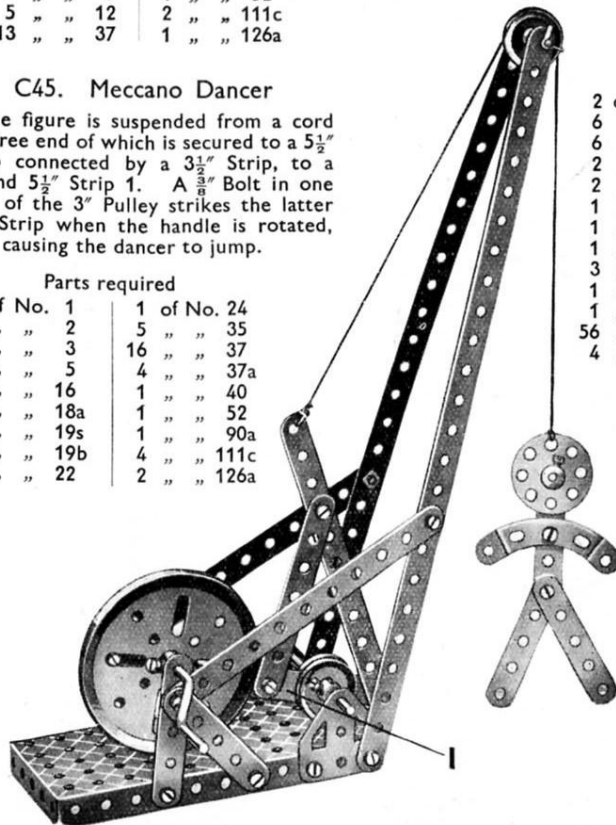
5 of No. 2	4 of No. 37a
5 " " 5	1 " " 52
5 " " 12	2 " " 111c
13 " " 37	1 " " 126a

C45. Meccano Dancer

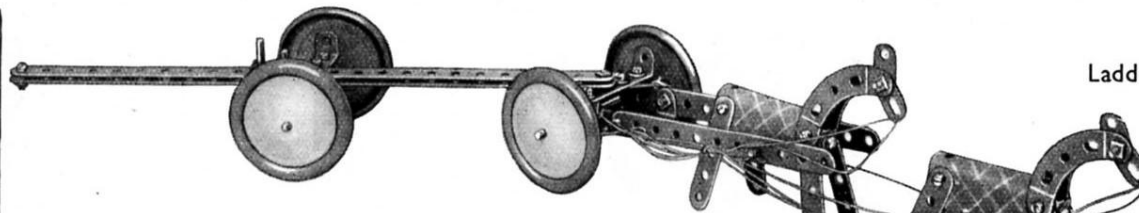
The figure is suspended from a cord the free end of which is secured to a  $5\frac{1}{2}$ " Strip connected by a  $3\frac{1}{2}$ " Strip, to a second  $5\frac{1}{2}$ " Strip 1. A Bolt in one hole of the 3" Pulley strikes the latter  $5\frac{1}{2}$ " Strip when the handle is rotated, thus causing the dancer to jump.

## Parts required

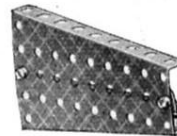
2 of No. 1	1 of No. 24
4 " " 2	5 " " 35
1 " " 3	16 " " 37
7 " " 5	4 " " 37a
1 " " 16	1 " " 40
1 " " 18a	1 " " 52
1 " " 19s	1 " " 90a
1 " " 19b	4 " " 111c
3 " " 22	2 " " 126a



C46. Timber Drag



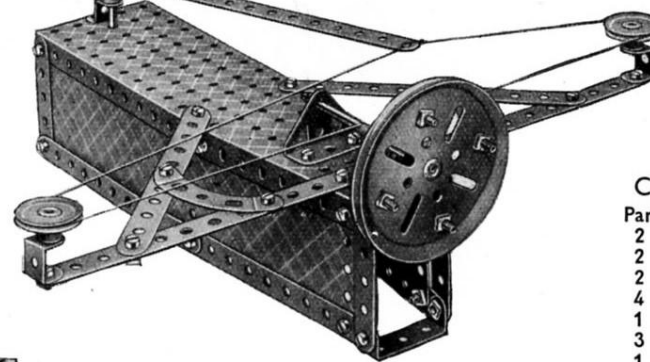
Parts required	8 of No. 12	3 of No. 37a	2 of No. 111c
2 of No. 1	2 " " 15b	8 " " 38	2 " " 126
2 " " 2	2 " " 17	1 " " 40	2 " " 126a
8 " " 5	2 " " 18a	1 " " 48	4 " " 187
4 " " 10	8 " " 35	3 " " 48a	2 " " 190
2 " " 11	27 " " 37	4 " " 90a	



C47. Ship's Steering Gear

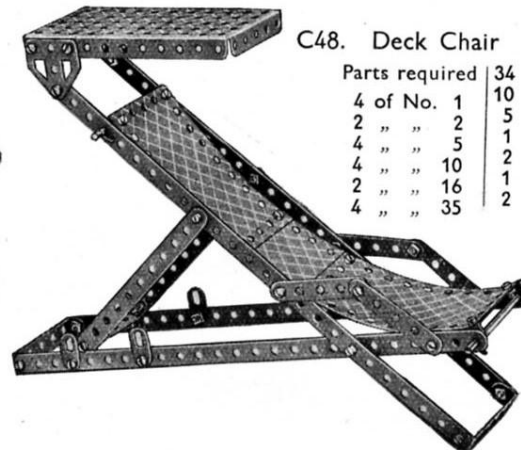
## Parts required

2 of No. 1	5 of No. 38
6 " " 2	1 " " 40
6 " " 5	1 " " 48
2 " " 11	1 " " 48a
2 " " 12	1 " " 52
1 " " 16	2 " " 54a
1 " " 18a	2 " " 90a
1 " " 19b	6 " " 111c
3 " " 22	1 " " 125
1 " " 24	2 " " 126
1 " " 35	1 " " 190
56 " " 37	2 " " 191
4 " " 37a	2 " " 192



C48. Deck Chair

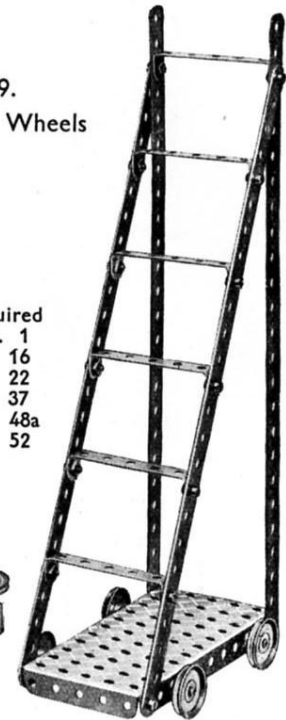
Parts required	34 of No. 37
4 of No. 1	10 " " 37a
2 " " 2	5 " " 48a
4 " " 5	1 " " 52
4 " " 10	2 " " 126a
2 " " 16	1 " " 190
4 " " 35	2 " " 191



C49.

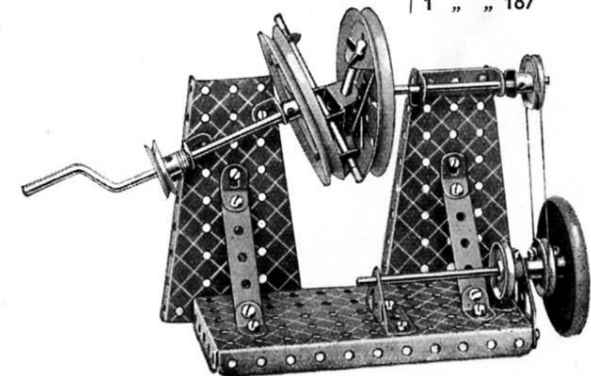
Ladder on Wheels

Parts required	4 of No. 1
2 " " 16	2 " " 22
4 " " 22	16 " " 37
16 " " 37	6 " " 48a
6 " " 48a	1 " " 52

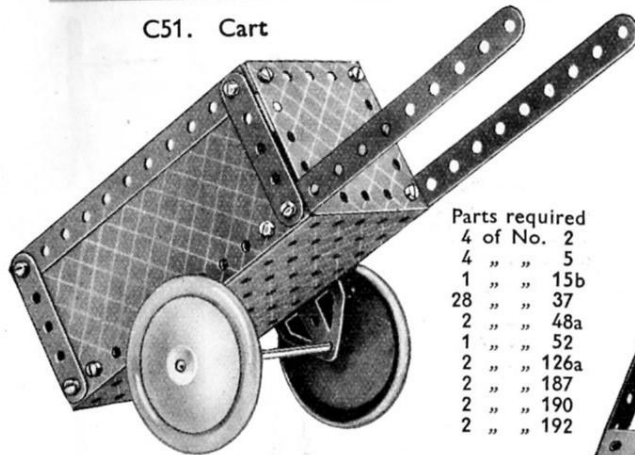


C50. Hooke's Coupling

Parts required	6 of No. 35
2 of No. 5	24 " " 37
2 " " 11	3 " " 38
2 " " 12	1 " " 40
4 " " 12c	1 " " 48
1 " " 15b	2 " " 48a
3 " " 16	1 " " 52
1 " " 19s	2 " " 54a
2 " " 19b	1 " " 126
4 " " 22	1 " " 126a
	1 " " 187



C51. Cart

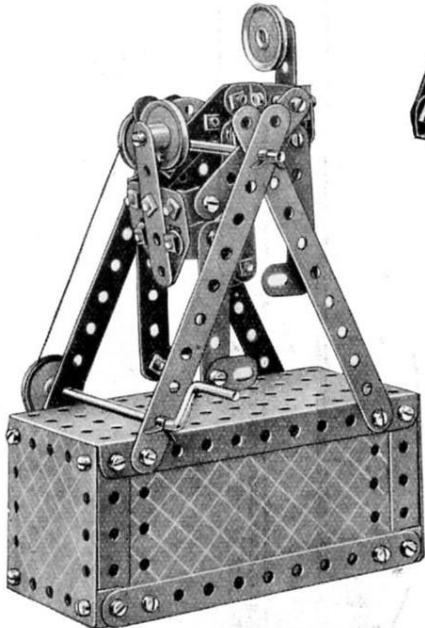


Parts required	
4 of No. 2	
4 " " 5	
1 " " 15b	
28 " " 37	
2 " " 48a	
1 " " 52	
2 " " 126a	
2 " " 187	
2 " " 190	
2 " " 192	

C52. Wrestlers

Parts required

6 of No. 2	4 of No. 22	6 of No. 48a
8 " " 5	1 " " 24	1 " " 52
4 " " 10	2 " " 35	6 " " 111c
8 " " 12	44 " " 37	2 " " 126a
1 " " 16	6 " " 38	2 " " 190
1 " " 19s	1 " " 40	2 " " 191

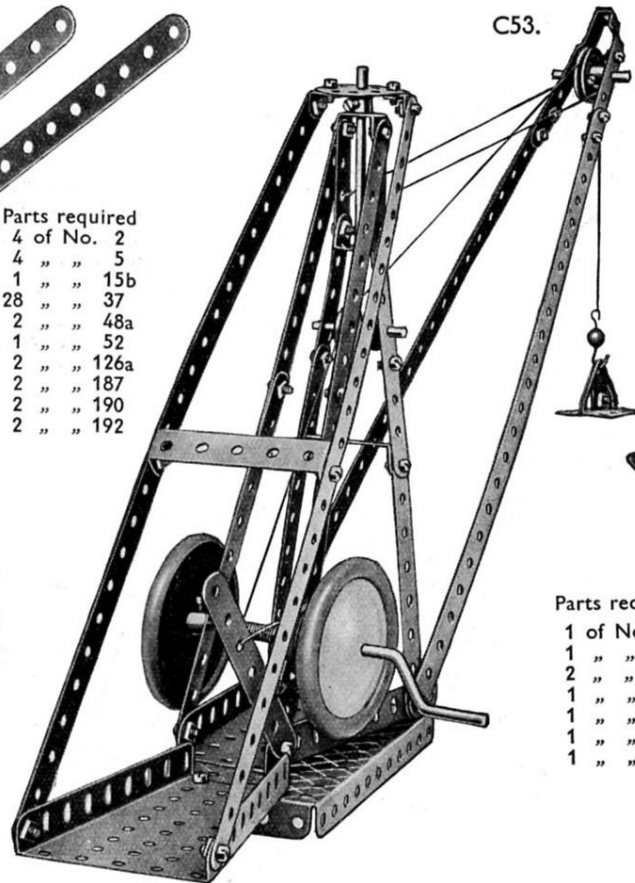


Parts required

4 of No. 1	2 of No. 37a	2 of No. 126
6 " " 2	1 " " 40	2 " " 126a
9 " " 5	1 " " 48	1 " " 176
5 " " 10	3 " " 48a	4 " " 190
2 " " 11	1 " " 51	2 " " 191
4 " " 12	1 " " 52	2 " " 192
1 " " 15b	1 " " 54a	
2 " " 16	4 " " 90a	
1 " " 17	2 " " 111c	
2 " " 19b		
3 " " 22		
1 " " 23		
6 " " 35		
58 " " 37		

C53.

Jib Crane

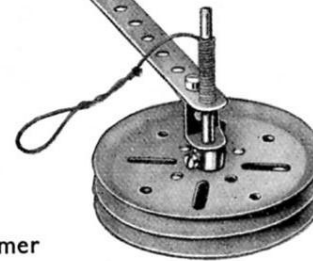


Parts required		32 of No. 37
4 of No. 1	2 " " 37a	
8 " " 2	3 " " 38	
1 " " 3	1 " " 40	
2 " " 5	1 " " 44	
2 " " 11	1 " " 48	
2 " " 12	1 " " 48a	
1 " " 16	1 " " 52	
1 " " 17	2 " " 54a	
2 " " 18a	1 " " 57c	
1 " " 19s	1 " " 111c	
4 " " 22	2 " " 126	
1 " " 23	1 " " 176	
1 " " 24	2 " " 187	
3 " " 35		

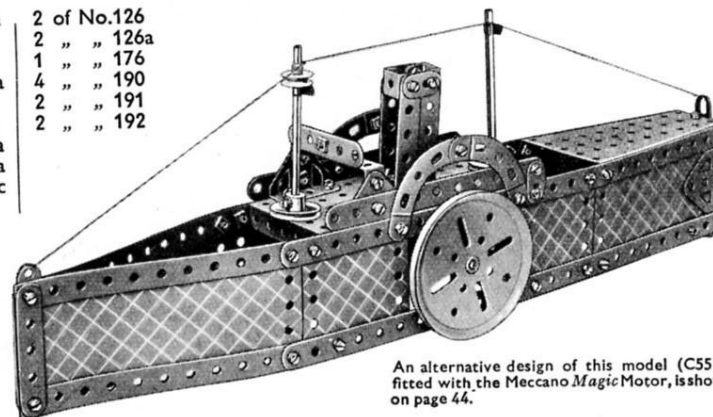
C54. Top

Parts required

1 of No. 1	
1 " " 16	
2 " " 19b	
1 " " 24	
1 " " 37	
1 " " 40	
1 " " 125	

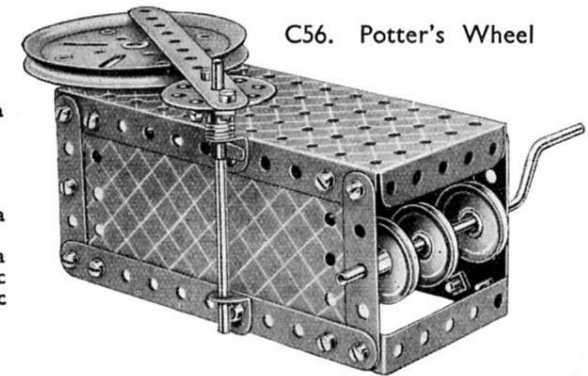


C55. Paddle Steamer



An alternative design of this model (C55M), fitted with the Meccano Magic Motor, is shown on page 44.

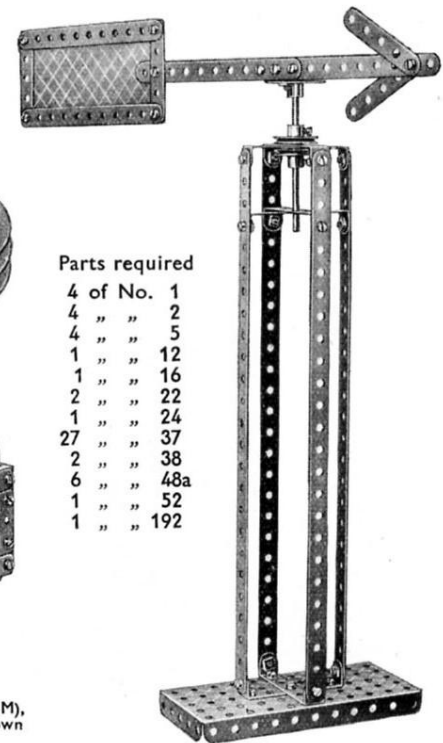
C56. Potter's Wheel



Parts required

3 of No. 2	1 of No. 19b	1 of No. 40
4 " " 5	4 " " 22	2 " " 48a
2 " " 12	1 " " 24	1 " " 52
1 " " 16	1 " " 35	2 " " 191
1 " " 17	22 " " 37	
1 " " 19s	5 " " 38	

C57. Weather Vane



Parts required

4 of No. 1	
4 " " 2	
4 " " 5	
1 " " 12	
1 " " 16	
2 " " 22	
1 " " 24	
27 " " 37	
2 " " 38	
6 " " 48a	
1 " " 52	
1 " " 192	



C58. Telfer Span (Electric)

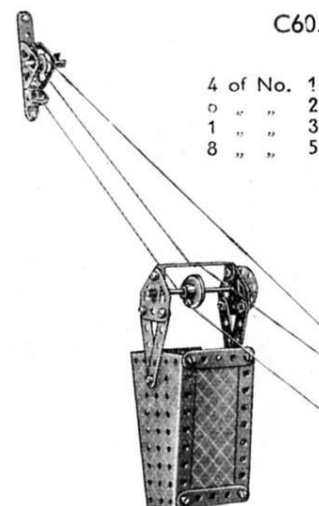
## Parts required

4	of No.	1
6	" "	2
1	" "	3

8	of No.	5
2	" "	11
8	" "	12
2	" "	12c
3	" "	16
1	" "	17
1	" "	18a
2	" "	19b
4	" "	22
1	" "	23

1	of No.	24
8	" "	35
61	" "	37
4	" "	37a
7	" "	38
1	" "	40
1	" "	48
3	" "	48a
1	" "	52
2	" "	54a
2	" "	90a
2	" "	111c
2	" "	126
2	" "	126a
1	" "	176
2	" "	191
1	" "	198

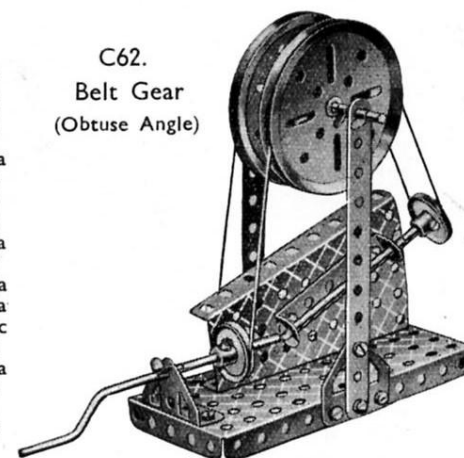
**E6. Electric Motor**  
(not included in Outfit)



C60. Telfer Span (Hand)

Parts required		Parts required	
4 of No. 1	2 of No. 11	1 of No. 23	2 of No. 38
0 " " 2	8 " " 12	1 " " 24	1 " " 40
1 " " 3	2 " " 12c	6 " " 35	1 " " 48a
8 " " 5	2 " " 16	53 " " 37	1 " " 52
	1 " " 17	4 " " 37a	1 " " 54a
	1 " " 18a	5 " " 38	1 " " 126
	1 " " 19s	1 " " 40	2 " " 126a
	2 " " 19b	1 " " 48	1 " " 176
	4 " " 22	1 " " 48a	2 " " 191
		1 " " 52	1 " " 198
		2 " " 54a	
		2 " " 90a	
		2 " " 111c	
		2 " " 126	
		2 " " 126a	
		1 " " 176	
		2 " " 191	
		1 " " 198	

C62. Belt Gear (Obtuse Angle)



Parts required

Parts required		Parts required	
2 of No. 2	2 of No. 38	2 of No. 38	2 of No. 38
1 " " 12	1 " " 40	1 " " 40	1 " " 40
1 " " 16	1 " " 48a	1 " " 48a	1 " " 48a
1 " " 19s	1 " " 52	1 " " 52	1 " " 52
2 " " 19b	1 " " 54a	1 " " 54a	1 " " 54a
2 " " 22	1 " " 126	1 " " 126	1 " " 126
8 " " 35	2 " " 126a	2 " " 126a	2 " " 126a
15 " " 37			

C63. Centrifugal Governor

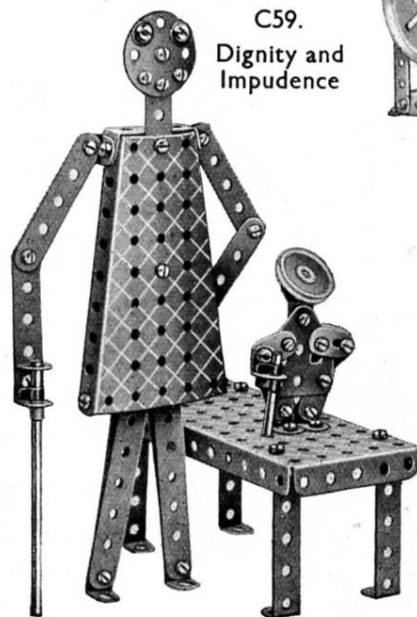
Parts required

Parts required		Parts required	
6 of No. 5	32 of No. 37	32 of No. 37	32 of No. 37
4 " " 10	10 " " 37a	10 " " 37a	10 " " 37a
2 " " 11	8 " " 38	8 " " 38	8 " " 38
6 " " 12	1 " " 40	1 " " 40	1 " " 40
1 " " 15b	1 " " 48a	1 " " 48a	1 " " 48a
1 " " 19s	1 " " 52	1 " " 52	1 " " 52
1 " " 19b	1 " " 54a	1 " " 54a	1 " " 54a
4 " " 22	4 " " 111c	4 " " 111c	4 " " 111c
1 " " 24	2 " " 126	2 " " 126	2 " " 126
3 " " 35			

A 3" Pulley, driven from a 1" Pulley on the armature shaft, rotates a second 1" Pulley that in turn operates the 3" Pulley driving the winding shaft.

A 3" Pulley on the Crank Handle is connected by a cord to a similar Pulley on the winding shaft that is also fitted with a 1" Pulley carrying the operating cord

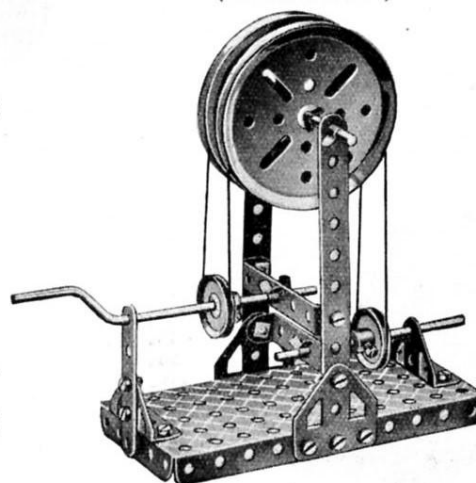
C59. Dignity and Impudence



Parts required

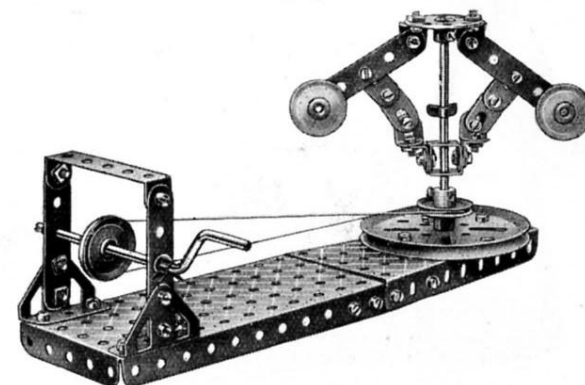
Parts required		Parts required	
5 of No. 2	5 of No. 2	5 of No. 2	5 of No. 2
3 " " 5	3 " " 5	3 " " 5	3 " " 5
5 " " 10	5 " " 10	5 " " 10	5 " " 10
2 " " 11	2 " " 11	2 " " 11	2 " " 11
8 " " 12	8 " " 12	8 " " 12	8 " " 12
1 " " 16	1 " " 16	1 " " 16	1 " " 16
1 " " 17	1 " " 17	1 " " 17	1 " " 17
2 " " 22	2 " " 22	2 " " 22	2 " " 22
4 " " 35	4 " " 35	4 " " 35	4 " " 35
31 " " 37	31 " " 37	31 " " 37	31 " " 37
1 " " 48	1 " " 48	1 " " 48	1 " " 48
4 " " 48a	4 " " 48a	4 " " 48a	4 " " 48a
1 " " 52	1 " " 52	1 " " 52	1 " " 52
2 " " 54a	2 " " 54a	2 " " 54a	2 " " 54a
2 " " 111c	2 " " 111c	2 " " 111c	2 " " 111c
2 " " 125	2 " " 125	2 " " 125	2 " " 125
1 " " 126a	1 " " 126a	1 " " 126a	1 " " 126a

C61. Belt Gear (Shafts not in Line)



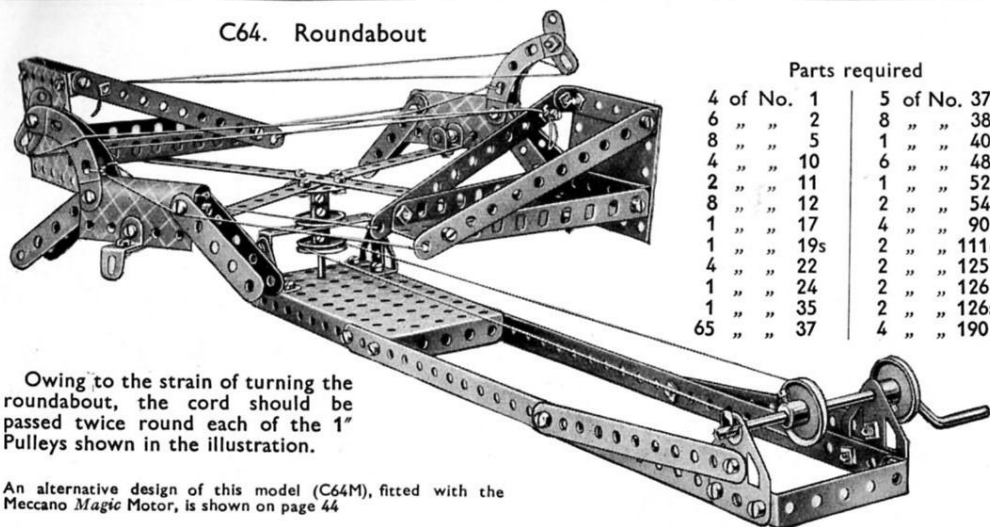
Parts required

Parts required		Parts required	
2 of No. 2	2 of No. 2	2 of No. 2	2 of No. 2
1 " " 5	1 " " 5	1 " " 5	1 " " 5
2 " " 16	2 " " 16	2 " " 16	2 " " 16
1 " " 19s	1 " " 19s	1 " " 19s	1 " " 19s
2 " " 19b	2 " " 19b	2 " " 19b	2 " " 19b
2 " " 22	2 " " 22	2 " " 22	2 " " 22
8 " " 35	8 " " 35	8 " " 35	8 " " 35
16 " " 37	16 " " 37	16 " " 37	16 " " 37
1 " " 40	1 " " 40	1 " " 40	1 " " 40
2 " " 48a	2 " " 48a	2 " " 48a	2 " " 48a
1 " " 52	1 " " 52	1 " " 52	1 " " 52
2 " " 126	2 " " 126	2 " " 126	2 " " 126
2 " " 126a	2 " " 126a	2 " " 126a	2 " " 126a



These Models can be built with **MECCANO Outfit C (or Outfits B and Ba)**

C64. Roundabout



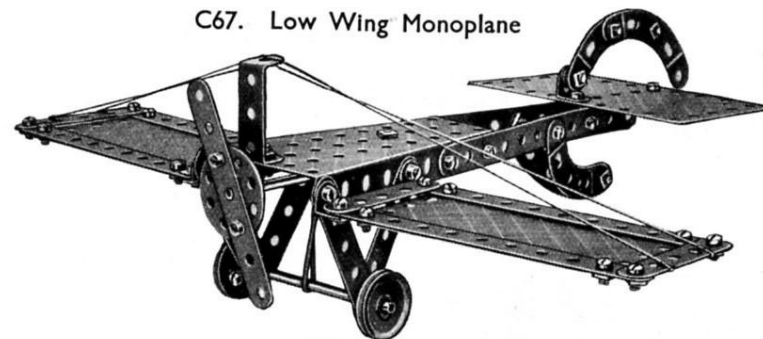
## Parts required

4 of No. 1	5 of No. 37a
6 " " 2	8 " " 38
8 " " 5	1 " " 40
4 " " 10	6 " " 48a
2 " " 11	1 " " 52
8 " " 12	2 " " 54a
1 " " 17	4 " " 90a
1 " " 19s	2 " " 111c
4 " " 22	2 " " 125
1 " " 24	2 " " 126
1 " " 35	2 " " 126a
65 " " 37	4 " " 190

Owing to the strain of turning the roundabout, the cord should be passed twice round each of the 1" Pulleys shown in the illustration.

An alternative design of this model (C64M), fitted with the Meccano Magic Motor, is shown on page 44

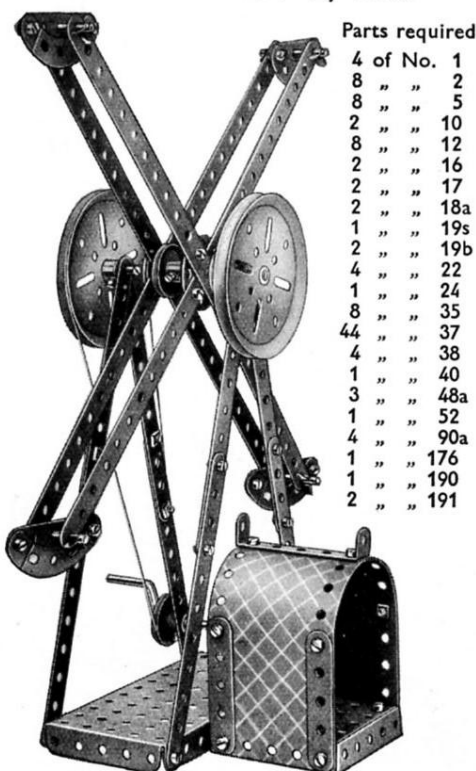
C67. Low Wing Monoplane



## Parts required

6 of No. 2	2 of No. 16	2 of No. 37a	4 of No. 90a
1 " " 3	2 " " 22	8 " " 38	2 " " 111c
8 " " 5	1 " " 24	1 " " 40	1 " " 186
1 " " 11	1 " " 35	1 " " 48	2 " " 190
7 " " 12	36 " " 37	1 " " 54a	2 " " 191

C65. Fly Boats

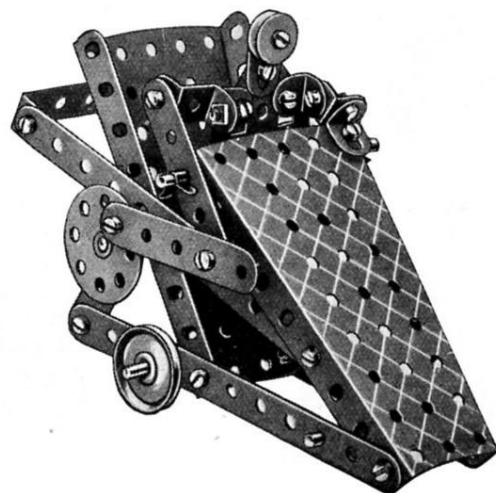


## Parts required

4 of No. 1
8 " " 2
8 " " 5
2 " " 10
8 " " 12
2 " " 16
2 " " 17
2 " " 18a
1 " " 19s
2 " " 19b
4 " " 22
1 " " 24
8 " " 35
44 " " 37
4 " " 38
1 " " 40
3 " " 48a
1 " " 52
4 " " 90a
1 " " 176
1 " " 190
2 " " 191

C66. The Invalid

When wheeled along the table the "invalid" appears to push himself energetically along. His neck is a Flat Bracket: his right (or propelling) arm consists of one Angle Bracket and one  $\frac{1}{2}$ " Reversed Angle Bracket, and his left arm—the hand of which is bolted loosely to the chair—is formed by three Angle Brackets. The chair is composed principally of two Sector Plates and four  $5\frac{1}{2}$ " Strips, and it runs on three 1" Pulley Wheels—one in front and two at the back. One of these, not shown, is connected by means of a Driving Band to a third 1" Pulley Wheel, the shaft of which carries also a Bush Wheel. As will be seen, a  $2\frac{1}{2}$ " Strip is pivoted at one end to this Bush Wheel and at the other end to a second  $2\frac{1}{2}$ " Strip which, rocking about an axle journaled through its centre hole is again pivoted to the invalid's hands.



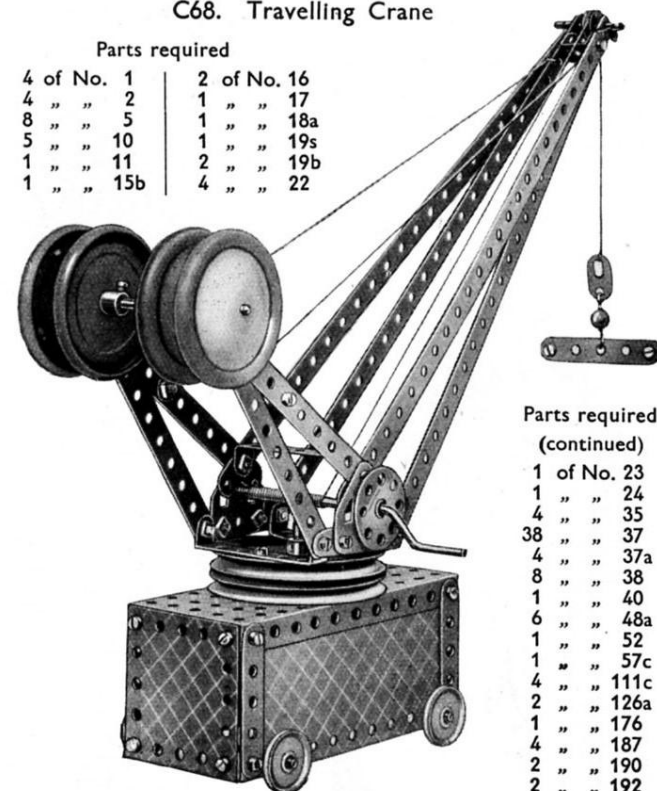
## Parts required

4 of No. 2
4 " " 5
1 " " 10
4 " " 12
3 " " 16
1 " " 17
4 " " 22
1 " " 23
1 " " 24
4 " " 35
22 " " 37
5 " " 37a
4 " " 38
1 " " 48a
2 " " 54a
1 " " 111c
1 " " 125
1 " " 126a
1 " " 186

C68. Travelling Crane

## Parts required

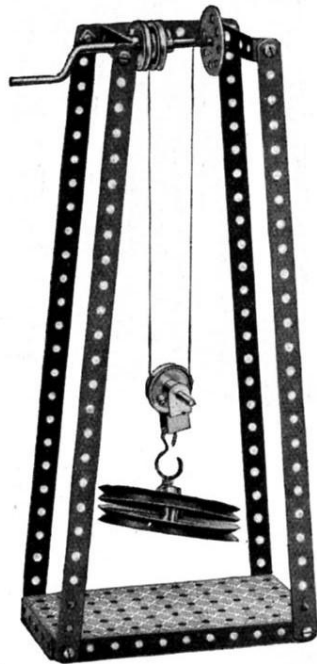
4 of No. 1	2 of No. 16
4 " " 2	1 " " 17
8 " " 5	1 " " 18a
5 " " 10	1 " " 19s
1 " " 11	2 " " 19b
1 " " 15b	4 " " 22

Parts required  
(continued)

1 of No. 23
1 " " 24
4 " " 35
38 " " 37
4 " " 37a
8 " " 38
1 " " 40
6 " " 48a
1 " " 52
1 " " 57c
4 " " 111c
2 " " 126a
1 " " 176
4 " " 187
2 " " 190
2 " " 192

An alternative design of this model (C65M), fitted with the Meccano Magic Motor, is shown on page 45

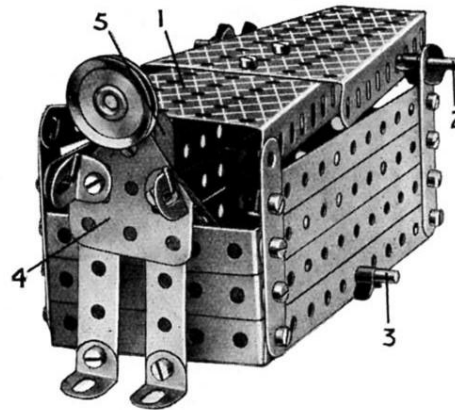
C69. Chinese Windlass



## Parts required

4 of No. 1
1 " " 3
1 " " 18a
1 " " 19s
2 " " 19b
3 " " 22
1 " " 23
1 " " 24
8 " " 37
1 " " 40
1 " " 45
2 " " 48a
1 " " 52
1 " " 57c
1 " " 176

C71. Disappearing Meccanitian

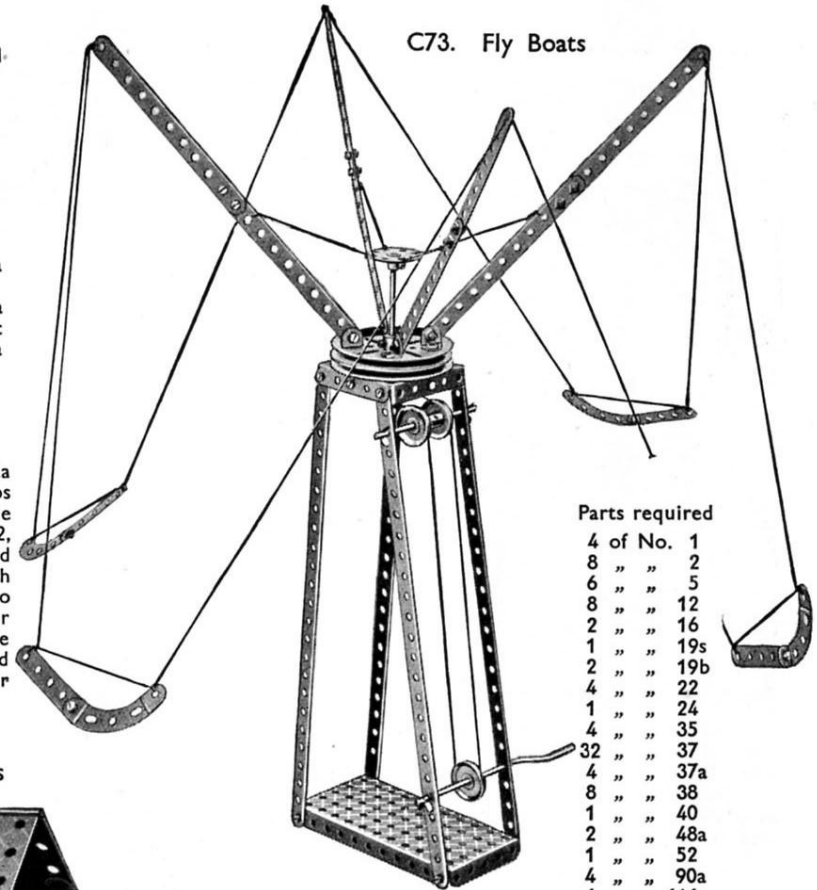


## Parts required

6 of No. 2
6 " " 5
1 " " 10
4 " " 12
2 " " 16
1 " " 22
6 " " 35
23 " " 37
1 " " 45
6 " " 48a
1 " " 52
2 " " 54a
1 " " 111c
1 " " 126a
Four short lengths of elastic

The bottom of the box-like portion of the model consists of a  $5\frac{1}{2} \times 2\frac{1}{2}$ " Flanged Plate; three  $5\frac{1}{2}$ " Strips bolted to upright  $2\frac{1}{2}$ " Strips form each side and each end consists of two  $2\frac{1}{2} \times \frac{1}{2}$ " Double Angle Strips. The lid 1, which is mounted pivotally on an Axle Rod 2, consists of two Sector Plates bolted together. Elastic bands are tied to the sides of these Plates and connected to Rod 3 passed through the bottom of the box. The "Meccanitian" 4 also is connected to this Rod by pieces of elastic. On pressing the end of the rear Sector Plate the lid opens sufficiently to allow the figure to be drawn inside and then snaps back into place. A Cranked Bent Strip 5 is bolted at the back of the figure and rests against the edge of the Sector Plate.

C73. Fly Boats



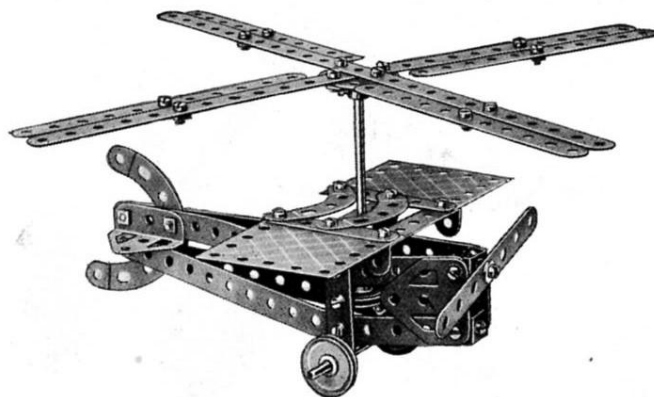
## Parts required

4 of No. 1
8 " " 2
6 " " 5
8 " " 12
2 " " 16
1 " " 19s
2 " " 19b
4 " " 22
1 " " 24
4 " " 35
32 " " 37
4 " " 37a
8 " " 38
1 " " 40
2 " " 48a
1 " " 52
4 " " 90a
4 " " 111c

C70. Autogiro

## Parts required

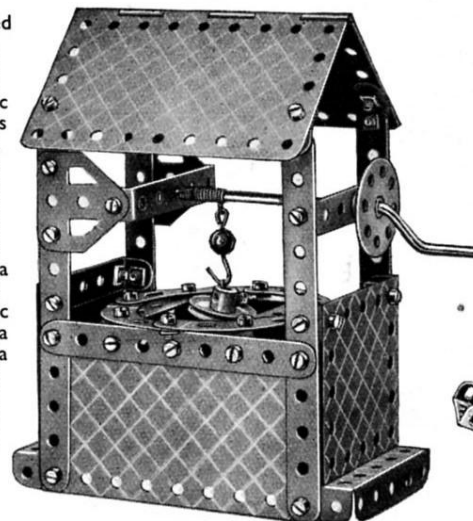
2 of No. 1	2 of No. 11	33 of No. 37	4 of No. 90a
8 " " 2	2 " " 12	3 " " 37a	2 " " 111c
1 " " 3	2 " " 16	7 " " 38	2 " " 126
9 " " 5	4 " " 22	1 " " 48	2 " " 126a
5 " " 10	1 " " 24	1 " " 48a	2 " " 190



C72. Well Windlass

## Parts required

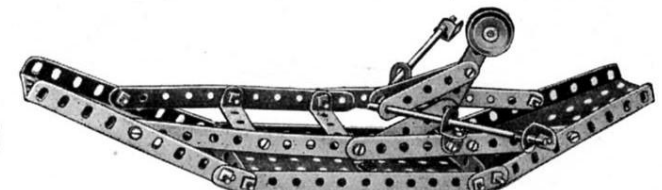
4 of No. 2
4 " " 5
4 " " 12c
1 " " 19s
1 " " 22
1 " " 24
1 " " 35
46 " " 37
1 " " 38
1 " " 40
6 " " 48a
1 " " 52
1 " " 57c
4 " " 90a
2 " " 126a
1 " " 176
2 " " 190
2 " " 191
1 " " 198



C74. Rowing Boat

## Parts required

4 of No. 2	2 of No. 16	3 of No. 48a
4 " " 5	1 " " 22	1 " " 52
4 " " 10	6 " " 35	2 " " 54a
7 " " 12	25 " " 37	1 " " 111c

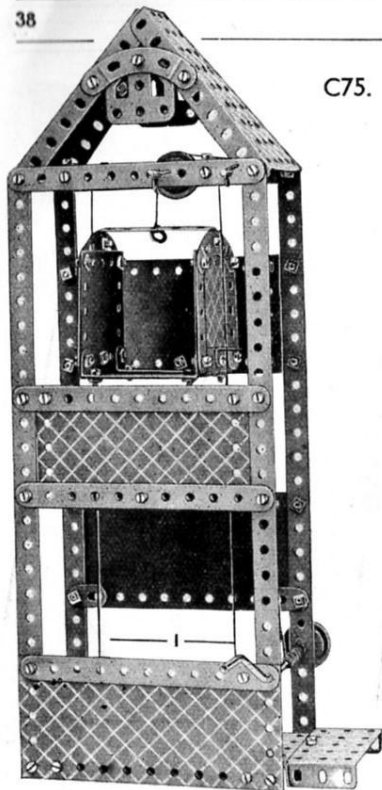




C75. Elevator

## Parts required

4 of No. 1	
8 " " 2	
8 " " 5	
2 " " 10	
6 " " 12	
2 " " 16	
1 " " 19s	
2 " " 22	
1 " " 23	
6 " " 35	
63 " " 37	
2 " " 37a	
8 " " 38	
1 " " 40	
3 " " 48a	
1 " " 51	
1 " " 52	
2 " " 54a	
4 " " 90a	
1 " " 126	
2 " " 126a	
1 " " 176	
3 " " 190	
2 " " 191	
2 " " 192	

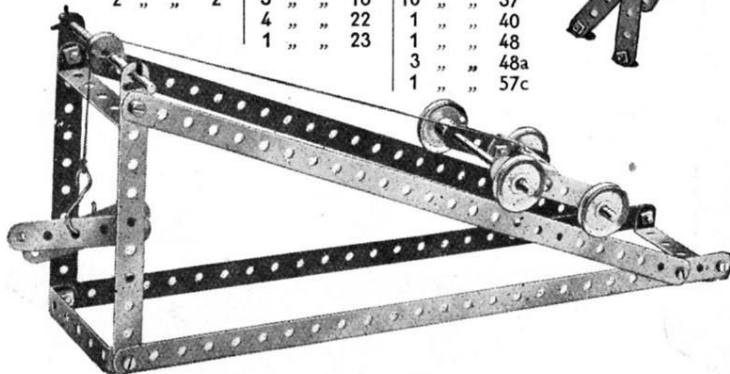


The guide cords 1 for the cage are tied to the centre holes of  $2\frac{1}{2}$ " Strips attached to the top of the model by Angle Brackets, and in corresponding holes in the  $5\frac{1}{2}$ "  $\times$   $2\frac{1}{2}$ " Flanged Plate. The hoisting cord is passed over a loose Pulley and 1" fixed Pulley before being tied to the cage as shown.

C76. Inclined Plane

## Parts required

4 of No. 1	2 of No. 5	3 of No. 35
2 " " 2	3 " " 16	10 " " 37
	4 " " 22	1 " " 40
	1 " " 23	1 " " 48
		3 " " 48a
		1 " " 57c



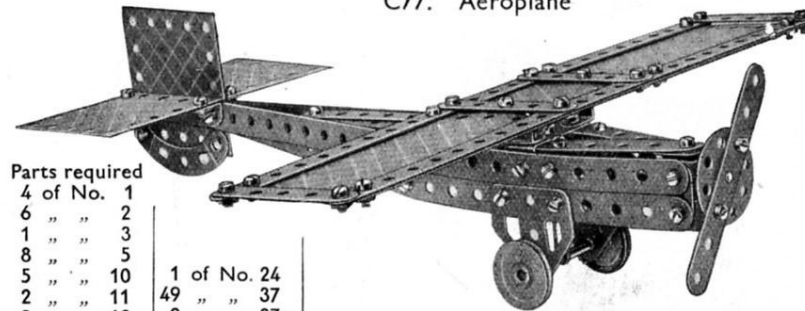
C77. Aeroplane

## Parts required

4 of No. 1	
6 " " 2	
1 " " 3	
8 " " 5	
5 " " 10	
2 " " 11	
8 " " 12	
1 " " 15b	
1 " " 17	
2 " " 22	

1 of No. 24	
49 " " 37	
2 " " 37a	
1 " " 48	
2 " " 90a	
2 " " 111c	

2 of No. 125	1 of No. 186
2 " " 126a	4 " " 190
1 " " 176	2 " " 191



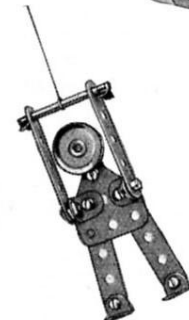
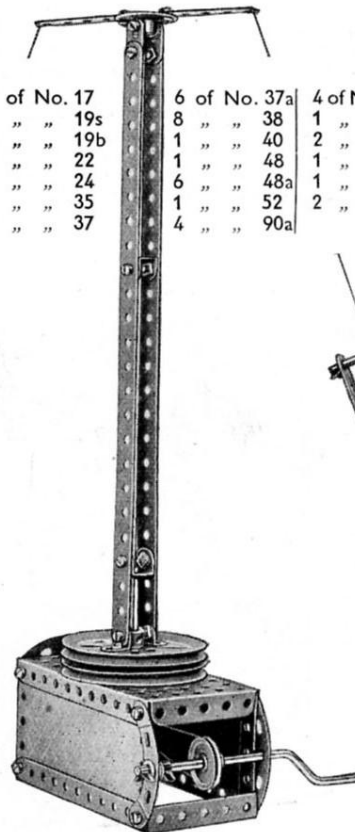
An alternative design of this model (C77M), fitted with the Meccano Magic Motor, is illustrated on page 45.

C78. Revolving Gymnasts

## Parts required

2 of No. 1	2 of No. 17
3 " " 2	1 " " 19s
8 " " 5	2 " " 19b
4 " " 10	4 " " 22
2 " " 11	1 " " 24
8 " " 12	7 " " 35
1 " " 16	40 " " 37

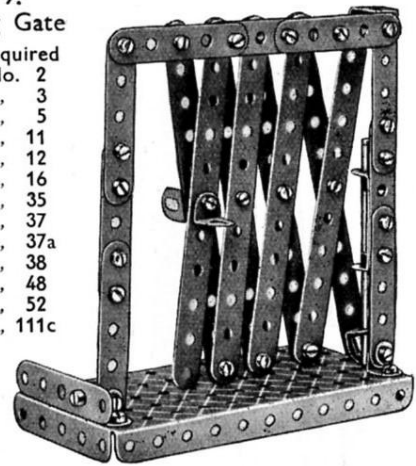
6 of No. 37a	4 of No. 111c
8 " " 38	1 " " 125
1 " " 40	2 " " 126a
1 " " 48	1 " " 186
6 " " 48a	1 " " 190
1 " " 52	2 " " 192
4 " " 90a	



C79. Sliding Gate

## Parts required

8 of No. 2	
1 " " 3	
9 " " 5	
1 " " 11	
6 " " 12	
1 " " 16	
2 " " 35	
30 " " 37	
14 " " 37a	
5 " " 38	
1 " " 48	
1 " " 52	
1 " " 111c	

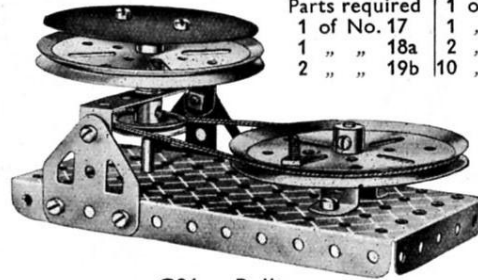


C80. Rotary Linisher

## Parts required

1 of No. 17	1 of No. 22
1 " " 18a	1 " " 24
2 " " 19b	2 " " 35
	10 " " 37

1 of No. 37a	1 of No. 38
2 " " 38	1 " " 40
1 " " 40	1 " " 48a
1 " " 48a	1 " " 52
1 " " 52	1 " " 111c
2 " " 125	
1 " " 126a	



Disc of Emery Cloth (not included in Outfit)

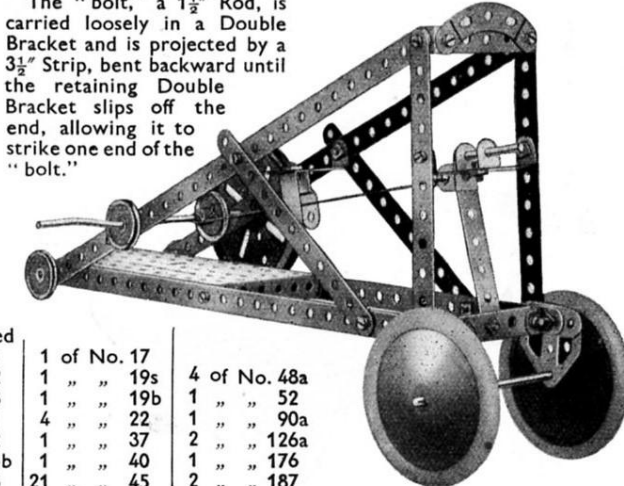
C81. Ballista

The "bolt," a  $1\frac{1}{2}$ " Rod, is carried loosely in a Double Bracket and is projected by a  $3\frac{1}{2}$ " Strip, bent backward until the retaining Double Bracket slips off the end, allowing it to strike one end of the "bolt."

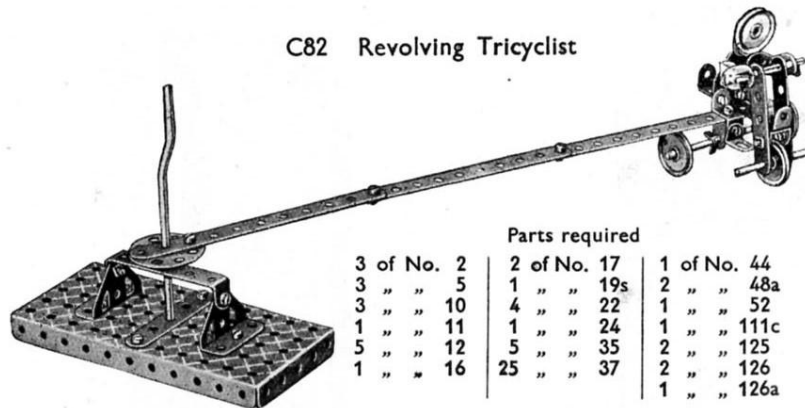
## Parts required

4 of No. 1	1 of No. 17
4 " " 2	1 " " 19s
1 " " 3	1 " " 19b
2 " " 11	4 " " 22
2 " " 12	1 " " 37
1 " " 15b	1 " " 40
1 " " 16	21 " " 45

4 of No. 48a	
1 " " 52	
1 " " 90a	
2 " " 126a	
1 " " 176	
2 " " 187	

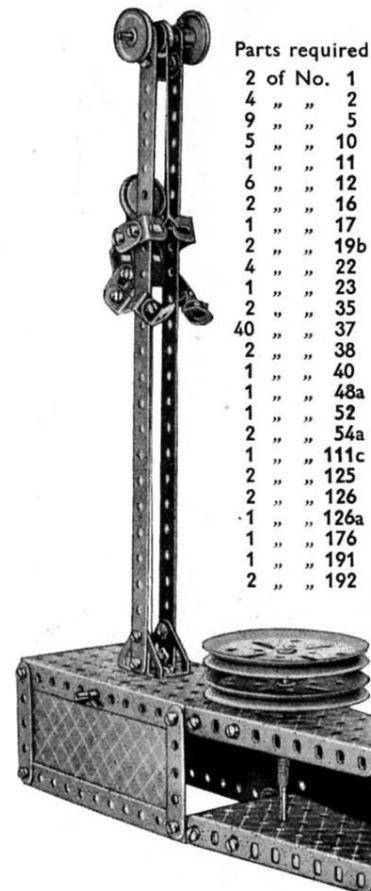


C82 Revolving Tricyclist



Parts required		
3 of No. 2	2 of No. 17	1 of No. 44
3 " " 5	1 " " 19s	2 " " 48a
3 " " 10	4 " " 22	1 " " 52
1 " " 11	1 " " 24	1 " " 111c
5 " " 12	5 " " 35	2 " " 125
1 " " 16	25 " " 37	2 " " 126
		1 " " 126a

C83. Man Climbing Pole



Parts required	
2 of No. 1	2
4 " " 2	4
9 " " 5	9
5 " " 10	5
1 " " 11	1
6 " " 12	6
2 " " 16	2
1 " " 17	1
2 " " 19b	2
4 " " 22	4
1 " " 23	1
2 " " 35	2
2 " " 37	2
2 " " 38	2
1 " " 40	1
1 " " 48a	1
1 " " 52	1
2 " " 54a	2
1 " " 111c	1
2 " " 125	2
2 " " 126	2
1 " " 126a	1
1 " " 176	1
1 " " 191	1
2 " " 192	2

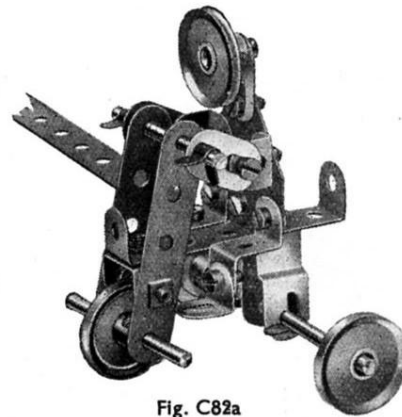


Fig. C82a

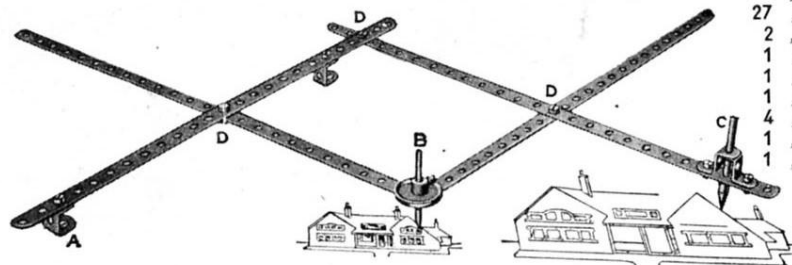
C85. Pantograph

The apparatus is fixed at the point A. If an enlarged sketch is to be made the point B is traced round the outlines, the writing point C reproducing the sketch on a large scale. When a reduced drawing is to be made, the point C traces the outline, whilst the point B reproduces the sketch on a smaller scale. The degree of enlargement or reduction varies according to the position in which point C is fixed on the perforated arm.

The Bolts at D are fitted with locknuts to allow free movement of the 12½ Strips.

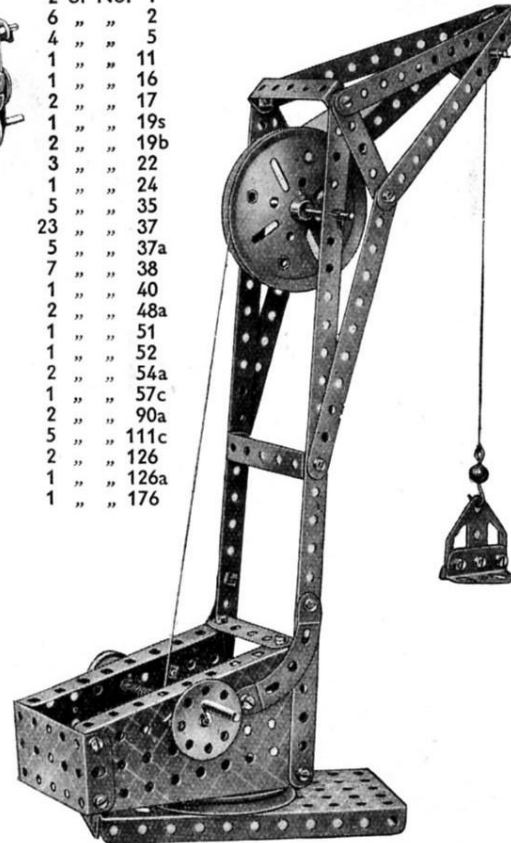
Parts required

4 of No. 1	4
2 " " 11	2
2 " " 18a	2
1 " " 22	1
2 " " 35	2
4 " " 37	4
3 " " 37a	3
3 " " 111c	3
2 " " 125	2



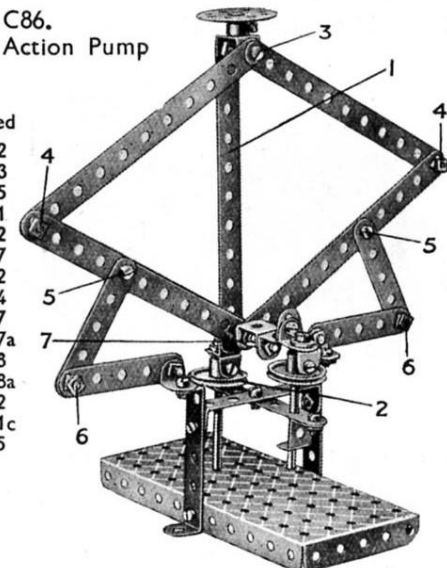
C84. Warehouse Crane

Parts required	
2 of No. 1	2
6 " " 2	6
4 " " 5	4
1 " " 11	1
1 " " 16	1
2 " " 17	2
1 " " 19s	1
2 " " 19b	2
3 " " 22	3
1 " " 24	1
5 " " 35	5
23 " " 37	23
5 " " 37a	5
7 " " 38	7
1 " " 40	1
2 " " 48a	2
1 " " 51	1
1 " " 52	1
2 " " 54a	2
1 " " 57c	1
2 " " 90a	2
5 " " 111c	5
2 " " 126	2
1 " " 126a	1
1 " " 176	1



C86. Double Action Pump

Parts required	
5 of No. 2	5
1 " " 3	1
4 " " 5	4
2 " " 11	2
6 " " 12	6
2 " " 17	2
2 " " 22	2
1 " " 24	1
24 " " 37	24
9 " " 37a	9
7 " " 38	7
3 " " 48a	3
1 " " 52	1
3 " " 111c	3
2 " " 125	2

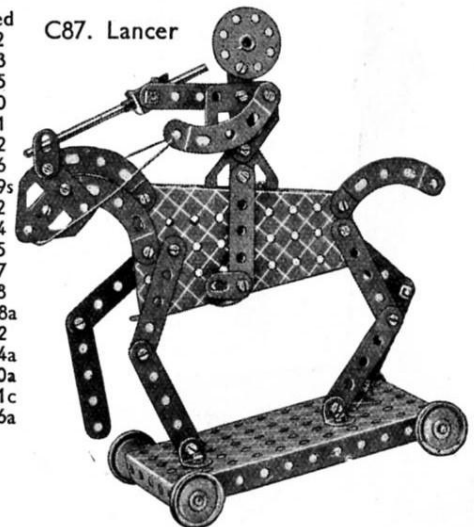


The 5½" Strip 1 is attached to the 1" Pulley Wheel 2 by means of two Angle Brackets, through the lower one of which passes the Set-Screw that secures the Pulley to its 2" Rod. Two Washers are placed beneath the head of the bolt joining the Angle Brackets in order to prevent its shank from binding on the boss of the Pulley 2. The joints 3, 4, 5, 6, 7, are all locknotted, the remainder of the joints being quite rigid. When the Strip 1 descends, together with the first pump, the incidental distortion of the parallelogram 3, 4, 7, 4 causes the second pump to rise. Similarly, when the first pump rises, the second descends.

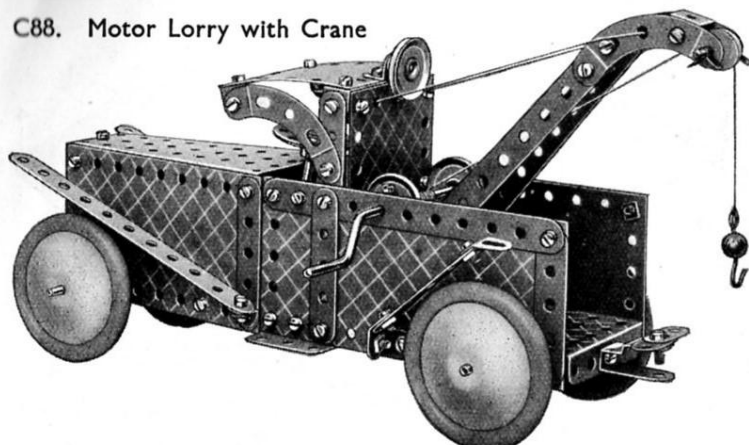
Parts required

1 of No. 2	1
1 " " 3	1
9 " " 5	9
2 " " 10	2
2 " " 11	2
5 " " 12	5
2 " " 16	2
1 " " 19s	1
4 " " 22	4
1 " " 24	1
1 " " 35	1
27 " " 37	27
2 " " 38	2
1 " " 48a	1
1 " " 52	1
1 " " 54a	1
4 " " 90a	4
1 " " 111c	1
1 " " 126a	1

C87. Lancer



C88. Motor Lorry with Crane



## Parts required

2 of No. 2
2 " " 18a
4 " " 22
1 " " 23
2 " " 35
8 " " 37
1 " " 40
4 " " 48a
1 " " 52
2 " " 125

Parts required	4 of No. 12c	1 of No. 24	5 of No. 48a	2 of No. 126
8 of No. 2	2 " " 15b	4 " " 35	1 " " 51	2 " " 126a
1 " " 3	1 " " 16	66 " " 37	1 " " 52	1 " " 176
9 " " 5	2 " " 17	1 " " 37a	2 " " 54a	4 " " 187
4 " " 10	1 " " 19s	2 " " 38	1 " " 57c	3 " " 190
1 " " 11	4 " " 22	1 " " 40	4 " " 90a	2 " " 191
7 " " 12	1 " " 23	1 " " 44	2 " " 111c	1 " " 192

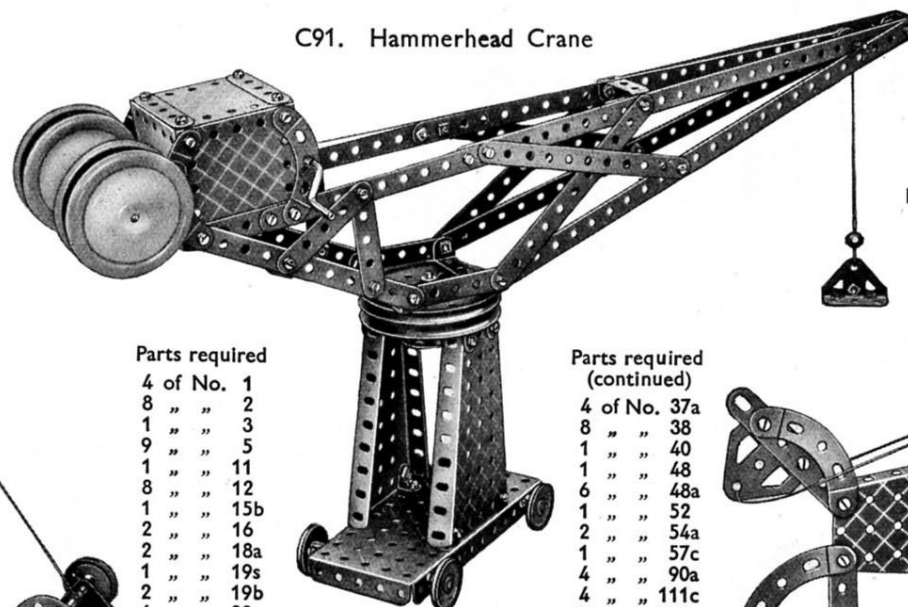
C89.

## Pile Driver

## Parts required

2 of No. 1
2 " " 2
9 " " 5
5 " " 10
2 " " 11
7 " " 12
1 " " 17
1 " " 19s
4 " " 22
1 " " 24
2 " " 35
36 " " 37
1 " " 37a
1 " " 38
1 " " 40
2 " " 48a
1 " " 52
1 " " 54a
1 " " 111c
2 " " 125
2 " " 126
2 " " 126a
1 " " 176

C91. Hammerhead Crane



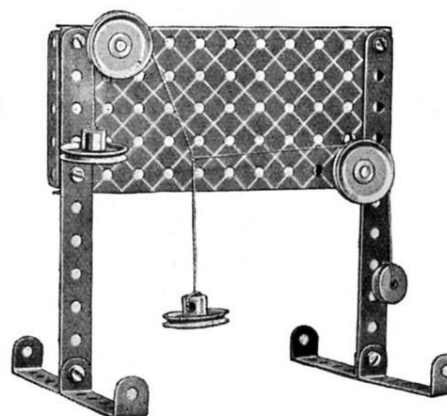
## Parts required

4 of No. 1
8 " " 2
1 " " 3
9 " " 5
1 " " 11
8 " " 12
1 " " 15b
2 " " 16
2 " " 18a
1 " " 19s
2 " " 19b
4 " " 22
1 " " 23
1 " " 24
4 " " 35
51 " " 37

## Parts required (continued)

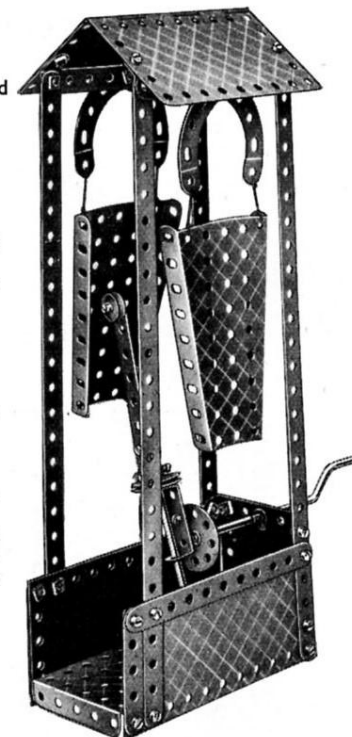
4 of No. 37a
8 " " 38
1 " " 40
1 " " 48
6 " " 48a
1 " " 52
2 " " 54a
1 " " 57c
4 " " 90a
4 " " 111c
2 " " 126
2 " " 126a
1 " " 176
4 " " 187
4 " " 190

C90. Triangle of Forces



The suspended weights represent three forces acting on a central point. If a triangle is drawn with its sides respectively parallel to the three converging cords, i.e., parallel to the directions of the three forces, the lengths of the sides will be found to be proportional to the respective magnitudes of the forces.

C92. Mechanical Gong



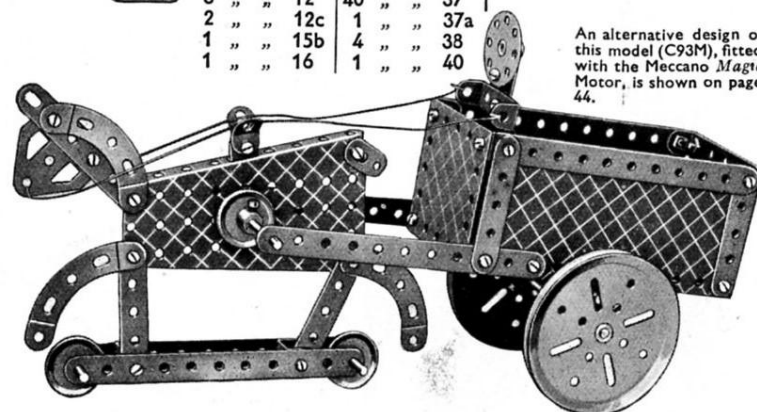
## Parts required

4 of No. 1
2 " " 2
1 " " 3
7 " " 5
2 " " 10
1 " " 12
4 " " 12c
1 " " 16
1 " " 19s
2 " " 22
1 " " 23
1 " " 24
2 " " 35
39 " " 37
2 " " 37a
7 " " 38
1 " " 40
1 " " 48
2 " " 48a
1 " " 52
2 " " 54a
4 " " 90a
1 " " 111c
1 " " 126
1 " " 190
2 " " 192
1 " " 198

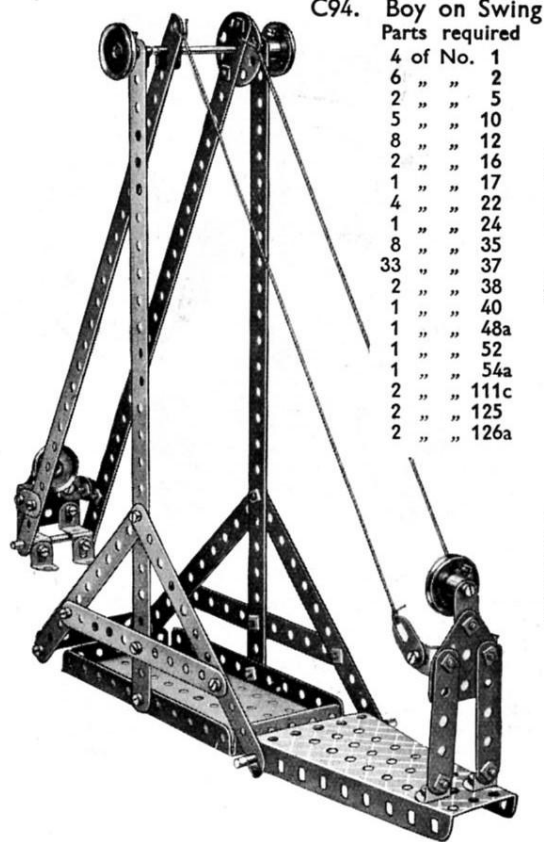
C93. Horse and Cart

Parts required	2 of No. 18a	1 of No. 48	1 of No. 111c
6 of No. 2	2 " " 19b	2 " " 48a	2 " " 126
9 " " 5	4 " " 22	1 " " 52	2 " " 126a
3 " " 10	1 " " 24	1 " " 54a	2 " " 190
2 " " 11	2 " " 35	3 " " 90	2 " " 192
3 " " 12	40 " " 37		
2 " " 12c	1 " " 37a		
1 " " 15b	4 " " 38		
1 " " 16	1 " " 40		

An alternative design of this model (C93M), fitted with the Meccano Magic Motor, is shown on page 44.



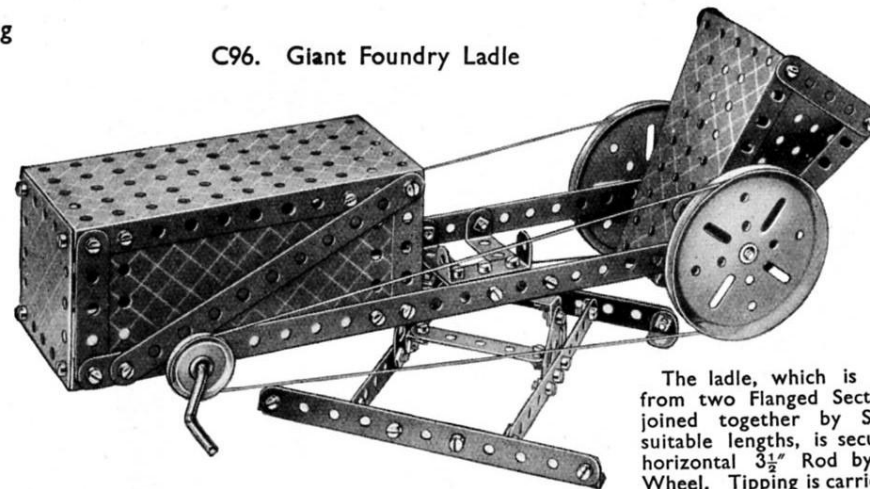




C94. Boy on Swing

## Parts required

4	of No.	1
6	" "	2
2	" "	5
5	" "	10
8	" "	12
2	" "	16
1	" "	17
4	" "	22
1	" "	24
8	" "	35
33	" "	37
2	" "	38
1	" "	40
1	" "	48a
1	" "	52
1	" "	54a
2	" "	111c
2	" "	125
2	" "	126a



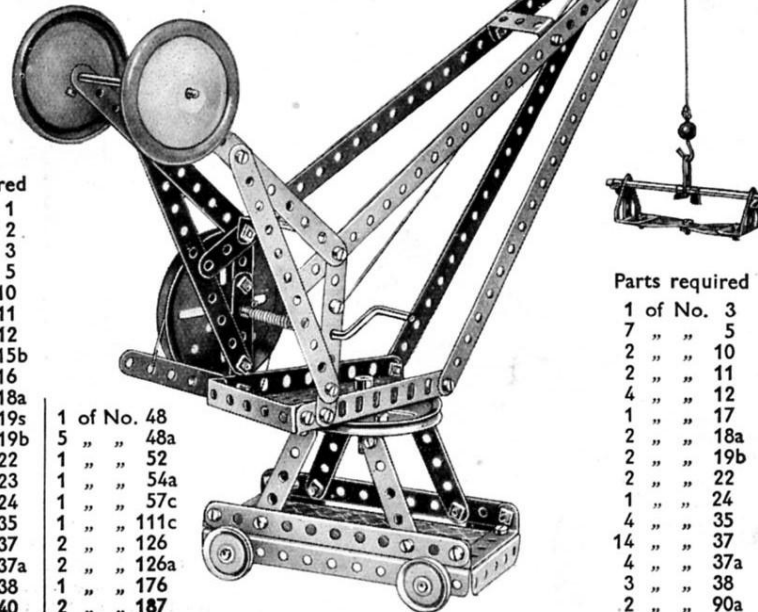
C96. Giant Foundry Ladle

## Parts required

2	of No.	1	1	of No.	19s	5	of No.	38	2	of No.	54a
6	" "	2	2	" "	19b	1	" "	40	1	" "	111c
9	" "	5	2	" "	22	1	" "	48	2	" "	126a
2	" "	10	1	" "	24	6	" "	48a	1	" "	190
8	" "	12	64	" "	37	1	" "	52	2	" "	191
1	" "	16	2	" "	37a						

The ladle, which is built up from two Flanged Sector Plates joined together by Strips of suitable lengths, is secured to a horizontal  $3\frac{1}{2}$ " Rod by a Bush Wheel. Tipping is carried out by two cords as shown.

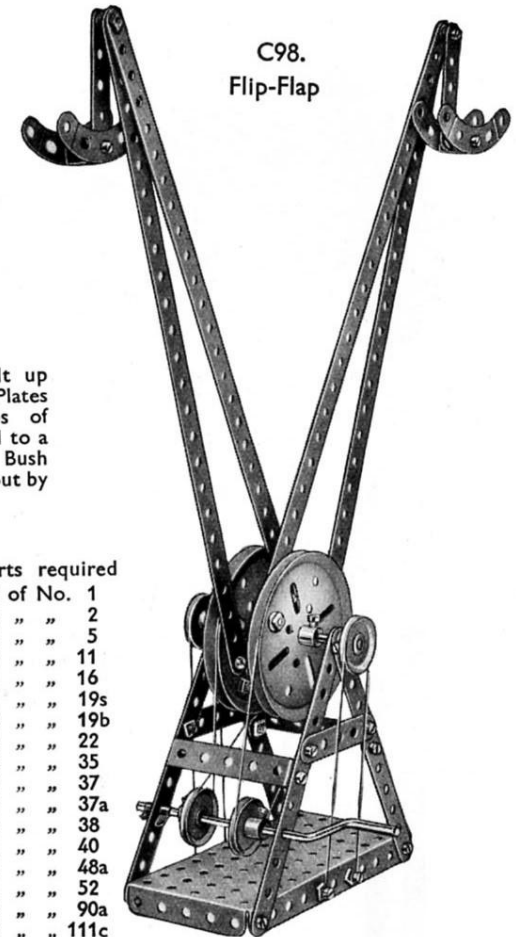
C97. Swivelling Crane



## Parts required

4	of No.	1
8	" "	2
1	" "	3
8	" "	5
1	" "	10
4	" "	11
1	" "	12
1	" "	15b
3	" "	16
2	" "	18a
1	" "	19s
2	" "	19b
4	" "	22
1	" "	23
1	" "	24
6	" "	35
46	" "	37
2	" "	37a
6	" "	38
1	" "	40

1	of No.	48
5	" "	48a
1	" "	52
1	" "	54a
1	" "	57c
1	" "	111c
2	" "	126
2	" "	126a
3	" "	176
2	" "	187

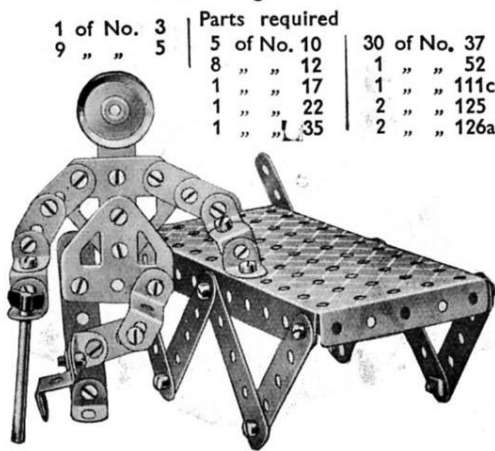



C98. Flip-Flap

## Parts required

4	of No.	1
4	" "	2
4	" "	5
2	" "	11
1	" "	16
1	" "	19s
2	" "	19b
4	" "	22
4	" "	35
20	" "	37
20	" "	37a
8	" "	38
1	" "	40
2	" "	48a
1	" "	52
4	" "	90a
6	" "	111c

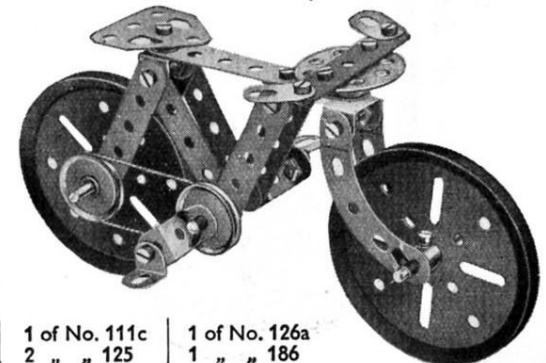
C95. King Meccano



1 of No. 3	Parts required	30 of No. 37
9 " " 5	5 of No. 10	1 " " 52
	8 " " 12	1 " " 111c
	1 " " 17	2 " " 125
	1 " " 22	2 " " 126a
	1 " " 35	

## Parts required

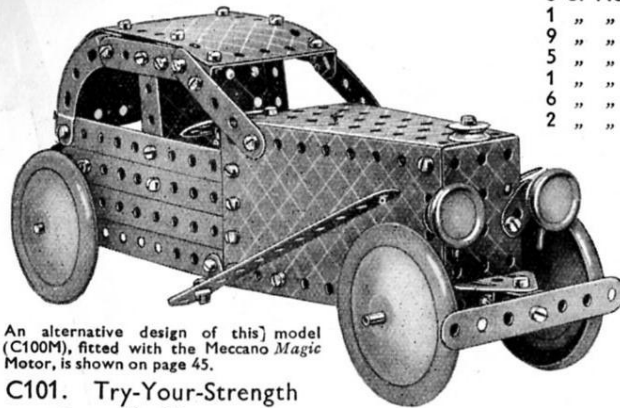
1	of No.	3
7	" "	5
2	" "	10
2	" "	11
4	" "	12
1	" "	17
2	" "	18a
2	" "	19b
2	" "	22
1	" "	24
4	" "	35
14	" "	37
4	" "	37a
3	" "	38
2	" "	90a



C99. Bicycle

1	of No.	111c	1	of No.	126a
2	" "	125	1	" "	186

C100. Sports Coupé

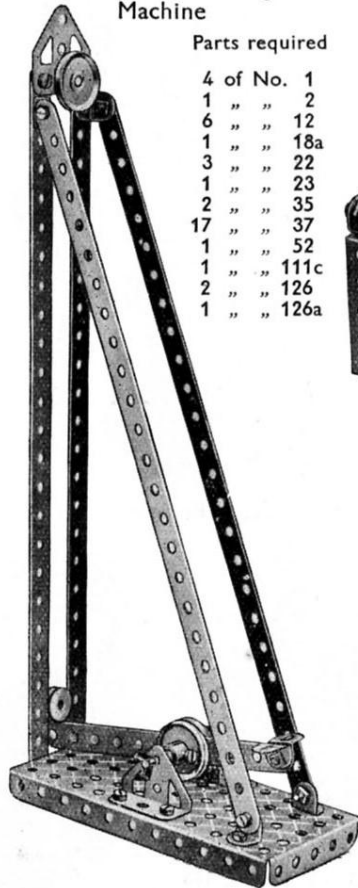


An alternative design of this model (C100M), fitted with the Meccano Magic Motor, is shown on page 45.

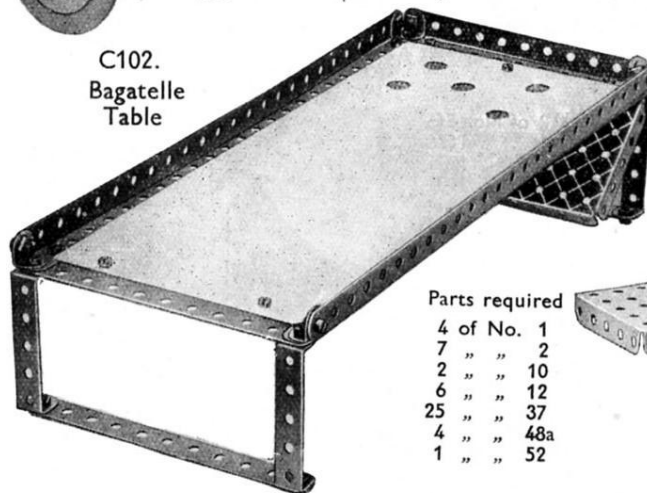
C101. Try-Your-Strength Machine

Parts required

4 of No. 1
1 " " 2
6 " " 12
1 " " 18a
3 " " 22
1 " " 23
2 " " 35
17 " " 37
1 " " 52
1 " " 111c
2 " " 126
1 " " 126a



C102. Bagatelle Table

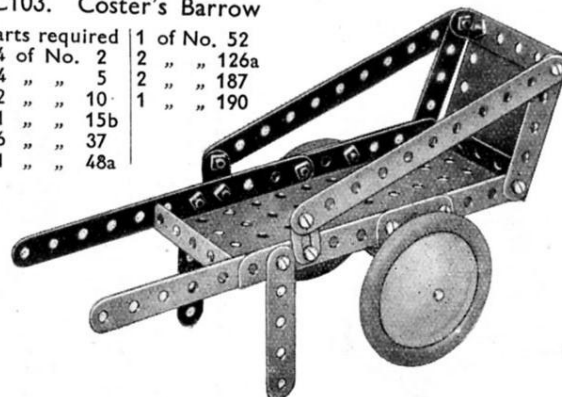


Parts required

4 of No. 1
7 " " 2
2 " " 10
6 " " 12
25 " " 37
4 " " 48a
1 " " 52

C103. Coster's Barrow

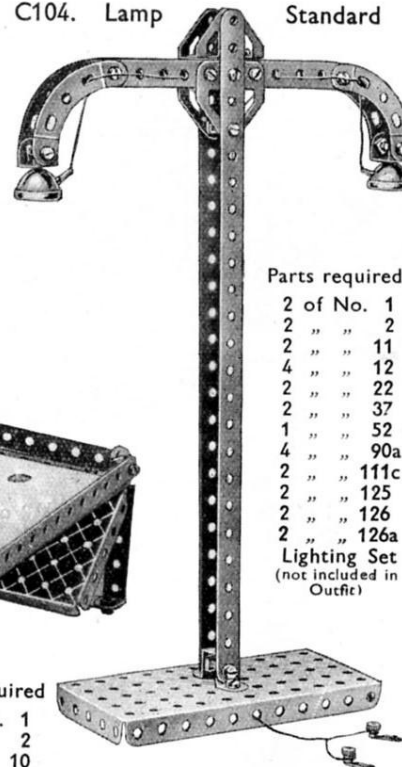
Parts required	1 of No. 52
4 of No. 2	2 " " 126a
4 " " 5	2 " " 187
2 " " 10	1 " " 190
1 " " 15b	
16 " " 37	
1 " " 48a	



Parts required	1 of No. 17
8 of No. 2	2 " " 22
1 " " 3	66 " " 37
9 " " 5	4 " " 37a
1 " " 10	6 " " 48a
5 " " 11	1 " " 51
6 " " 12	1 " " 52
2 " " 15b	2 " " 54a
	2 " " 90a
	6 " " 111c
	1 " " 125
	1 " " 126
	2 " " 126a
	4 " " 187
	2 " " 190
	2 " " 191
	1 " " 192

Lighting Set  
(not included in  
Outfit)

C104. Lamp



Parts required

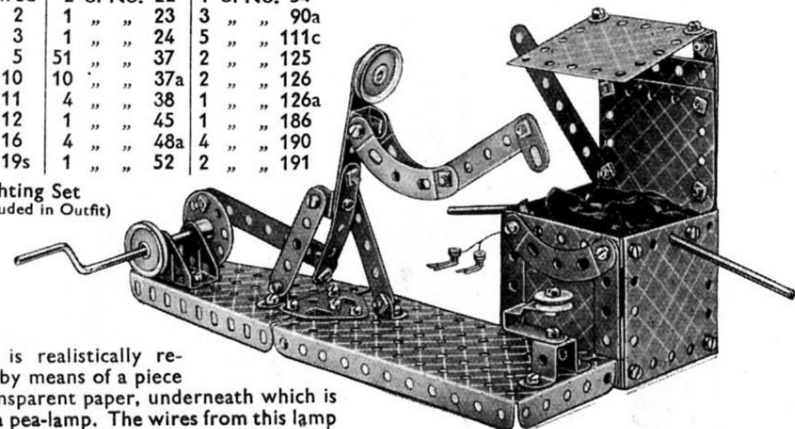
2 of No. 1
2 " " 2
2 " " 11
4 " " 12
2 " " 22
2 " " 37
1 " " 52
4 " " 90a
2 " " 111c
2 " " 125
2 " " 126
2 " " 126a

Lighting Set  
(not included in  
Outfit)

C106. Blacksmith

Parts required	2 of No. 22	1 of No. 54
3 of No. 2	1 " " 23	3 " " 90a
1 " " 3	1 " " 24	5 " " 111c
7 " " 5	51 " " 37	2 " " 125
2 " " 10	10 " " 37a	2 " " 126
2 " " 11	4 " " 38	1 " " 126a
7 " " 12	1 " " 45	1 " " 186
2 " " 16	4 " " 48a	4 " " 190
1 " " 19s	1 " " 52	2 " " 191

Lighting Set  
(not included in Outfit)

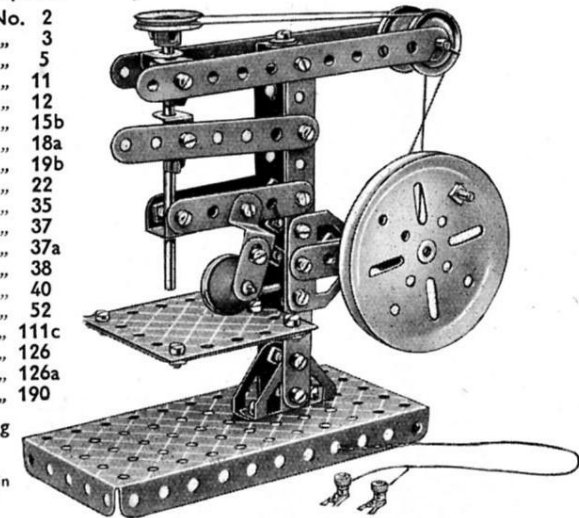


The fire is realistically represented by means of a piece of red transparent paper, underneath which is concealed a pea-lamp. The wires from this lamp are shown at the back of the model.

C105. Drill

Parts required	4 of No. 2
1 " " 3	1 " " 5
2 " " 11	8 " " 12
1 " " 15b	1 " " 18a
2 " " 19b	4 " " 22
5 " " 35	37
33 " " 37a	3 " " 38
5 " " 40	1 " " 52
1 " " 111c	2 " " 126
2 " " 126a	1 " " 190

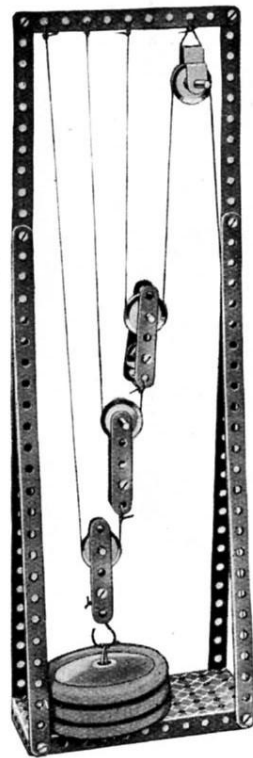
Lighting Set  
(not included in  
Outfit)



## MECCANO LIGHTING SET

The appearance of many Meccano models, especially those built with Outfits A, B and C, can be vastly improved by the addition of suitably disposed lights. For this purpose a special set of lighting equipment has been introduced. This consists of two pea-lamps, two lanterns for use as headlamps or spot lights, and a fancy stand lamp. The appearance and uses of the parts are shown in models C100, C104, C105 and C106

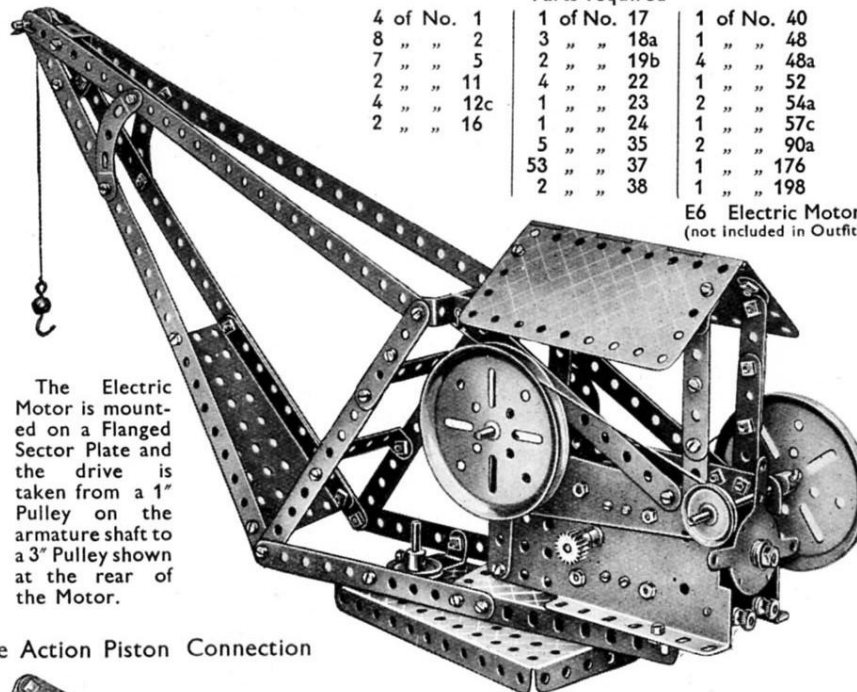
These Models can be built with **MECCANO Outfit C (or Outfits B and Ba)**



**C107.**  
**Pulley Block**  
**8:1**

**Parts required**

4 of No.	1
3 "	2
6 "	5
2 "	11
2 "	12
2 "	17
2 "	18a
4 "	22
15 "	37
2 "	38
1 "	40
1 "	45
1 "	52
1 "	57c
3 "	187



The Electric Motor is mounted on a Flanged Sector Plate and the drive is taken from a 1" Pulley on the armature shaft to a 3" Pulley shown at the rear of the Motor.

**C109. Swivelling Jib Crane (Electric)**

**Parts required**

4 of No.	1	1 of No.	17	1 of No.	40
8 "	2	3 "	18a	1 "	48
7 "	5	2 "	19b	4 "	48a
2 "	11	4 "	22	1 "	52
4 "	12c	1 "	23	2 "	54a
2 "	16	1 "	24	1 "	57c
		5 "	35	2 "	90a
		53 "	37	1 "	176
		2 "	38	1 "	198

**E6 Electric Motor**  
(not included in Outfit)

**C110.**  
**Overhead**  
**Crane**

**Parts required**

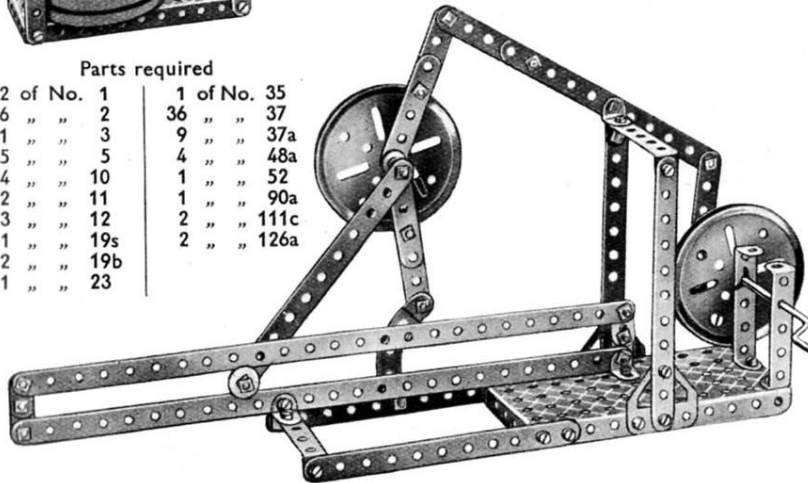
4 of No.	1
4 "	2
8 "	5
2 "	10
8 "	12
2 "	16
1 "	18a
1 "	19s
4 "	22
1 "	23
4 "	35
48 "	37
2 "	37a
1 "	40
6 "	48a
1 "	57c
4 "	90a
1 "	111c
2 "	126a
1 "	176
2 "	191



**C108. Double Action Piston Connection**

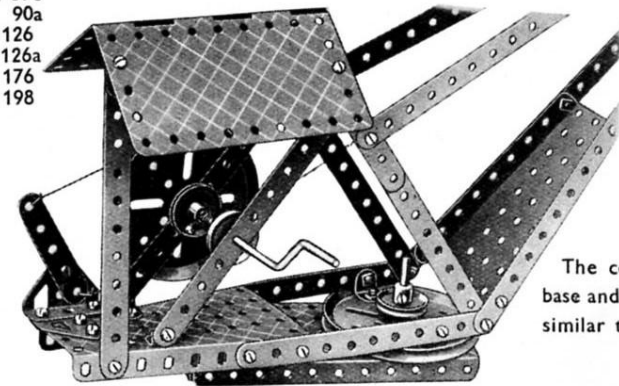
**Parts required**

2 of No.	1	1 of No.	35
6 "	2	36 "	37
1 "	3	9 "	37a
5 "	5	4 "	48a
4 "	10	1 "	52
2 "	11	1 "	90a
3 "	12	2 "	111c
1 "	19s	2 "	126a
2 "	19b		
1 "	23		



**Parts required**

4 of No.	1	1 of No.	57c
7 "	2	2 "	90a
3 "	5	1 "	126
2 "	11	1 "	126a
4 "	12	1 "	176
3 "	12c	1 "	198
1 "	17		
1 "	18a		
1 "	19s		
2 "	19b		
4 "	22		
1 "	23		
2 "	35		
36 "	37		
1 "	38		
1 "	40		
1 "	48		
1 "	48a		
1 "	52		
2 "	54a		



**C111. Swivelling Jib Crane**  
**(Hand)**

The construction of the base and jib of this model is similar to model C109

**HOW TO CONTINUE**

When you have built the C Outfit Models illustrated, and fitted a number of them with the Meccano *Magic Motor* (see two following pages), your next step is to purchase a Ca Accessory Outfit. This converts your C Outfit into a D and enables you to build bigger and better models.



The greatest thrill in Meccano model-building is experienced when a model is set to work by means of a Meccano Motor. The models featured on this and the opposite page are more elaborate variations of a selection of Outfit B Models, showing how the new Meccano *Magic* Motor can be fitted to give more realism and to increase the fun. The numbers of these re-designed models are the same as those of the corresponding models in the preceding pages, with the letter M added. Try your hand at re-designing other models in a similar manner.

## C55M. Paddle Steamer

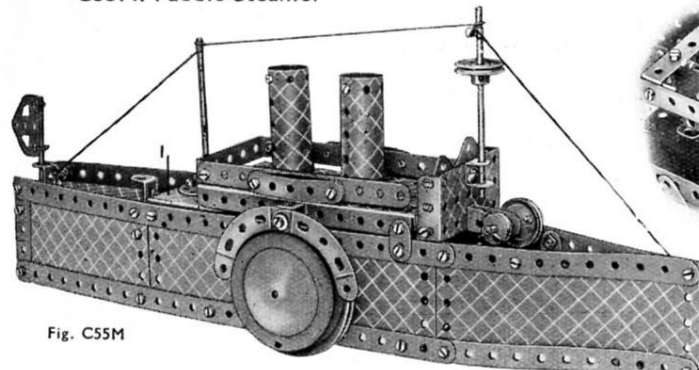
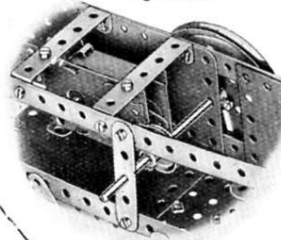


Fig. C55M

Fig. C55Mb



The Plate 1 forming part of the deck is a Hinged Flat Plate that forms also part of the side of the ship as shown in Fig. C55Mb.

Parts required		Parts required	
4 of No.	1	1 of No.	40
6 "	2	1 "	48a
8 "	5	1 "	51
4 "	10	1 "	52
2 "	11	2 "	54a
8 "	12	4 "	90a
1 "	15b	6 "	111c
1 "	19b	2 "	125
1 "	22	2 "	126
1 "	24	1 "	187
66 "	37	4 "	190
6 "	37a	2 "	191
5 "	38	2 "	195

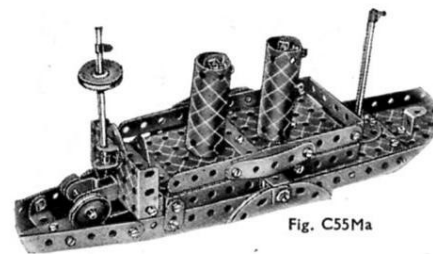


Fig. C55Ma

Parts required		2 of No.		7 of No.		2 of No.	
4 of No.	1	1 "	16	1 "	38	2 "	125
7 "	2	1 "	17	1 "	40	2 "	126
1 "	3	1 "	18a	1 "	44	1 "	126a
9 "	5	2 "	19b	1 "	48	1 "	176
2 "	10	4 "	22	5 "	48a	2 "	187
2 "	11	1 "	23	1 "	51	4 "	190
2 "	12	1 "	24	1 "	52	2 "	191
7 "	12c	8 "	35	1 "	54a	2 "	192
4 "	12c	66 "	37	4 "	90a	1 "	198
2 "	15b	6 "	37a	6 "	111c		

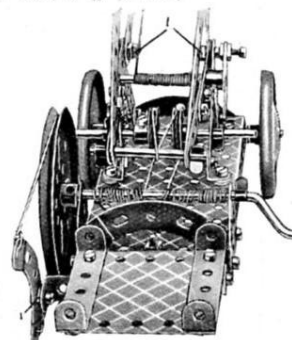


Fig. C27Ma

Parts required

2 of No.	1
4 "	2
9 "	5
3 "	10
2 "	11
8 "	12
1 "	15b
1 "	16
2 "	17
2 "	18a
1 "	19
1 "	19b
4 "	22
1 "	23
1 "	24
7 "	35
58 "	37
11 "	37a
8 "	38
1 "	40
1 "	44
1 "	48
6 "	48a
1 "	51
1 "	52
1 "	57c
3 "	90a
5 "	111c
1 "	125
2 "	126
1 "	126a
1 "	176
1 "	186
2 "	187
1j "	190

**C27M. Mobile Crane**  
The jib pivots on two bolts 1, which are each fitted with locknuts. A Crank Handle controls the raising and lowering of the jib and the method of winding the cord round the handle can be seen in Fig. C27Ma. A brake is fitted to the Crank Handle and consists of a pivoted  $2\frac{1}{2}$ " Curved Strip to which is tied a loop of cord that passes round the 3" Pulley.

Fig. C27Mb shows how the *Magic* Motor is mounted beneath the crane to drive the one pair of travelling wheels.

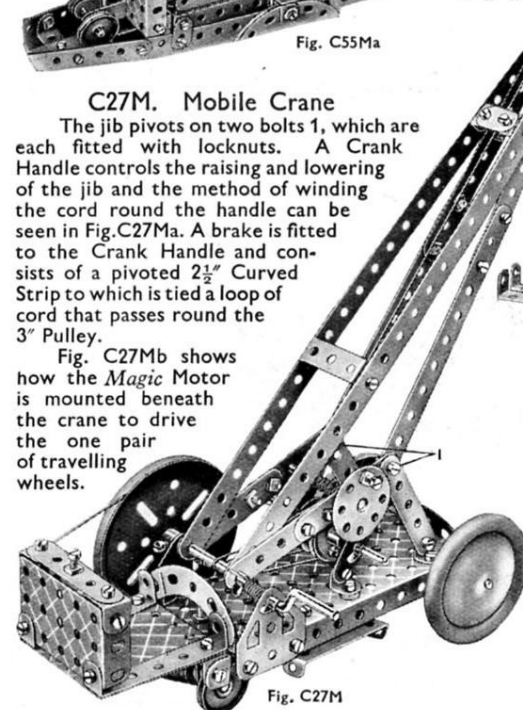


Fig. C27M

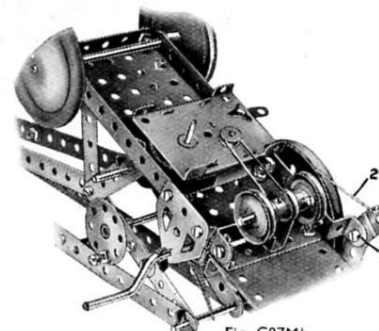


Fig. C27Mb

## C64M. Roundabout

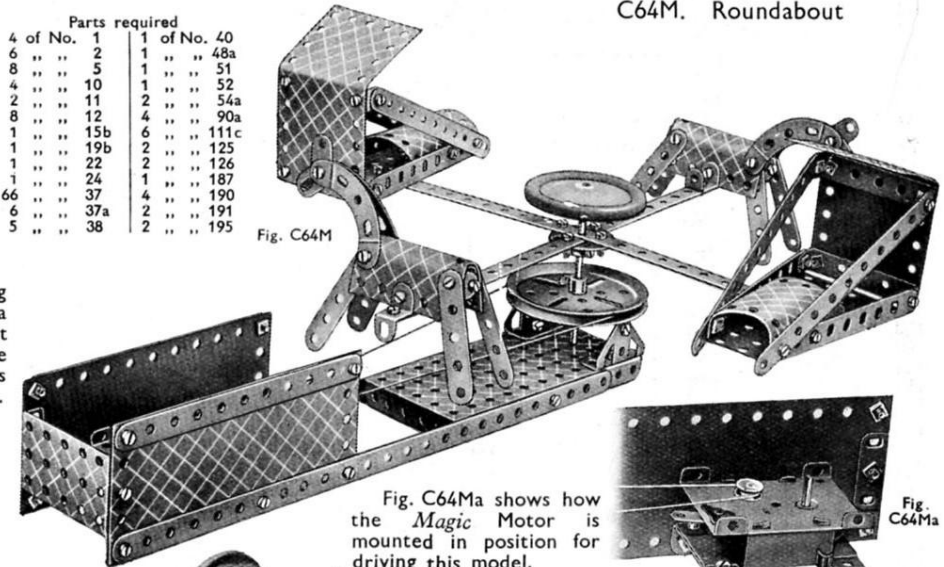


Fig. C64M

Fig. C64Ma shows how the *Magic* Motor is mounted in position for driving this model.

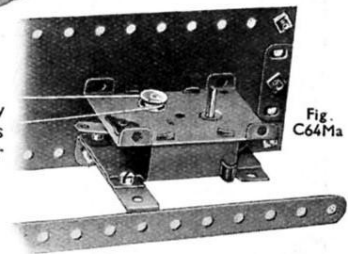


Fig. C64Ma

## C93M. Horse and Cart

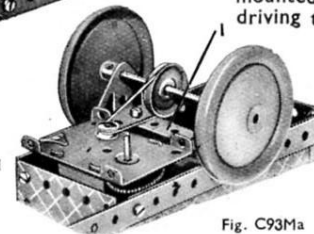


Fig. C93Ma

Parts required		Parts required		1 of No.	
2 of No.	1	1 of No.	24	1 of No.	52
6 "	2	5 "	35	1 "	54a
8 "	5	42 "	37	4 "	90a
3 "	10	2 "	38	2 "	126
1 "	11	1 "	40	2 "	126a
1 "	12	1 "	44	2 "	187
6 "	16	1 "	48	2 "	190
2 "	18a	1 "	48a	2 "	192
4 "	22				

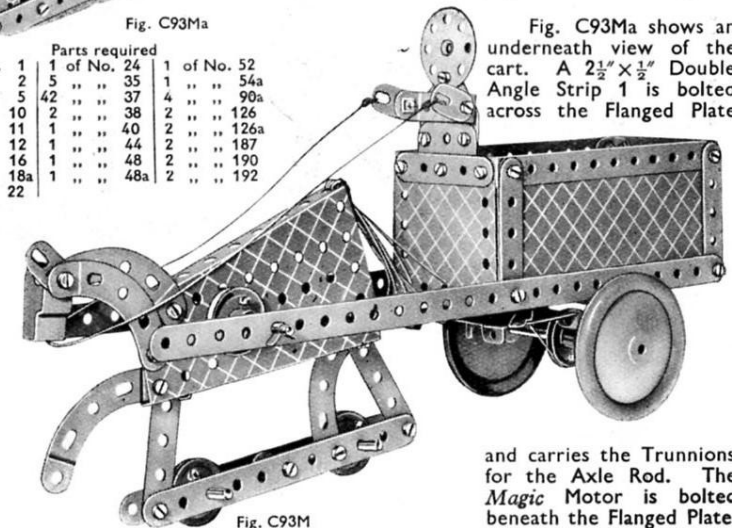


Fig. C93M

Fig. C93Ma shows an underneath view of the cart. A  $2\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strip 1 is bolted across the Flanged Plate

and carries the Trunnions for the Axle Rod. The *Magic* Motor is bolted beneath the Flanged Plate.

## C11M. Sports Car

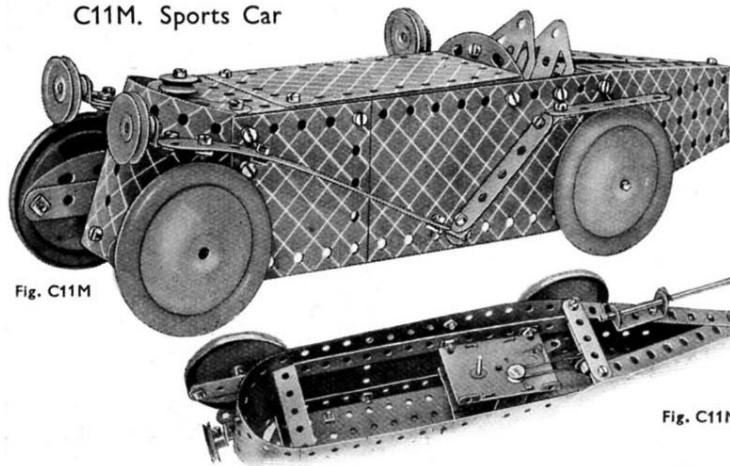


Fig. C11M

Fig. C11Ma

## Parts required

2 of No. 1
2 " " 2
2 " " 5
4 " " 10
8 " " 12
3 " " 12c
2 " " 15b
3 " " 22
1 " " 23
1 " " 24
2 " " 35
56 " " 37
8 " " 38
1 " " 48
1 " " 48a
1 " " 52
2 " " 54a
4 " " 90a
6 " " 111c
2 " " 125
2 " " 126a
4 " " 187
4 " " 190
2 " " 191
2 " " 192

## Parts required

4 of No. 1
6 " " 2
1 " " 3
1 " " 5
2 " " 10
2 " " 11
6 " " 12
1 " " 16
1 " " 18a
2 " " 22
1 " " 23
1 " " 24
3 " " 35
40 " " 37
6 " " 37a
2 " " 38
2 " " 48
1 " " 90a
5 " " 111c
2 " " 125

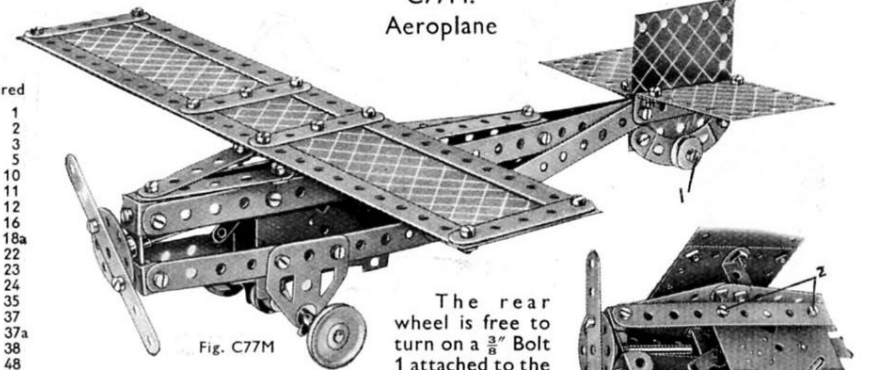


Fig. C77M

## C77M. Aeroplane

The rear wheel is free to turn on a  $\frac{3}{8}$ " Bolt 1 attached to the Curved Strips by locknuts. Fig. C77Ma shows how the Motor is fixed in position by bolts 2.

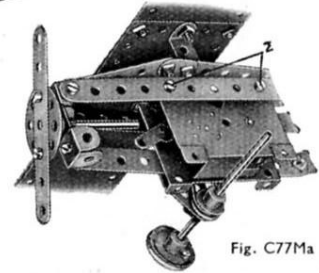


Fig. C77Ma

The underneath view of the model shown in Fig. C11Ma shows how the chassis is formed from two  $12\frac{1}{2}$ " Strips that project beyond the front of the model. The *Magic Motor* is bolted to one Strip and drives the special  $\frac{1}{2}$ " loose Pulley on the axle of the rear Road Wheels.

## Flyboats

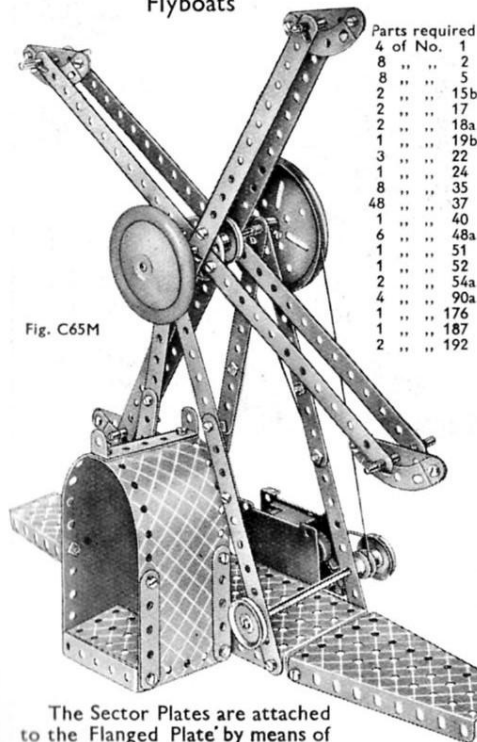


Fig. C65M

Parts required
4 of No. 1
8 " " 2
8 " " 5
2 " " 15b
2 " " 17
2 " " 18a
1 " " 19b
3 " " 22
1 " " 24
8 " " 35
48 " " 37
1 " " 40
1 " " 48a
6 " " 51
1 " " 52
2 " " 54a
4 " " 90a
1 " " 176
1 " " 187
2 " " 192

## Parts required

4 of No. 1
7 " " 2
9 " " 5
5 " " 10
1 " " 11
1 " " 12
9 " " 12c
4 " " 15b
2 " " 16
1 " " 18a
2 " " 19b
2 " " 22
1 " " 24
66 " " 35
9 " " 37
2 " " 37a
2 " " 38
1 " " 40
3 " " 48a
1 " " 52
1 " " 54a
6 " " 111c
2 " " 125
2 " " 126
2 " " 126a
4 " " 190
2 " " 192
1 " " 198

The Sector Plates are attached to the Flanged Plate by means of  $2\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strips.

## C22M. Windmill Pump

The construction of the model is seen in the sectional view in Fig. C22Ma the *Magic Motor* being shown ready to be mounted in position. The beam operating the pump is pivoted at each end by means of locknotted bolts 2. A  $2\frac{1}{2}$ " Strip connects one end of the beam to a Bush Wheel and pivots on the bolt 1 that is fixed in place by two nuts. The pump cylinder 3 is attached to the base Plate by Angle Brackets.

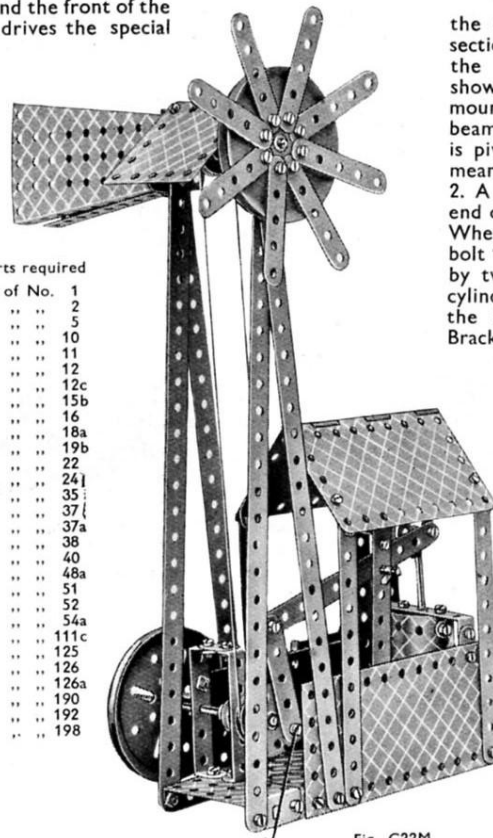


Fig. C22M

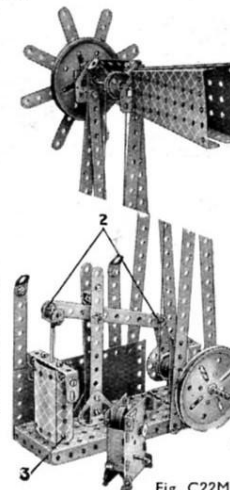


Fig. C22Ma

## Parts required

8 of No. 2
1 " " 3
9 " " 5
2 " " 11
8 " " 12
4 " " 12c
2 " " 15b
1 " " 18a
2 " " 22
1 " " 23
1 " " 24
4 " " 35
56 " " 37
1 " " 37a
6 " " 38
1 " " 44
1 " " 48
3 " " 48a
1 " " 51
1 " " 54a
2 " " 90a
3 " " 111c
1 " " 126
2 " " 126a
4 " " 187
4 " " 190
2 " " 191
2 " " 192

The front Axle Rod is carried in the upturned ends of a  $1\frac{1}{2}$ "  $\times$   $\frac{1}{2}$ " Double Angle Strip bolted to the lower flange of the  $2\frac{1}{2}$ "  $\times$   $1\frac{1}{2}$ " Flanged Plate forming the radiator. A dummy steering wheel, represented by a Bush Wheel, is carried on a  $1\frac{1}{2}$ " Rod passed through the right-hand hole of a Trunnion and held in place by Spring Clips.

## C100M. Sports Coupé

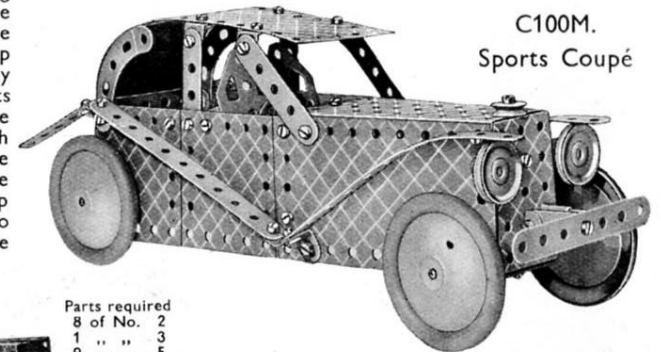
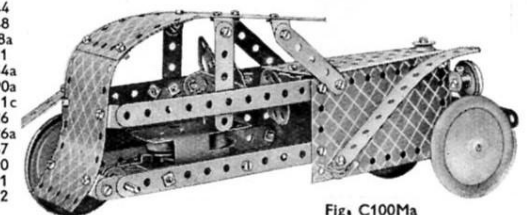
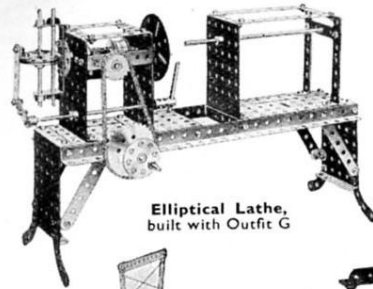


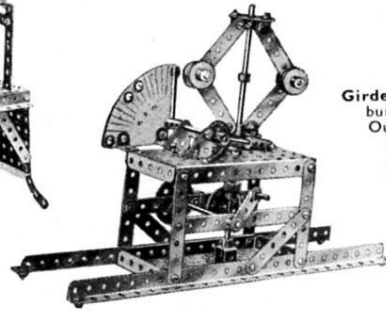
Fig. C100Ma



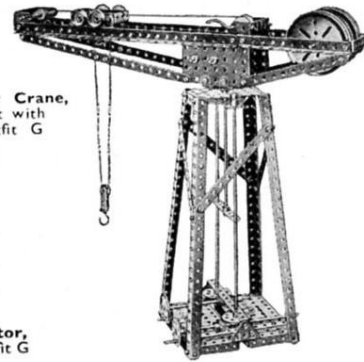
## Build Bigger and Better Models



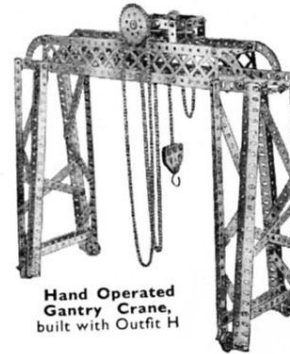
Elliptical Lathe,  
built with Outfit G



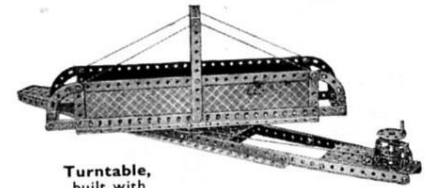
Speed Indicator,  
built with Outfit G



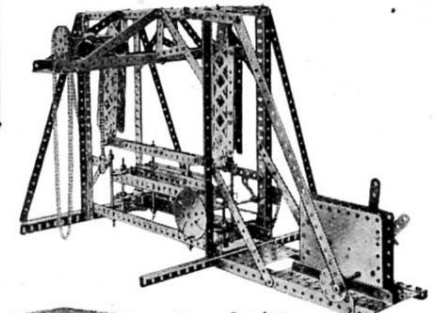
Girder Crane,  
built with Outfit G



Hand Operated  
Gantry Crane,  
built with Outfit H



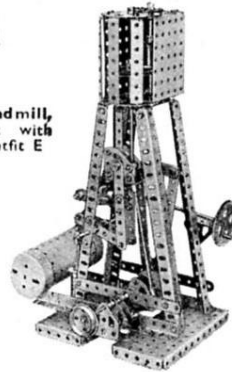
Turntable,  
built with Outfit E



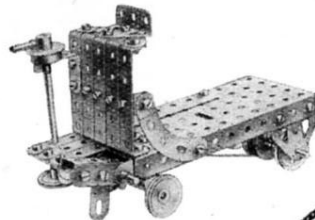
Stone Sawing  
Machine,  
built with Outfit K



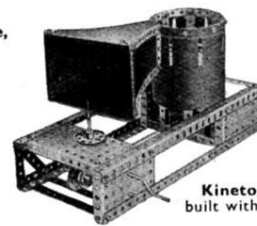
Windmill,  
built with Outfit E



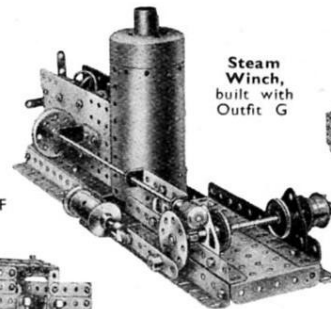
Vertical  
Marine Engine,  
built with Outfit H



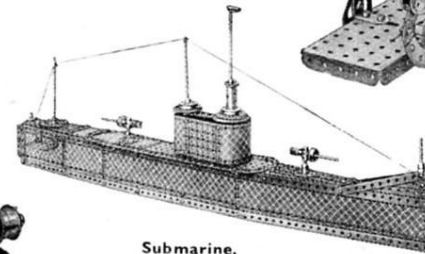
Electric Truck,  
built with Outfit E



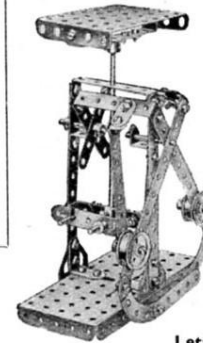
Kinetograph,  
built with Outfit F



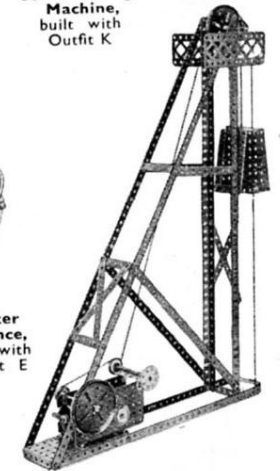
Steam  
Winch,  
built with Outfit G



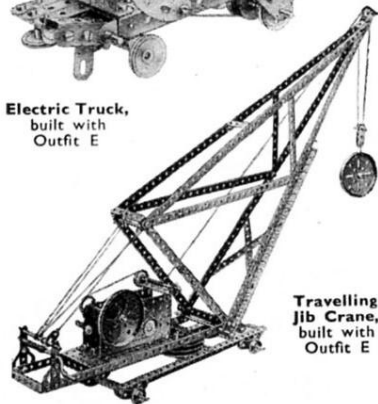
Submarine,  
built with Outfit G



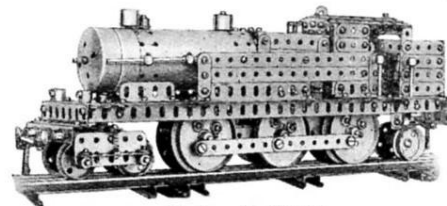
Letter  
Balance,  
built with Outfit E



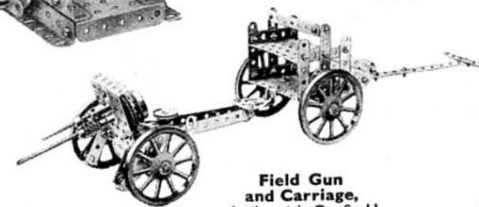
Pit Head Gear,  
built with Outfit D



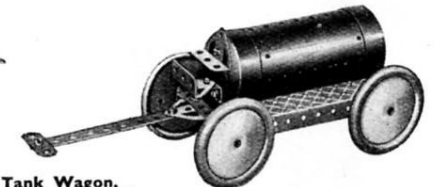
Travelling  
Jib Crane,  
built with Outfit E



Clockwork Pacific  
Tank Locomotive,  
built with Outfit L



Field Gun  
and Carriage,  
built with Outfit H



Tank Wagon,  
built with Outfit F

### Keep adding to your Outfit

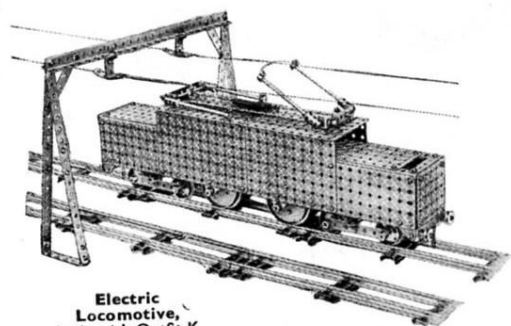
The more Meccano parts you have, the bigger and better the models you are able to build. Keen and enthusiastic model-builders keep adding to their Outfits, until they are able to build all the wonderful models shown in the Meccano Manuals.

The model-building possibilities of the Meccano System are limitless. All the fine models illustrated on this page are examples of the types you will be able to build as your Outfit develops.

You can purchase separate Meccano parts as you require them, or, if you prefer, you can purchase Accessory Outfits that connect all the main Outfits.



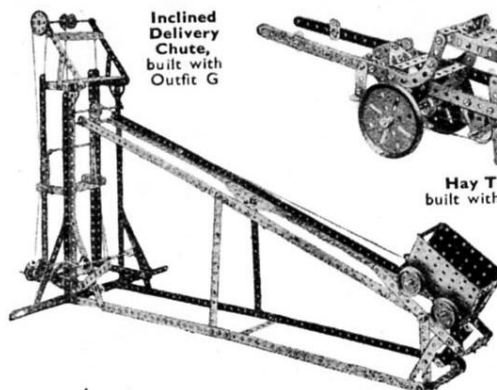
# The Possibilities of Meccano are Unlimited



**Electric Locomotive,**  
built with Outfit K



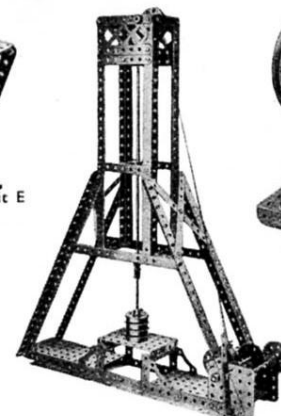
**Bale Press,**  
built with Outfit G



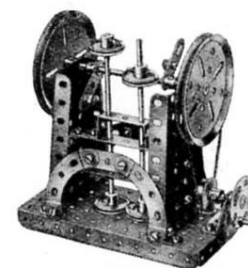
**Inclined Delivery Chute,**  
built with Outfit G



**Hay Tedder,**  
built with Outfit E



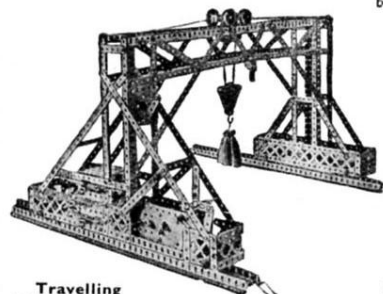
**Drop Hammer,**  
built with Outfit K



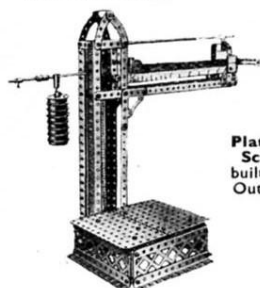
**Stamping Mill,**  
built with Outfit E



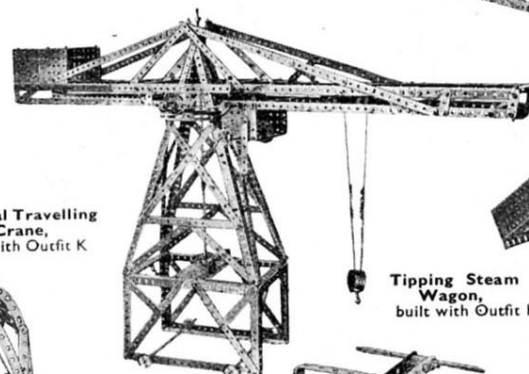
**Fret Saw,**  
built with Outfit H



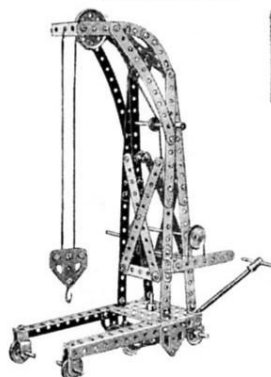
**Travelling Gantry Crane,**  
built with Outfit L



**Platform Scales,**  
built with Outfit K

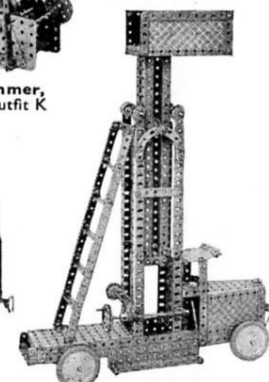
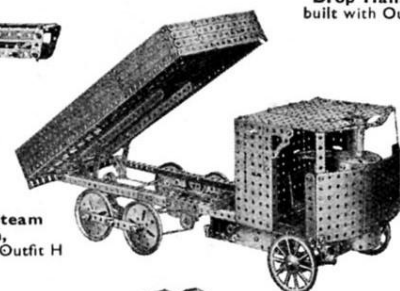


**Radial Travelling Crane,**  
built with Outfit K

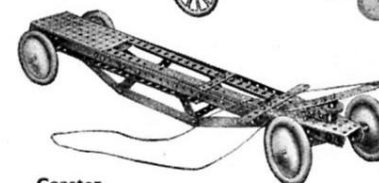


**Portable Crane,**  
built with Outfit K

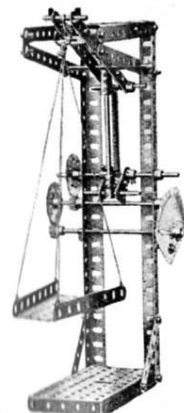
**Tipping Steam Wagon,**  
built with Outfit H



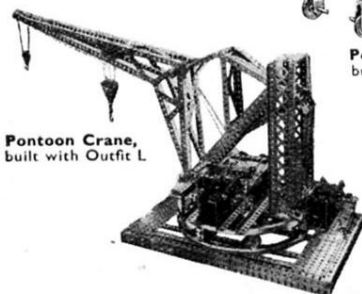
**Tower Wagon,**  
built with Outfit F



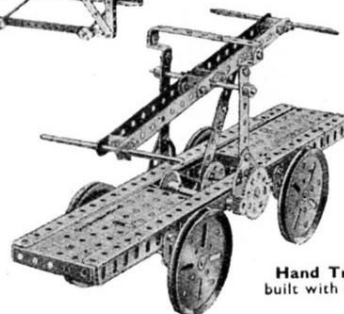
**Coaster,**  
built with Outfit D



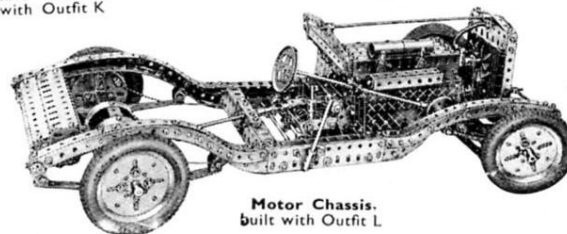
**Spring Scales,**  
built with Outfit H



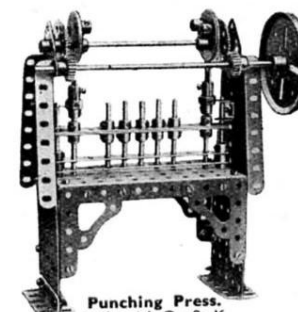
**Pontoon Crane,**  
built with Outfit L



**Hand Trolley,**  
built with Outfit F



**Motor Chassis,**  
built with Outfit L



**Punching Press,**  
built with Outfit K



**Vertical Drill**  
Built with Outfit H

# MECCANO

## POWER UNITS FOR OPERATING MECCANO MODELS

If you want to obtain the fullest enjoyment from the Meccano hobby you should operate your models by means of one of the Meccano power units described on this page. You push over the control lever of the clockwork or electric

motor and immediately your Crane, Motor Car, Ship Coaler or Windmill commences to work in exactly the same manner as its prototype in real life.

Each motor is pierced with the standard Meccano equidistant holes.

### MECCANO CLOCKWORK MOTORS

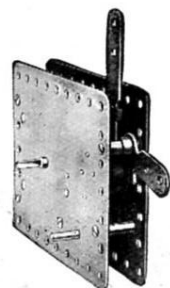
These are the finest Clockwork motors obtainable for model driving. They have exceptional power and length of run and their gears are cut with such precision as to make them perfectly smooth and steady in operation.

Meccano Clockwork Motors are especially suitable for small models built with a limited range of parts. They are extremely simple to operate and have the advantage of being self-contained.



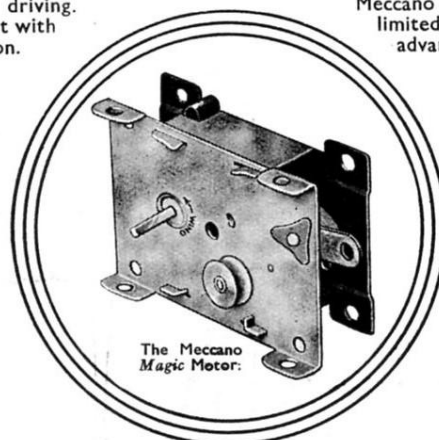
**No. 1 Clockwork Motor**

An efficient and long-running Motor fitted with a brake lever by means of which it may be started and stopped. It is non-reversing.



**No. 1a Clockwork Motor**

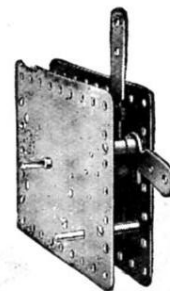
This Motor is more powerful than the No. 1 Motor and is fitted with reversing motion. It has brake and reverse levers.



The Meccano Magic Motor

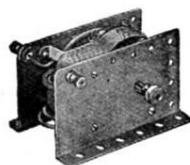
### The Meccano Magic Motor

The Meccano Magic Motor is well designed and strongly constructed, and is fitted with a powerful spring giving a long and steady run. It is non-reversing. Each Magic Motor is supplied with a separate  $\frac{1}{2}$ " Pulley Wheel and three pairs of driving bands of different lengths. It is capable of driving all the Meccano A and B Outfit models, and many of the lighter models illustrated in the Manuals of the C, D and E Outfits.



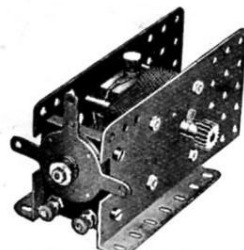
**No. 2 Clockwork Motor**

This is a Motor of super quality. Brake and reverse levers enable it to be started, stopped or reversed, as required.



**No. E1 Electric Motor (6-volt)**

This is a highly efficient motor (non-reversing) that will give excellent service. It can be operated through a 9-volt Meccano Transformer from the mains, providing that the supply is alternating current, or from a 6-volt accumulator.

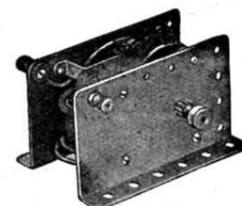


**No. E6 Electric Motor (6-volt)**

This fine motor is fitted with reversing motion and provided with stopping and starting controls. It can be operated through a 9-volt Meccano Transformer from the mains providing that the supply is alternating current, or from a 6-volt accumulator.

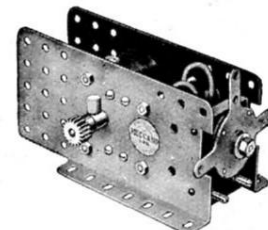
### MECCANO ELECTRIC MOTORS

The four Meccano Electric Motors shown here have been designed specially to provide smooth-running power units for the operation of Meccano models. The 6-volt Motors may be operated through a Meccano Transformer direct from the mains, providing that the supply is alternating current, or from a 6-volt accumulator. The 20-volt Motors are operated through a 20-volt Transformer from alternating current supply mains.



**No. E120 Electric Motor (20-volt)**

The E120 Electric Motor is a very reliable and smooth-running power unit. It is operated through a Meccano 20-volt Transformer from alternating current supply mains. Non-reversing.



**No. E20b Electric Motor (20-volt)**

This 20-volt Electric Motor is an extremely efficient power unit, fitted with reversing motion and provided with stopping and starting controls. It is operated through a Meccano 20-volt Transformer from alternating current supply mains.

### MECCANO TRANSFORMERS

There are six Transformers in the series, as described below, all of which are available for the following A.C. Supplies:—100/110 volts, 50 cycles; 200/225 volts, 50 cycles; 225/250 volts, 50 cycles. Any of the Transformers can be specially wound for supplies other than these at a small extra charge. When ordering a Transformer the voltage and frequency of the supply must always be stated.

### Resistance Controllers

These Controllers enable the speed of Meccano 6-volt and 20-volt Motors and Hornby 6-volt and 20-volt Electric Trains to be regulated as desired.



No. T20a Transformer

**No. T20A TRANSFORMER** (Output 35 VA at 20/3½ volts) for 20-volt Electric Motors. Has two separate circuits at 20 volts, one controlled by a 5-stud speed regulator; and a third circuit at 3½ volts for lighting up to 14 lamps.

**No. T6A TRANSFORMER** (Output 40 VA at 9/3½ volts) for 6-volt Electric Motors. Has two separate circuits at 9 volts, one controlled by a 5-stud speed regulator; and a third circuit at 3½ volts for lighting up to 18 lamps.

**No. T20M TRANSFORMER** (Output 20 VA at 20 volts) for 20-volt Electric Motors. This is similar to the No. T20 Transformer, but is not fitted with speed regulator.

**No. T6M TRANSFORMER** (Output 25 VA at 9 volts) for 6-volt Electric Motors. This is similar to the No. T6 Transformer, but is not fitted with speed regulator.

**No. T20 TRANSFORMER** (Output 20 VA at 20 volts) for 20-volt Electric Motors. Provided with one 20-volt circuit controlled by a 5-stud speed regulator.

**No. T6 TRANSFORMER** (Output 25 VA at 9 volts) for 6-volt Electric Motors. Provided with one 9-volt circuit controlled by a 5-stud speed regulator.



No. T20 Transformer

Ask your dealer for a complete price list.



# MECCANO

## STANDARD MECHANISMS



When a boy has built all the models illustrated in this Manual, he will wish not only to increase the size of his Outfit so that he can build bigger models, but also to start constructing models of his own design. It is now that the real inventive spirit of the Meccano boy asserts itself, and if he builds thoughtfully there is no reason why he should not in time become familiar with almost every form of engineering structure and mechanical movement.

In order to assist youthful inventors two splendidly illustrated Manuals have been specially prepared. The first of these, the "Standard Mechanisms Manual," describes Levers, Gear and Belt Transmission, Electrical Movements, and numerous other types of mechanisms. The second publication, "How to Use Meccano Parts," describes fully the various Meccano parts and explains and illustrates their most important uses.

The following examples have been selected from these two Manuals because of their general utility.

### LOCKNUTS.

One of the most useful of all Meccano connections is the locknotted joint, illustrated in Fig. A. If a pivoted joint were to be made using one nut and bolt only, the nut would soon either unscrew from its bolt or jam the two Strips together. This difficulty is easily overcome by fitting the Bolt 1, carrying the Strip 2, with a Nut 5. The Strip 2 must swing freely between the bolt head and Nut 5, the latter part having a second Strip 3 locked firmly against it by means of a Nut 4. In order to make the two nuts secure they must be turned towards each other with the aid of two spanners.

### CORD TRANSMISSION

In small models where it is found necessary to introduce a step-up drive for increasing the speed of a movement, or a step-down drive for increasing the available power, pulleys of varying diameters connected together by cord can be used. An example of this is shown in Fig. C, where a 3" Pulley is connected to a  $\frac{1}{2}$ " Pulley, thus forming a 6:1 gear ratio. In Fig. B a 1:1 ratio transmission drive is shown for use in reverse gears. By crossing the cords in this way two shafts, arranged at any angle to each other, can be driven.

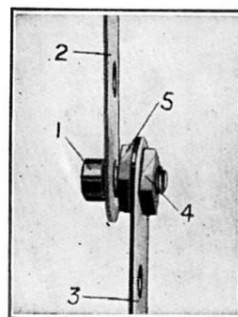


Fig. A

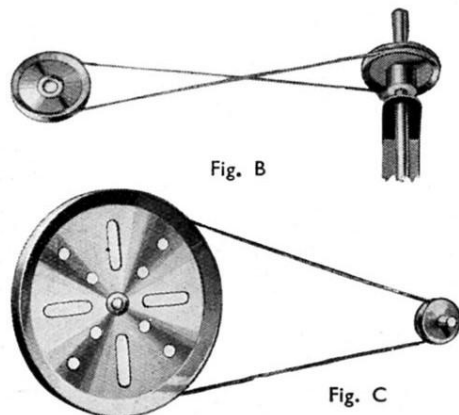


Fig. B

Fig. C

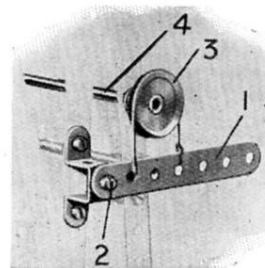


Fig. D

### BAND BRAKE

A simple method of slowing down or stopping a shaft is shown in Fig. D. A Strip 1 is secured by means of a locknotted Bolt (see Fig. A) to the framework of a model. A short length of cord attached to this Strip passes round a 1" fast Pulley 3 secured on the shaft 4. By depressing or adding weight to the end of the lever 1 the cord is pressed into the groove of the Pulley 3, and by regulating the weight or pressure the speed of the shaft can be very finely adjusted.

### STEERING MECHANISM

Greater interest can be given to a small model car or lorry by arranging the front wheels to steer. One simple way of accomplishing this is shown in Fig. E. A Double Angle Strip is bolted to a Bush Wheel that is secured to the underside of the model. The two front wheels are attached to the turned up ends of the Double Angle Strip by means of  $\frac{3}{4}$ " Bolts, and are turned from side to side by a short Strip connected to a Crank. This Crank is locked on the lower end of the steering column. If necessary the Crank and Strip may be replaced by a length of cord, passed round the steering column and secured to the extremities of the Double Angle Strip.

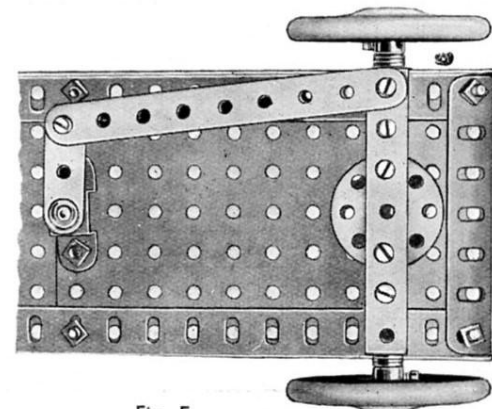


Fig. E



## 3A

[illegible]

**CONTENTS OF OUTFITS AND COMPLETE LIST OF MECCANO PARTS (Continued)**

No.	Description.	A	Aa	B	Ba	C	Ca	D	Da	E	Ea	F	Fa	G	Ga	H	Ha	K	Ka	L
142c	Motor Types, 1"																			
142d	"Circular Girders, 5 1/2" diam.																			
143	Dog Clutches, 3/4" diam.																			
144	"Circular Strips, 7" diam.																			
145	"Plates, 6" diam.																			
146	"Plates, 4" diam.																			
146a	"Pawls with pivot bolt and nuts																			
147	"Pawls, 3/4" diam.																			
147a	"Pivot Bolt with 2 Nuts																			
147b	"Pawl, without Boss																			
147c	"Ratchet Wheels																			
148	"Collector Shoes for Locos																			
149	"Crane Grabs																			
150	"Pulley Blocks, 1 Sheave																			
151	"Pulley Blocks, 2 Sheaves																			
152	"Corner Angle Brackets, 1 1/2" R.H.																			
153	"Rubber Rings, 3/4" diam.																			
154a	"Pointers, 2 1/2" diam.																			
154b	"Fans 2" diam.																			
155	"Signal Arms, Home																			
156	"Channel Brackets, 1 1/2" x 1 1/2"																			
157	"Girder Brackets, 2 x 1 1/2 x 1 1/2"																			
158a	"Boiler Brackets, 2 x 1 1/2 x 1 1/2"																			
158b	"Boiler Brackets, 2 x 1 1/2 x 1 1/2"																			
159	"Boiler Brackets, 2 x 1 1/2 x 1 1/2"																			
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211b	"Boiler Brackets, 2 x 1 1/2 x 1 1/2"																			
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1570	"Boiler Brackets, 2 x 1 1/2 x 1 1/2"																			
1575	"Boiler Brackets, 2 x 1 1/2 x 1 1/2"																			
1583	"Boiler Brackets, 2 x 1 1/2 x 1 1/2"																			

**SPECIAL INSTRUCTION LEAFLETS**

No. 1a—Motor Chassis  
 " 2—High-speed Ship-Coaler  
 " 5—Dredger  
 " 6—Stiff Leg Derrick  
 " 7—Platform Scales  
 " 9—Bagatelle Table  
 " 10—Log Saw  
 " 11a—Horizontal Engine  
 " 12—Stone-sawing Machine  
 " 13—Meccanograph

No. 14a—New Grandfather Clock  
 " 16a—New Loom  
 " 17—Planing Machine  
 " 18—Revolving Crane  
 " 19—Steam Shovel  
 " 20—Electric Mobile Crane  
 " 21—Transporter Bridge  
 " 22—Traction Engine  
 " 23—Vertical Log Saw  
 " 24—Travelling Gantry Crane

No. 25—Hydraulic Crane  
 " 26—Twin-elliptic Harmonograph  
 " 28—Pontoon Crane  
 " 29—Hammerhead Crane  
 " 30—Breakdown Crane  
 " 31—Warehouse Crane  
 " 32—Automatic Grabbing Crane  
 " 33—Electric Derrick Crane  
 " 37—Howitzer Limber and Tractor

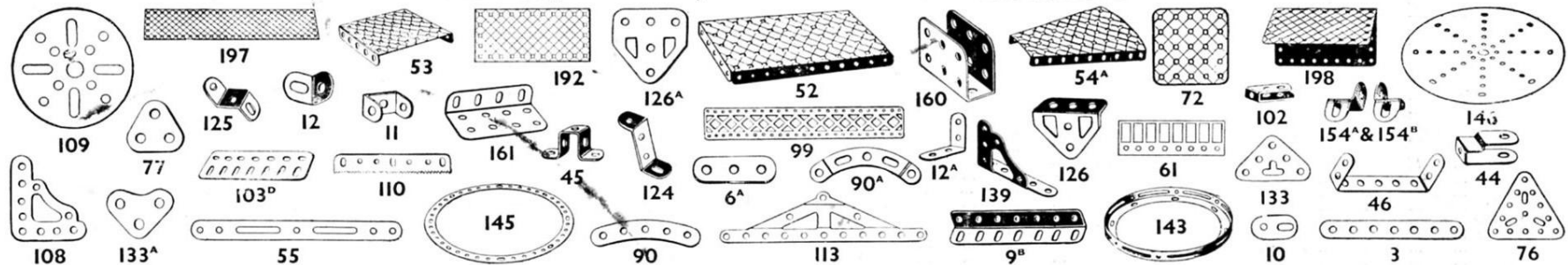
Outfits Ha and K contain Special Instruction Leaflets Nos. 7, 9, 10, 11a, 12 and 37.  
 Outfit Ka contains Special Instruction Leaflets Nos. 1a, 2, 5, 6, 13, 14a, 16a, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 31, 35 and 36.  
 Outfit L contains a copy of each of the 29 Special Instruction Leaflets listed above.



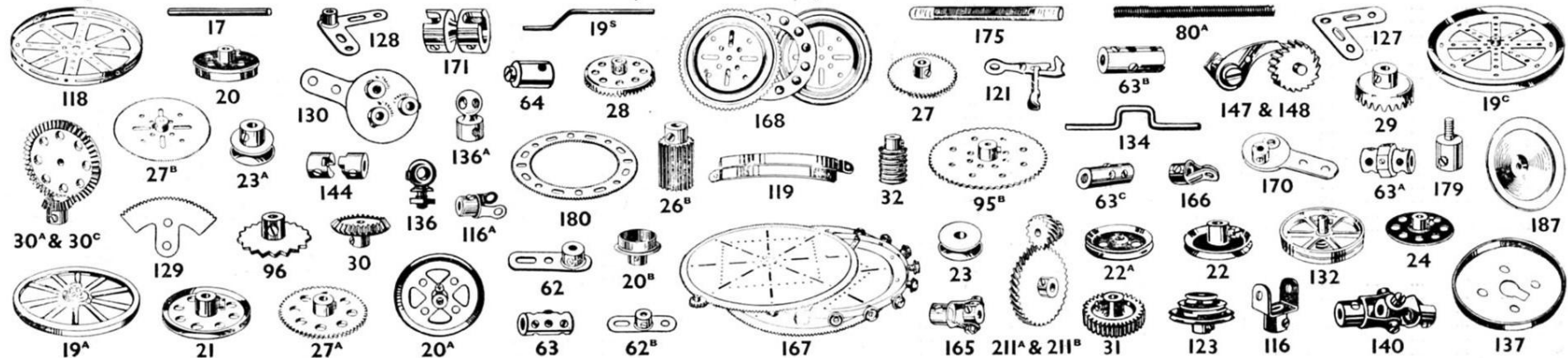


## PLATES, STRIPS, GIRDERS & BRACKETS

## PLATES, STRIPS, GIRDERS & BRACKETS



## WHEELS, PULLEYS, GEARS, ETC.



## MISCELLANEOUS

