

# MECCANO

HORNBY'S ORIGINAL SYSTEM - FIRST PATENTED 1901

INSTRUCTIONS FOR OUTFITS A to C

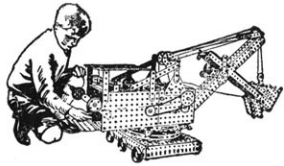
PRICE  
**6d.**



34A-C

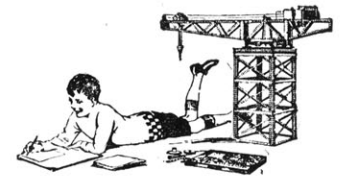
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13/834/24 (U.K.)



# MECCANO

HORNBY'S ORIGINAL SYSTEM — FIRST PATENTED 1901



## MODEL-BUILDING WITH MECCANO

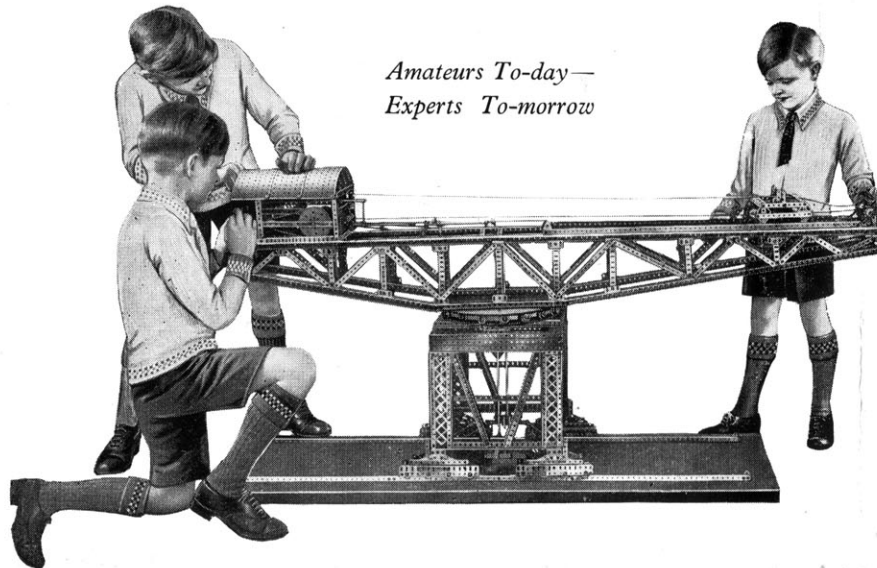
There is no limit to the number of models that can be built with Meccano—Cranes, Clocks, Motor Cars, Ship Coalers, Machine Tools, Locomotives—in fact everything that interests boys. A screwdriver and spanner, both of which are provided in the Outfit, are the only tools necessary.

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 may 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 may be converted into the one next higher by the purchase of an Accessory Outfit. Thus, Meccano Outfit A may 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



*Amateurs To-day—  
Experts To-morrow*

this way, no matter with which Outfit you commence, you may build it up by degrees until you possess an L Outfit. It is important to remember that Meccano Parts may be bought separately at any time in any quantity from your Meccano dealer.

## ELECTRIC LIGHTING OF MECCANO MODELS

It is great fun to illuminate your Meccano models by electric light, and a special Meccano Lighting Set may 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.

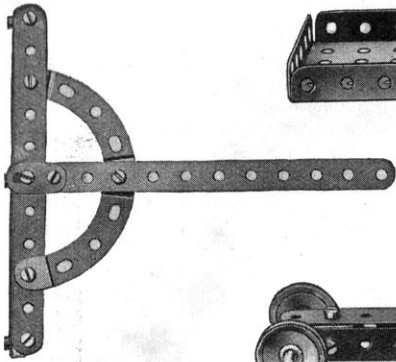
Meccano Clubs are founded and established under the guidance of the Guild Secretary at Headquarters, and at the present time there are active Clubs in nearly 250 towns and villages in the United Kingdom, and more than 100 in countries overseas. Each Club has its Leader, Secretary, Treasurer, and other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

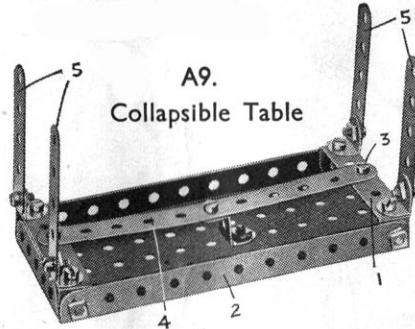
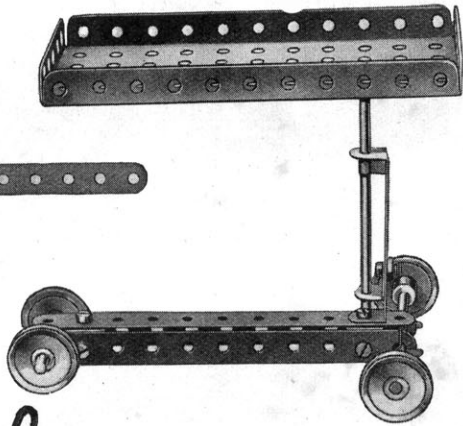
## MECCANO SERVICE

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.*

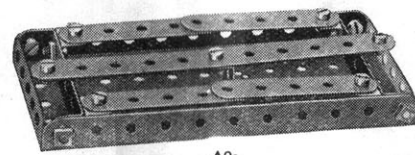
A1. Rake



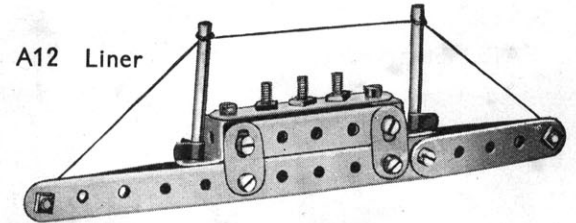
A5. Bed Table



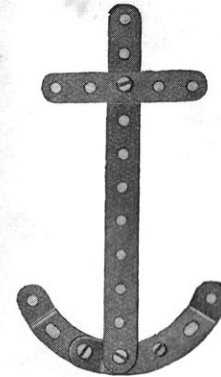
The  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strips 1 are attached to the  $5\frac{1}{2}'' \times 2\frac{1}{2}''$  Flanged Plate 2 by lock-nutted Bolts as in Standard Mechanism No. 263. The Bolts 3 are secured to the  $5\frac{1}{2}''$  Strip 4 and their shanks engage with the centre holes 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. A9a.



A12. Liner



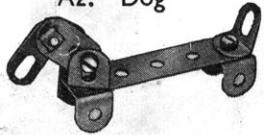
A13. Anchor



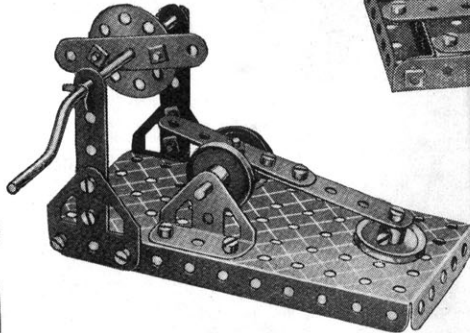
A16. Go-chair



A2. Dog

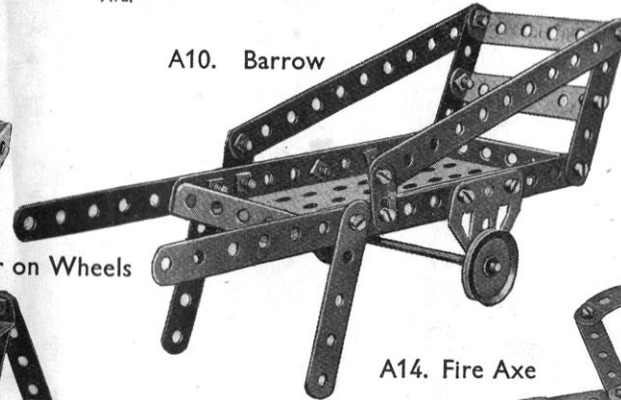


A6. Trip Hammer

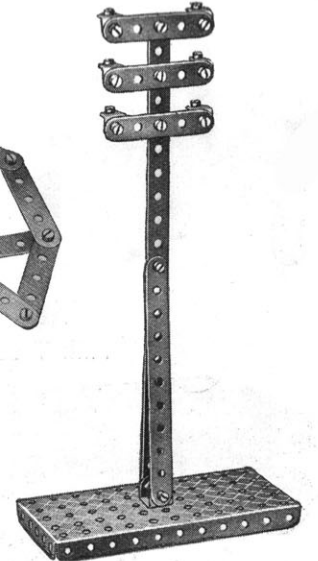


A9a.

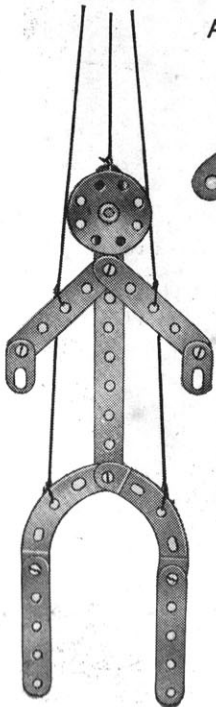
A10. Barrow



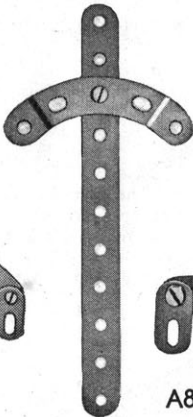
A17. Telegraph Pole



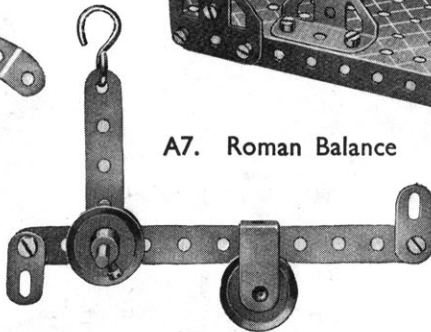
A3. Jumping Jack



A4. Sword



A7. Roman Balance



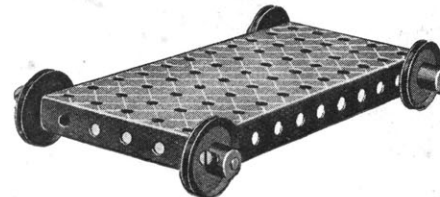
A11. Ladder on Wheels



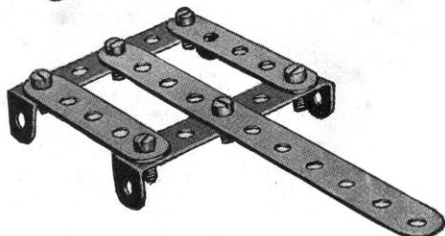
A14. Fire Axe



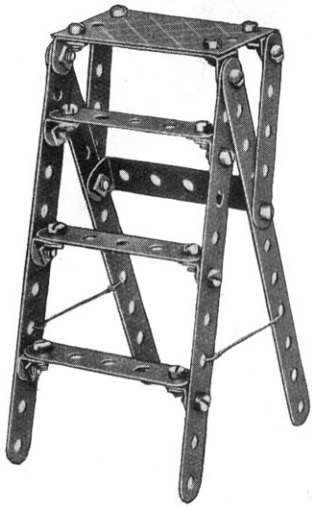
A15. Flat Truck



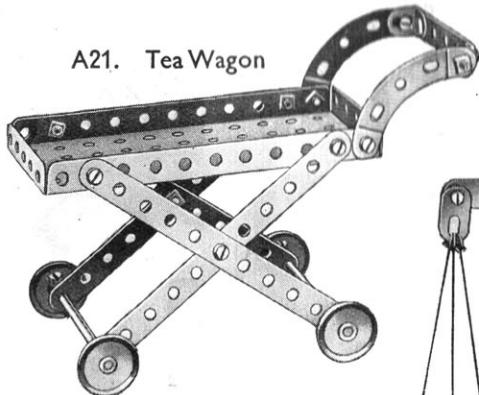
A8. Grill



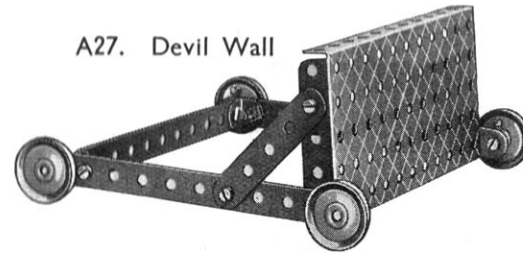
A18. Step Ladder



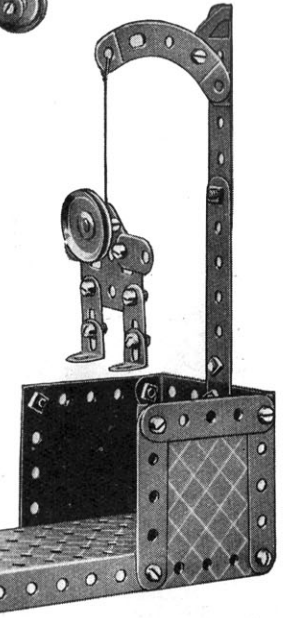
A21. Tea Wagon



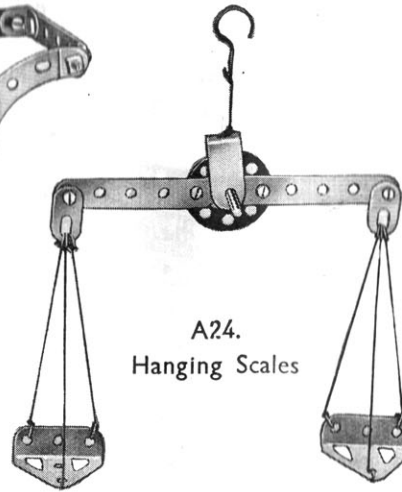
A27. Devil Wall



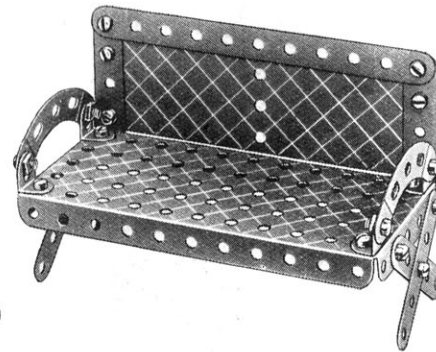
A30. Gallows



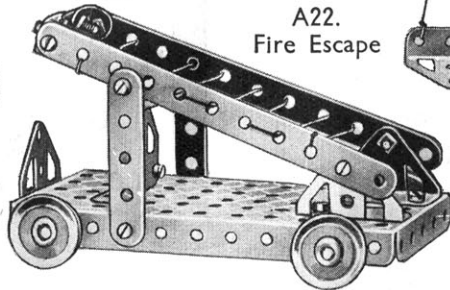
A24. Hanging Scales



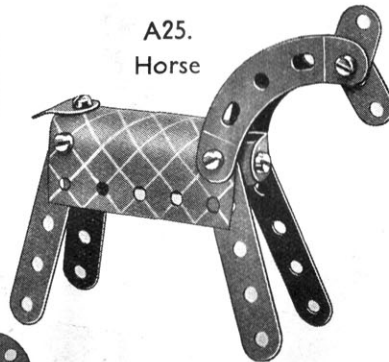
A28. Garden Seat



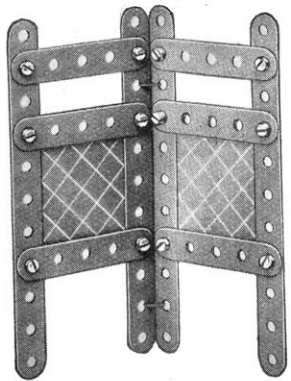
A22. Fire Escape



A25. Horse



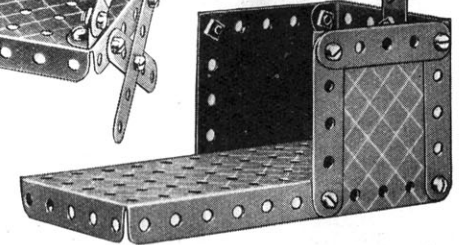
A19. Fire Screen



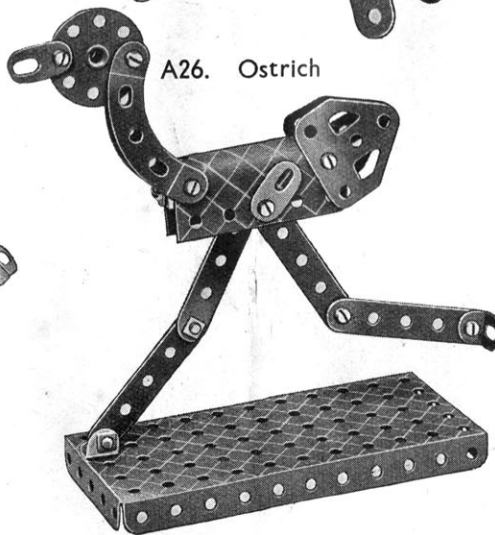
A23. Arm Chair



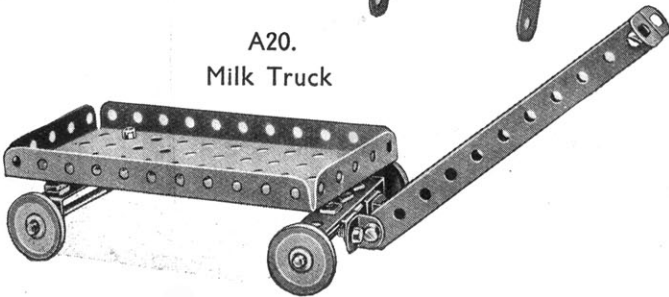
A29. Gravel Sifter



A26. Ostrich

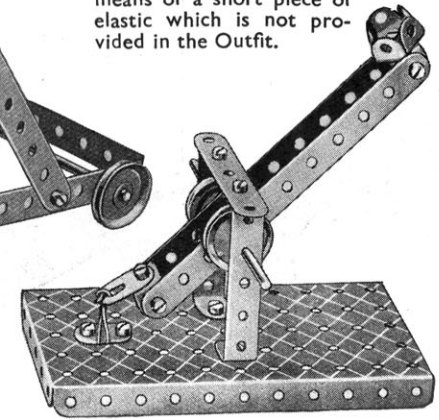
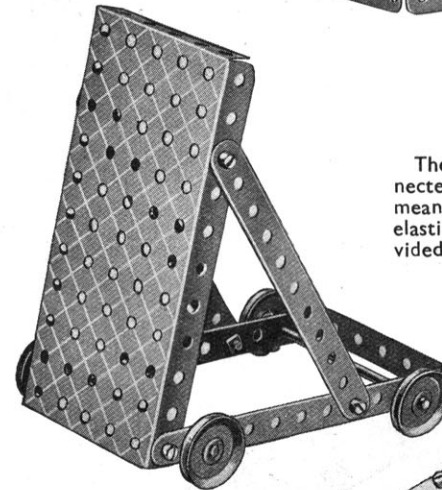


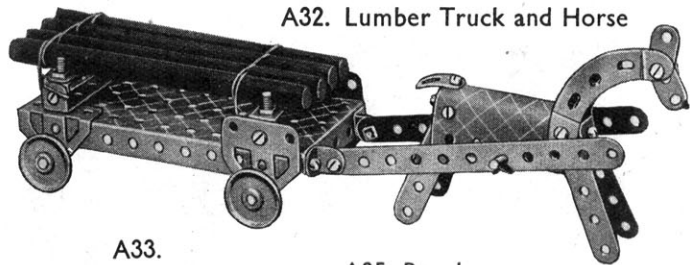
A20. Milk Truck



A31. Catapult

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



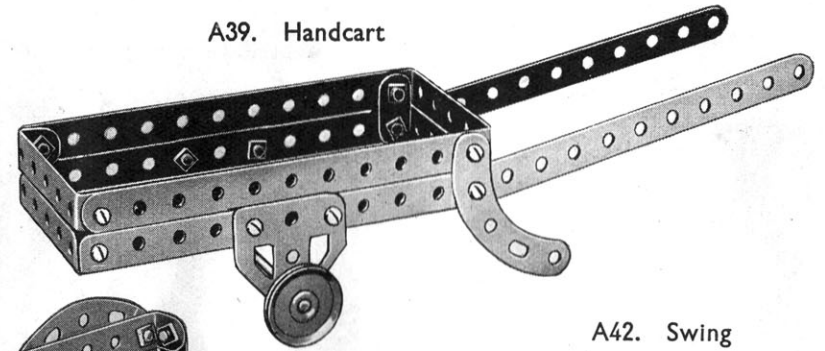


A32. Lumber Truck and Horse



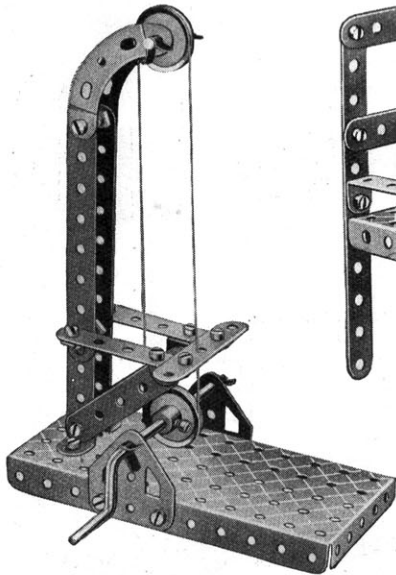
A37. Magic Plate

The cord is wound once round a 2 in. Axle Rod that is journalled in a 1/2-in. 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.

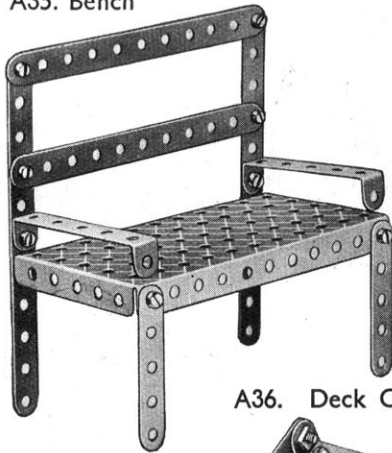


A39. Handcart

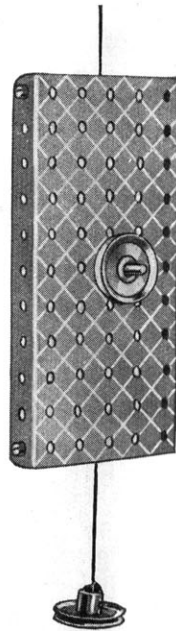
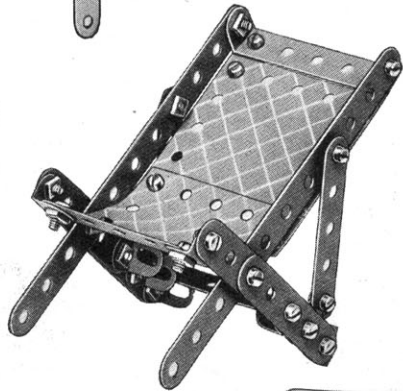
A33. Band Saw



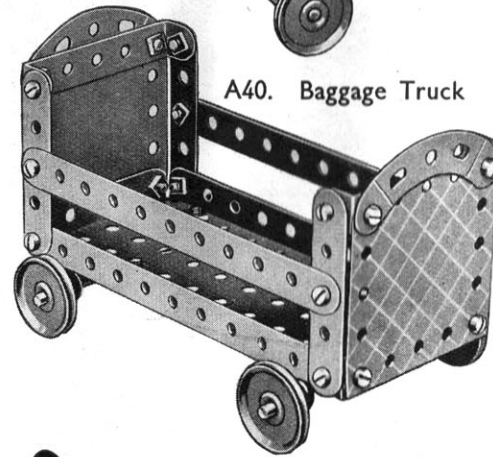
A35. Bench



A36. Deck Chair

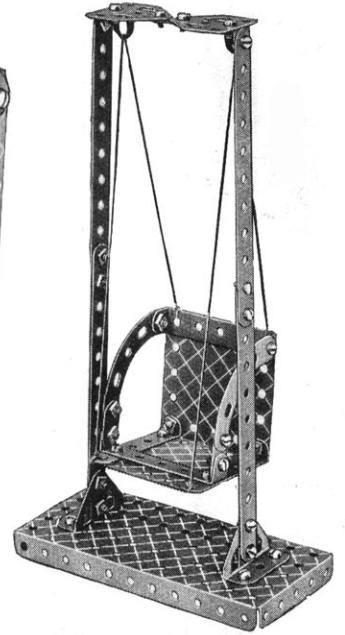


A38. Bacon Slicing Machine

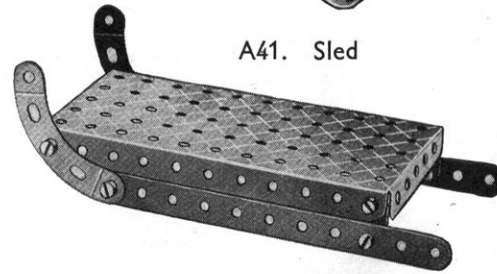


A40. Baggage Truck

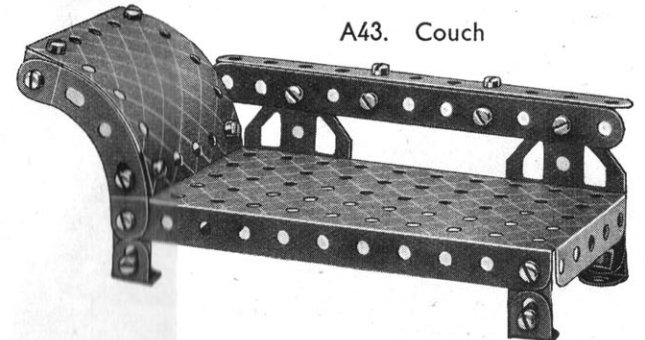
A42. Swing



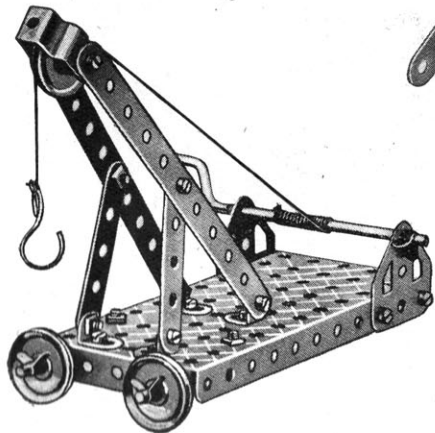
A41. Sled



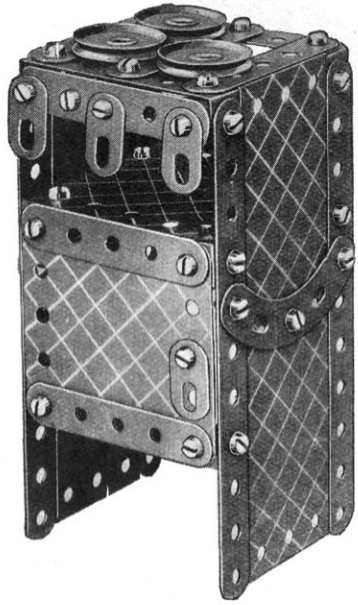
A43. Couch



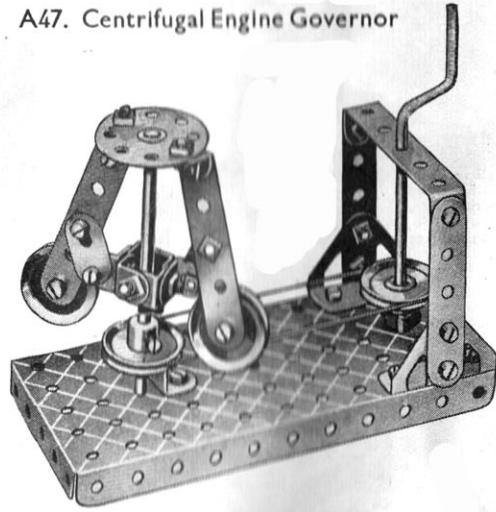
A34. Revolving Crane



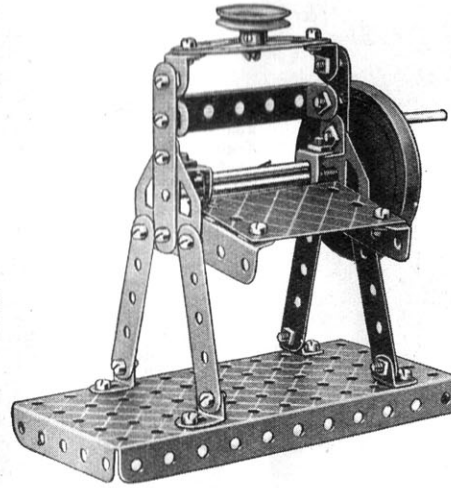
A44. Gas Stove



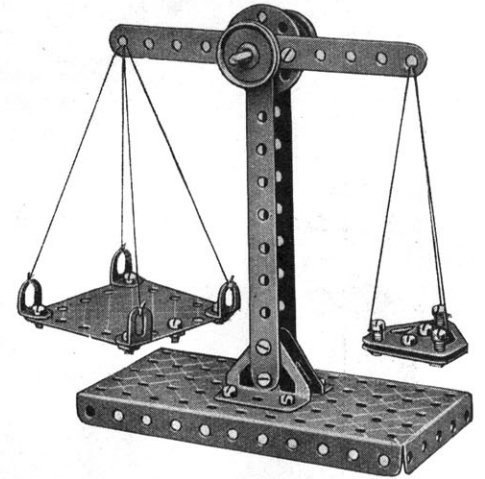
A47. Centrifugal Engine Governor



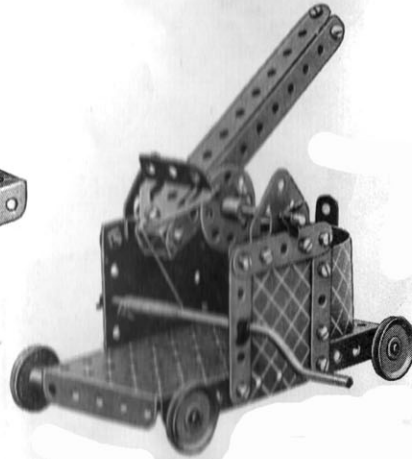
A49. Wringing Machine



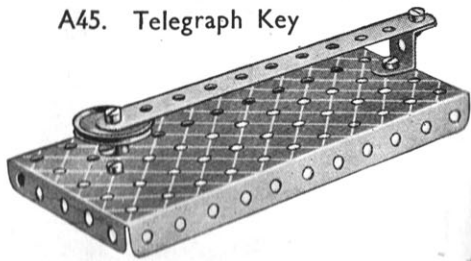
A51. Scales



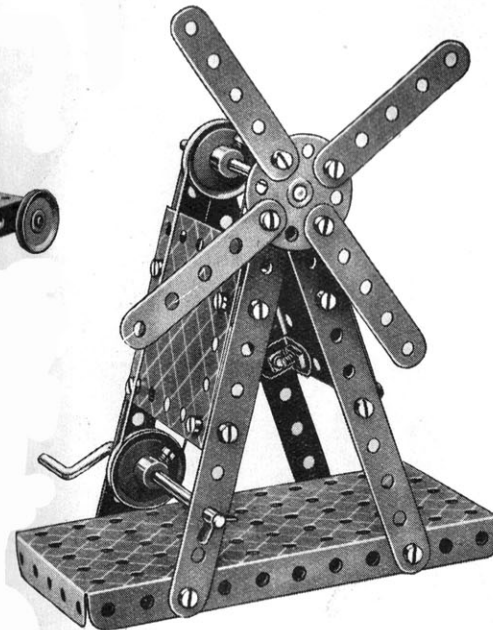
A48. Anti-aircraft Gun



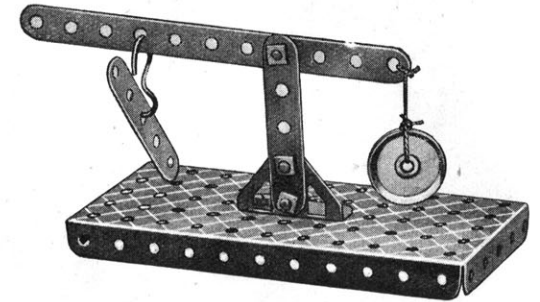
A45. Telegraph Key



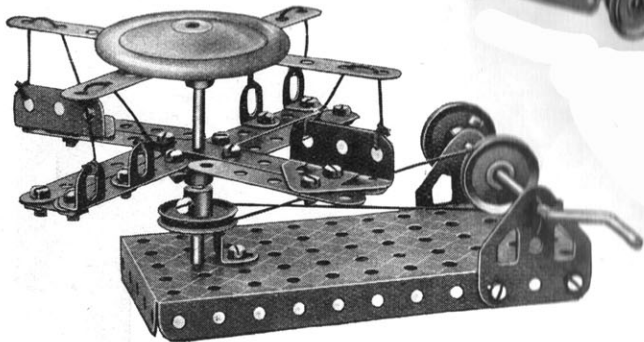
A50. Windmill



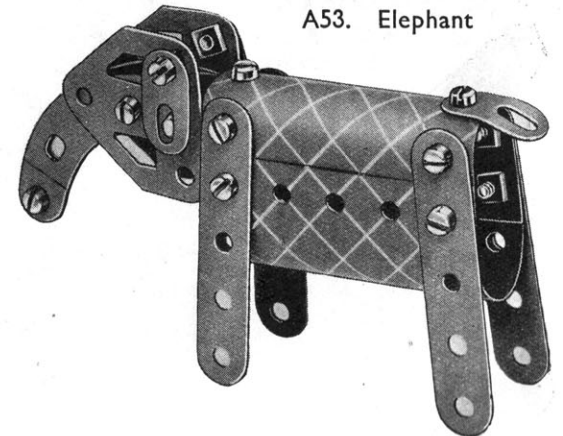
A52. Lever of the First Order



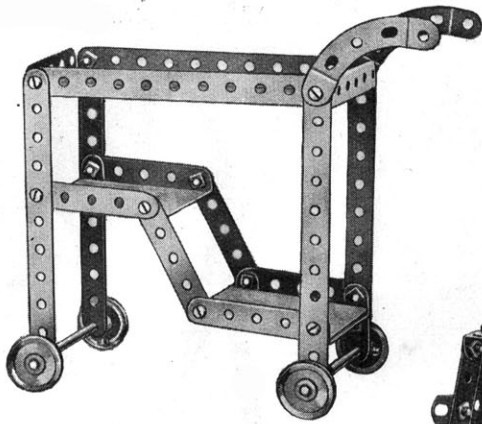
A46. Roundabout



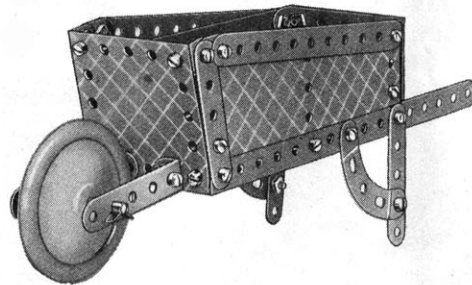
A53. Elephant



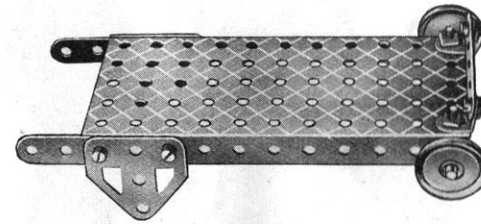
A54. Dinner Wagon



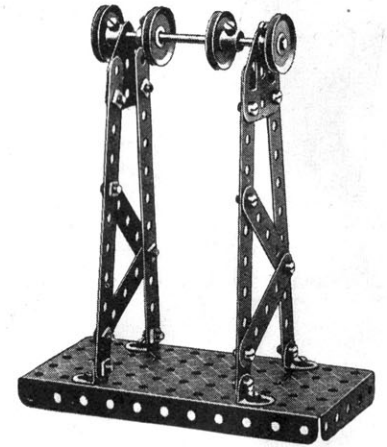
A56. Wheelbarrow



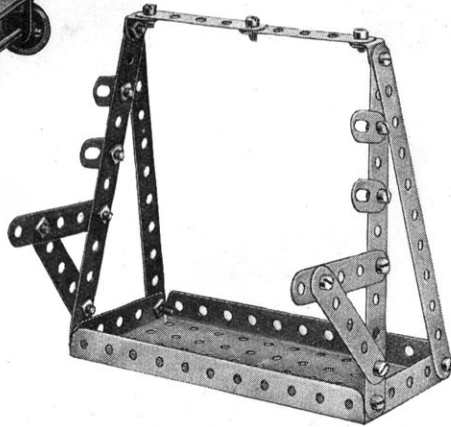
A62. Flat Truck



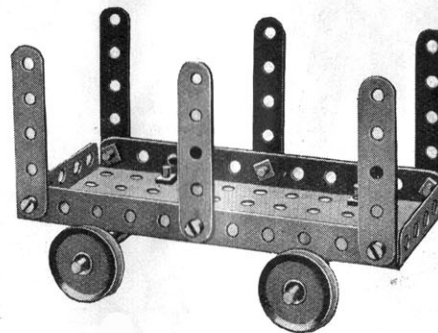
A64. Shafting Standard



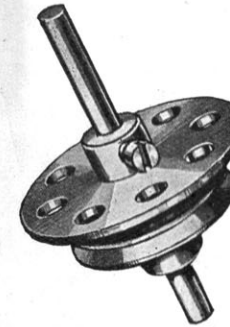
A57. Pen Rack



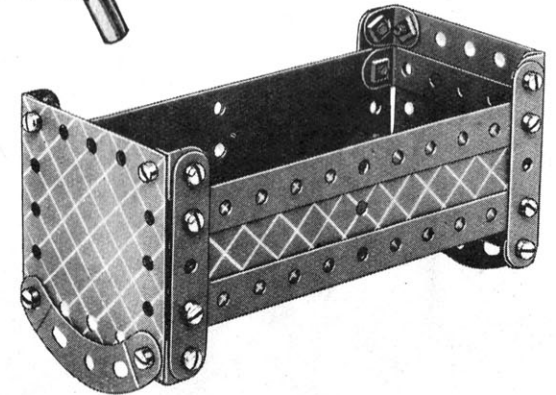
A60. Timber Truck



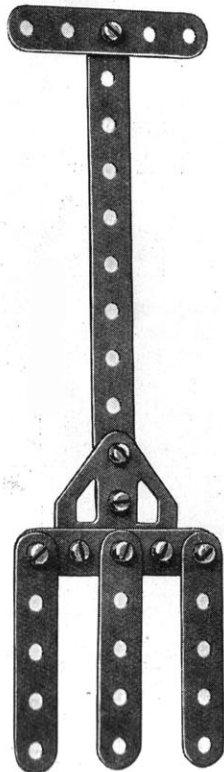
A63. Top



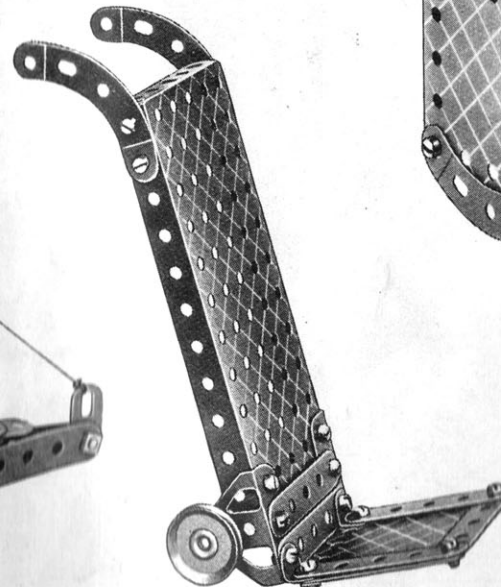
A65. Cot



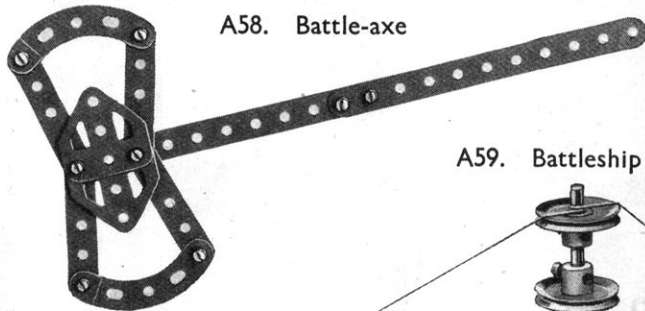
A55. Fork



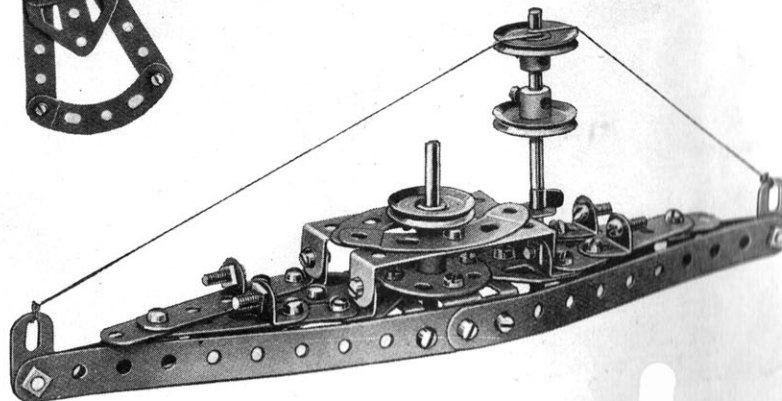
A61. Porter's Trolley



A58. Battle-axe

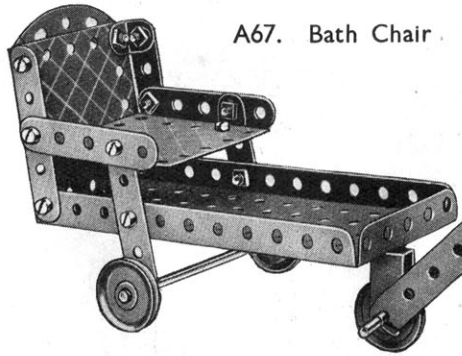


A59. Battleship



A66. Music Stool

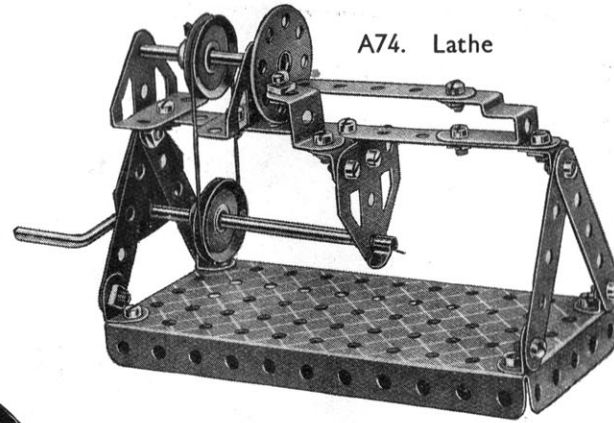




A67. Bath Chair



A71. Giraffe

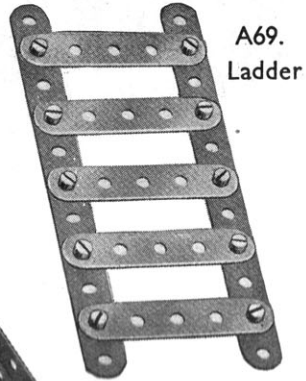
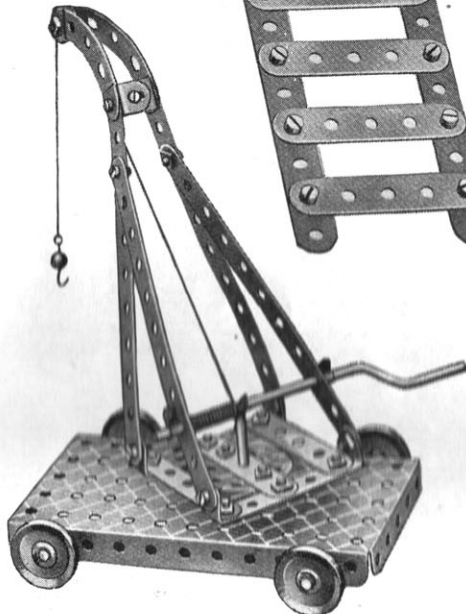


A74. Lathe



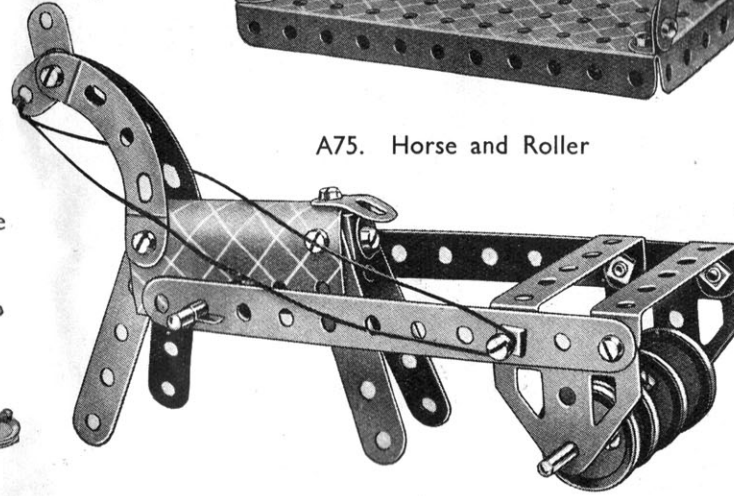
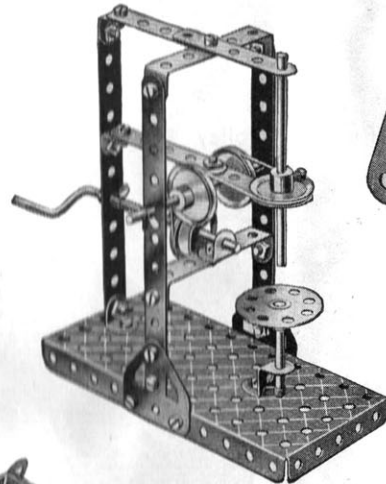
A77. Umpire's Seat

A68. Breakdown Crane



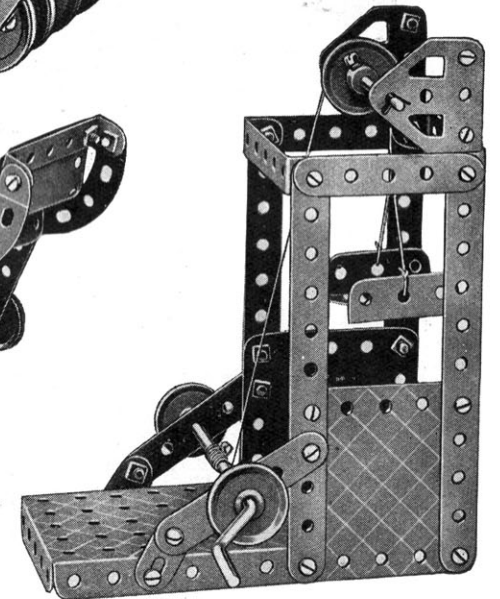
A69. Ladder

A72. Drilling Machine

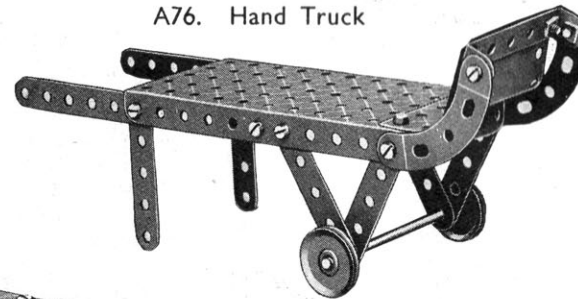


A75. Horse and Roller

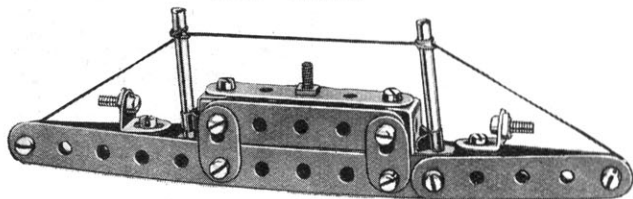
A78. Pit-head Gear



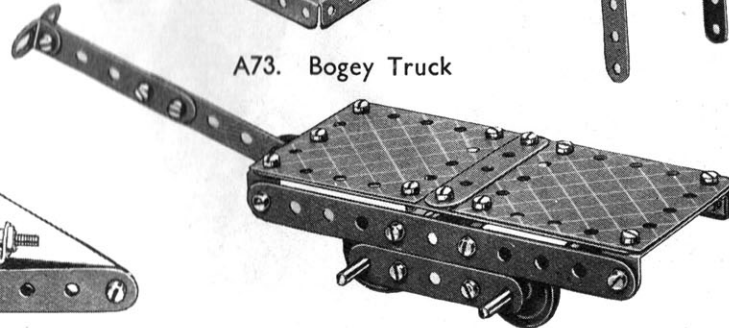
A76. Hand Truck



A70. Cruiser

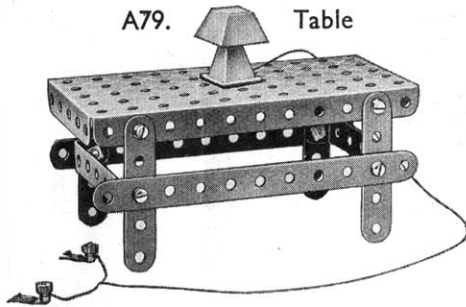


A73. Bogey Truck

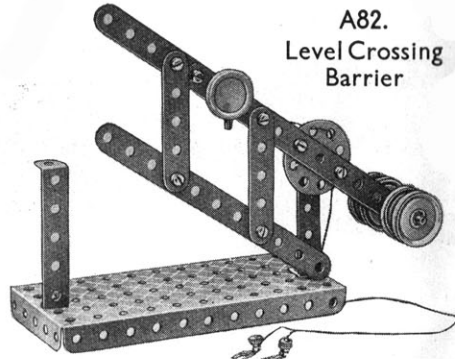




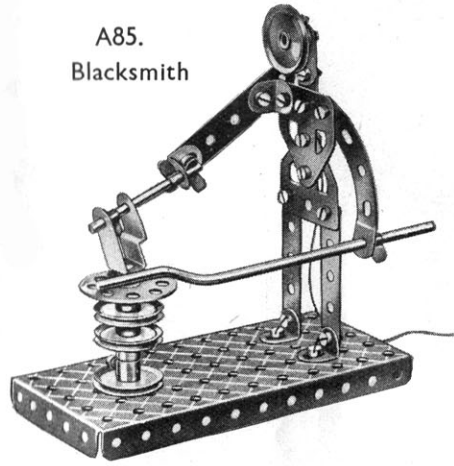
A79. Table



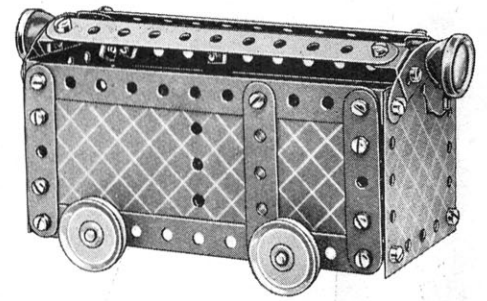
A82. Level Crossing Barrier



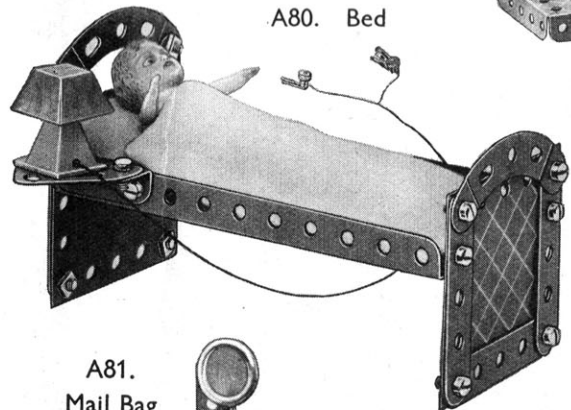
A85. Blacksmith



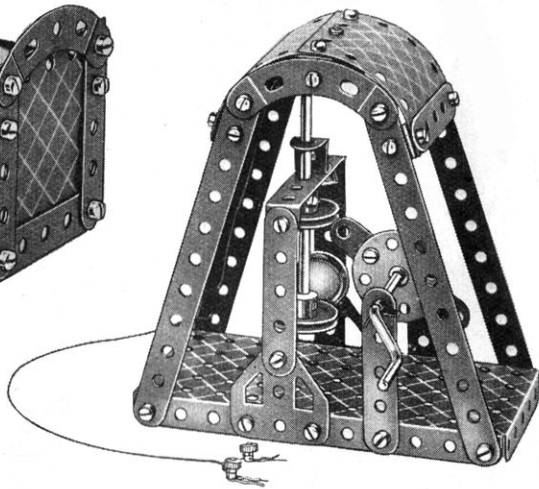
A88. Pullman Car



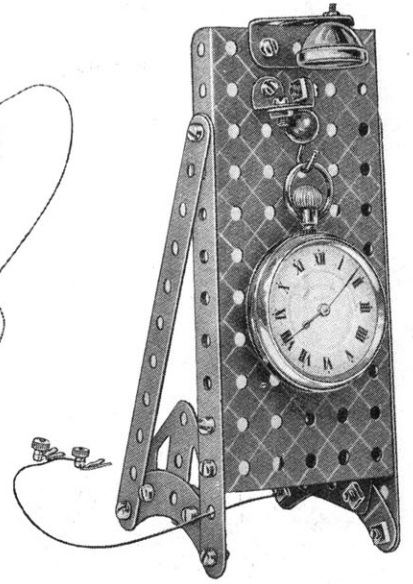
A80. Bed



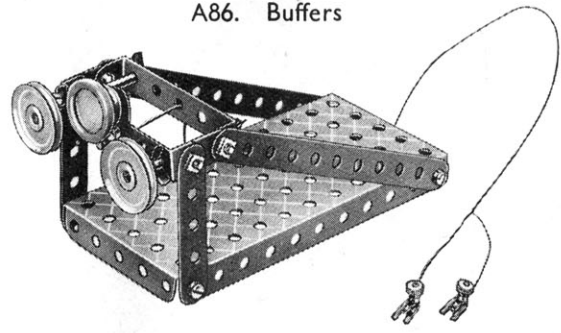
A83. Stamping Mill



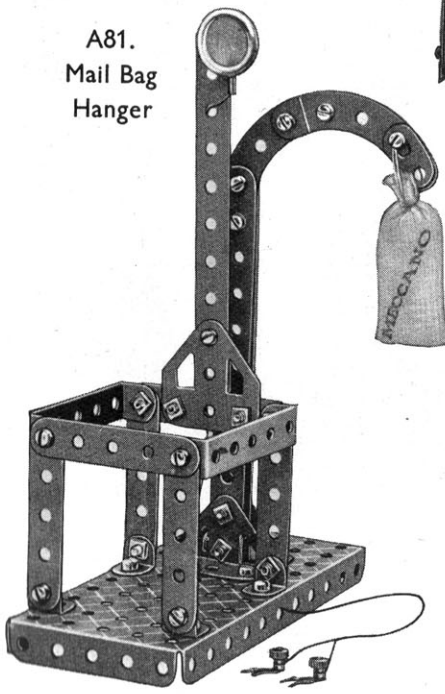
A89. Watch Stand



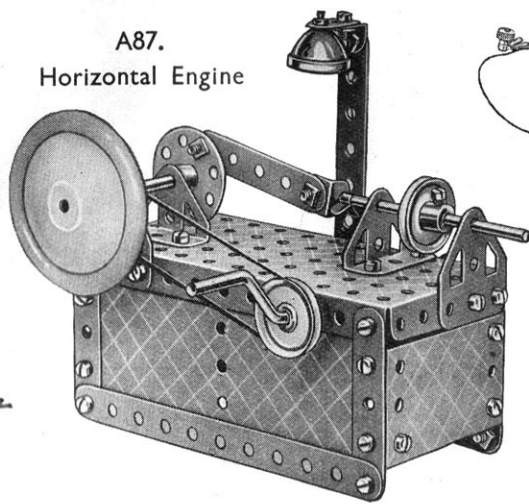
A86. Buffers



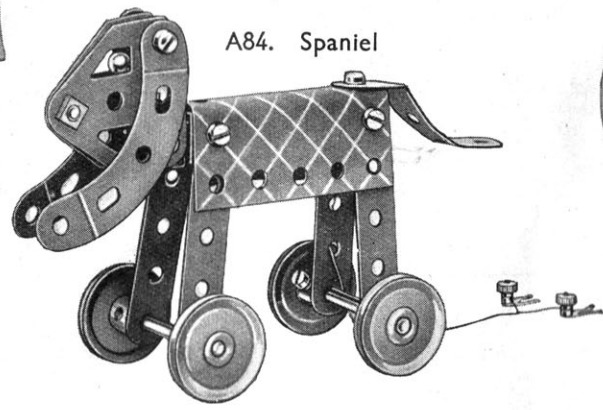
A81. Mail Bag Hanger



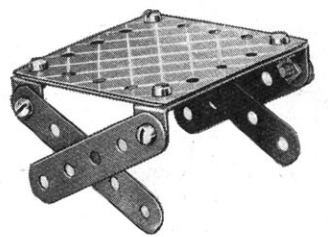
A87. Horizontal Engine



A84. Spaniel

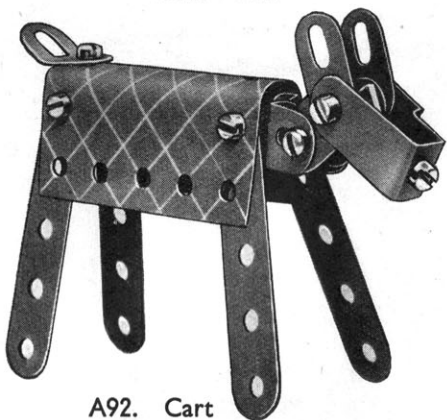


A90. Coffee Table

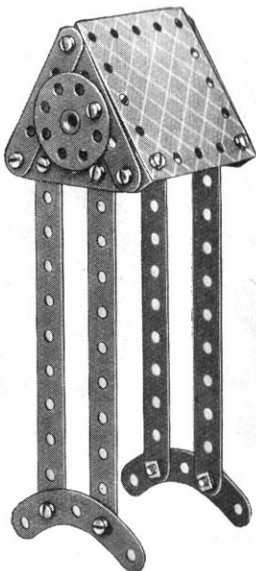


This page shows examples of the use of the Meccano Lighting Set, described on page 2 of cover

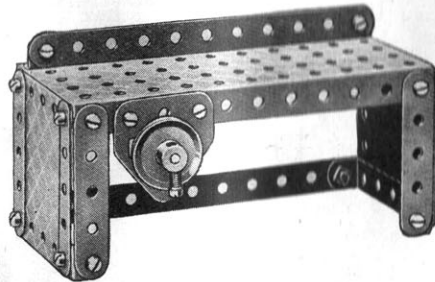
A91. Calf



A94. Grandfather Clock



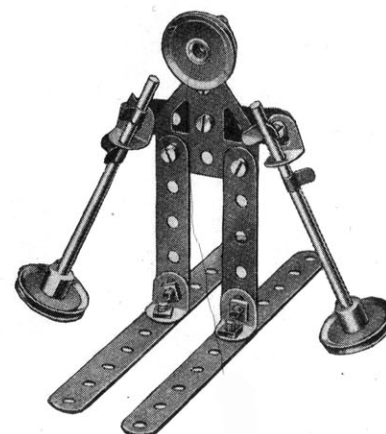
A95. Joiner's Bench



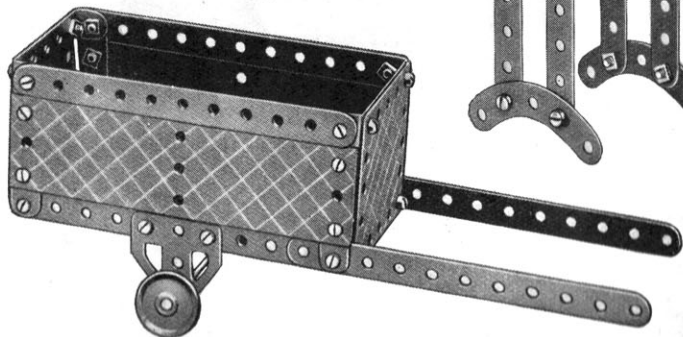
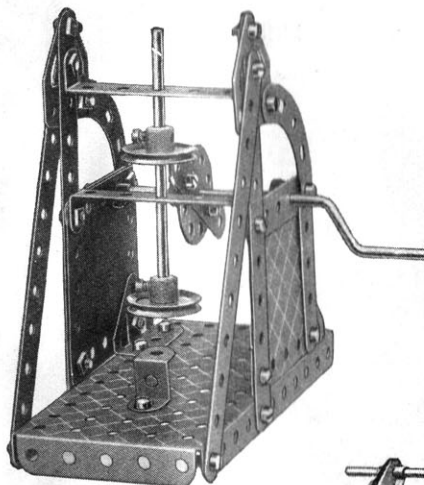
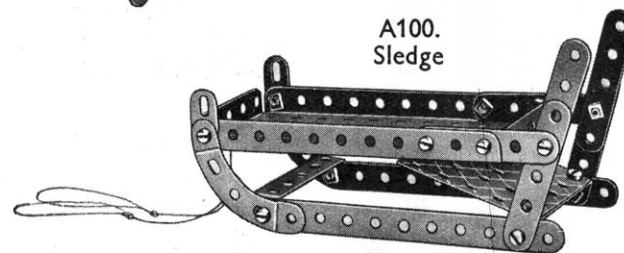
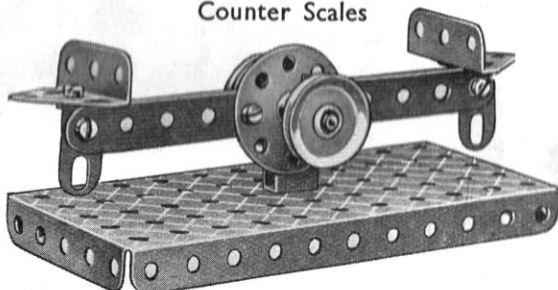
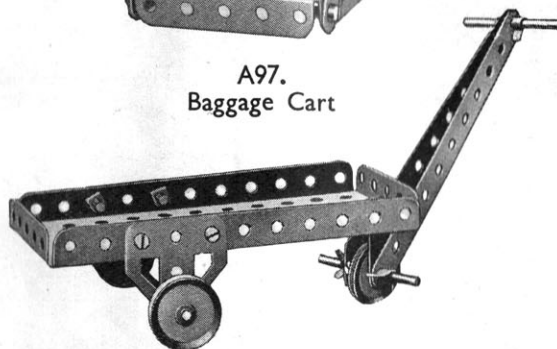
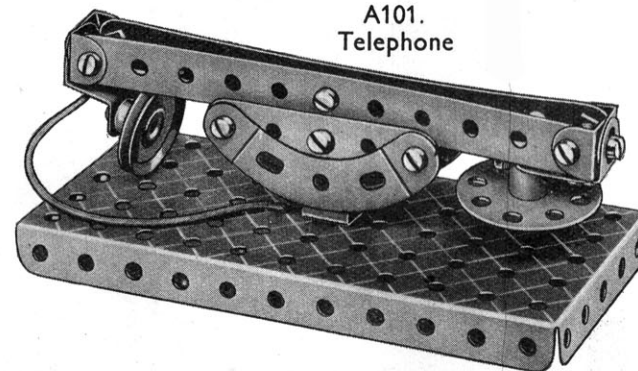
A98. Chair



A99. Skier



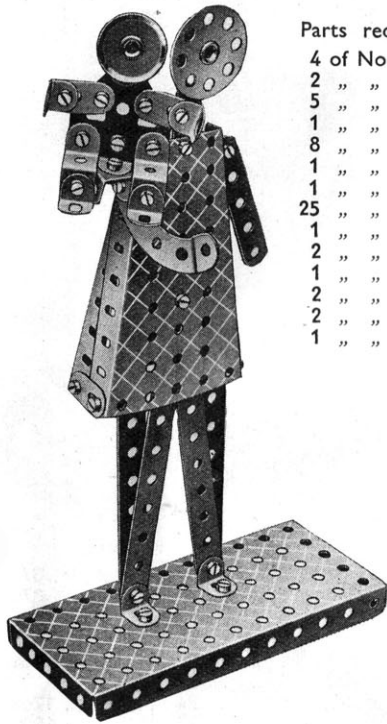
A92. Cart

A96.  
Ore CrusherA100.  
SledgeA93.  
Counter ScalesA97.  
Baggage CartA101.  
Telephone

#### HOW TO CONTINUE

This completes our examples of models that may be made with MECCANO Outfit A. The next models are a little more advanced, requiring extra parts to construct them. The necessary parts are all contained in a No. Aa Accessory Outfit, the price of which may be ascertained from any Meccano dealer.

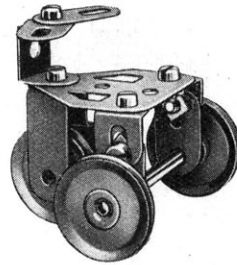
B1. Man and Boy



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

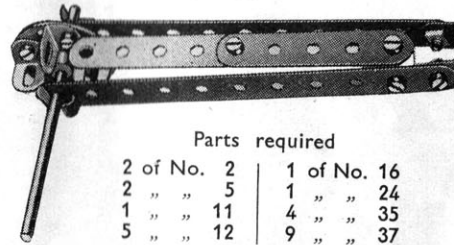
B4. Tricycle



Parts required

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

B7. Rattle



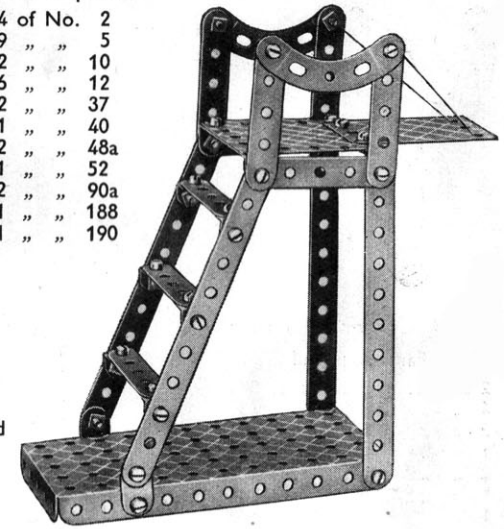
Parts required

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

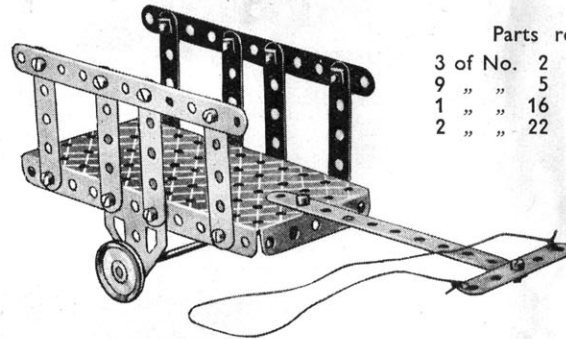
Parts required

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



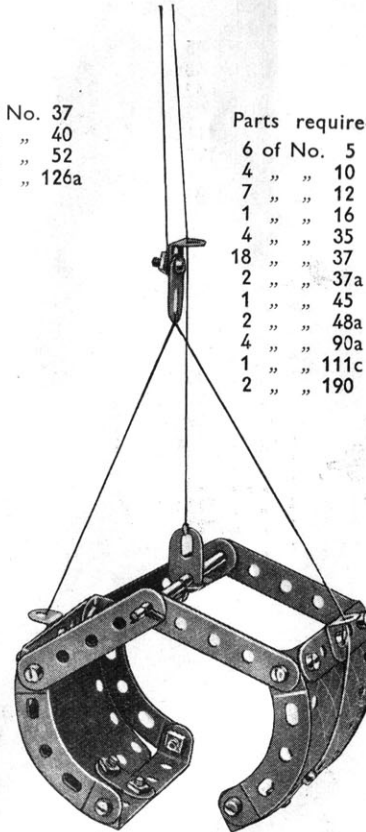
B5. Bullock Cart



Parts required

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

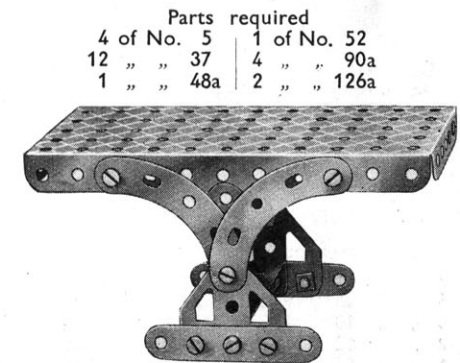
B8. Crane Grab



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



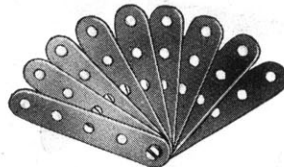
Parts required

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

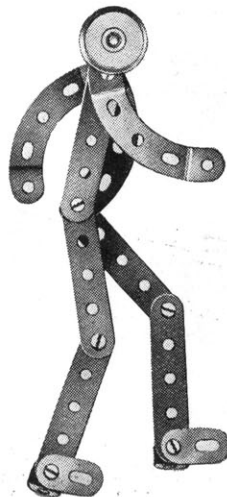
B2. Fan

Parts required

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



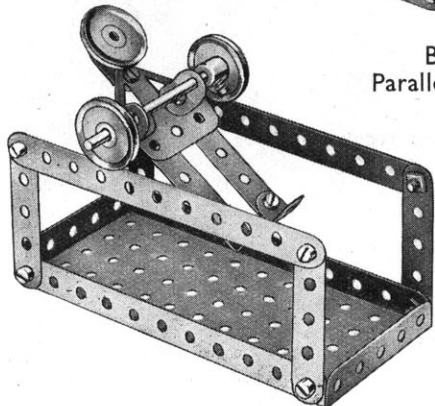
B6. Walking Man



Parts required

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

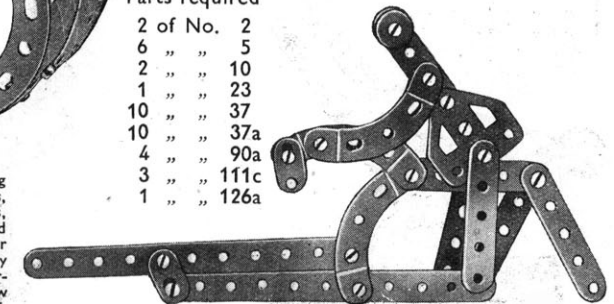
B3. Parallel Bars



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

B11. Bucking Broncho

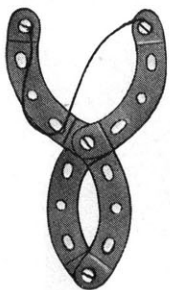


Parts required

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

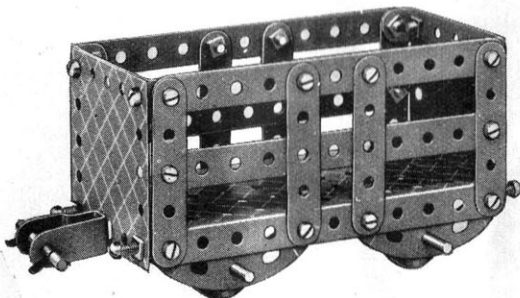
The  $\frac{3}{16}$ " Bolts used for connecting the  $5\frac{1}{2}$ " Strips, the horse's legs, and the rider's legs and arms, are all locknitted (see Standard Mechanism No. 262). The lower  $5\frac{1}{2}$ " Strip should be held rigidly and the upper one jerked forward; the horse will then throw its 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

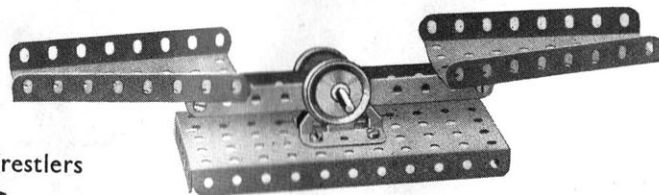
B18. Single Sheave Pulley Block



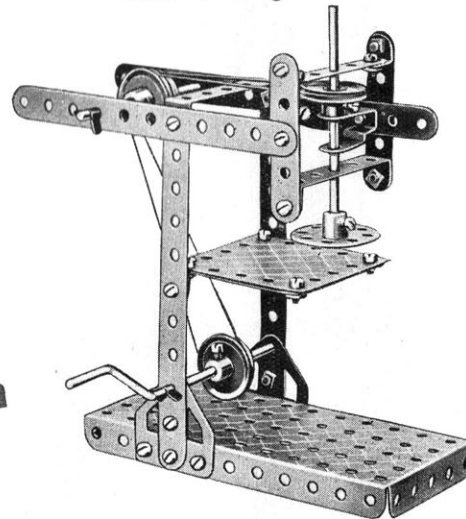
Parts required  
 1 of No. 23  
 11 " " 37a  
 1 " " 57c  
 4 " " 111c  
 2 " " 126a

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



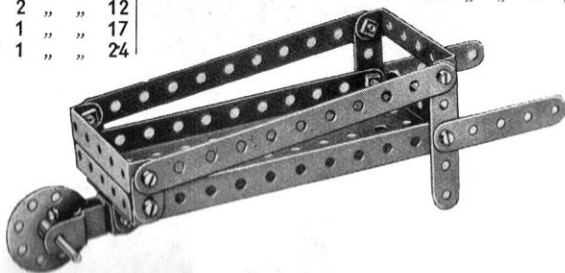
B21. Drilling Machine



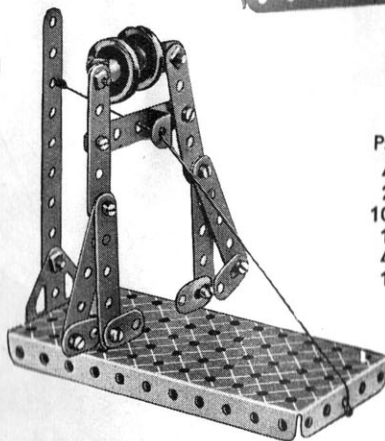
Parts required  
 4 of No. 2 | 28 of No. 37  
 8 " " 5 | 1 " " 37a  
 6 " " 12 | 1 " " 40  
 2 " " 16 | 1 " " 45  
 1 " " 19s | 2 " " 48a  
 4 " " 22 | 1 " " 52  
 1 " " 24 | 2 " " 126a  
 6 " " 35 | 1 " " 190

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



B16. Wrestlers



Parts required  
 1 of No. 2  
 7 " " 5  
 4 " " 10  
 2 " " 12  
 2 " " 22  
 13 " " 37  
 6 " " 37a  
 1 " " 40  
 1 " " 52  
 4 " " 111c  
 1 " " 125  
 1 " " 126a

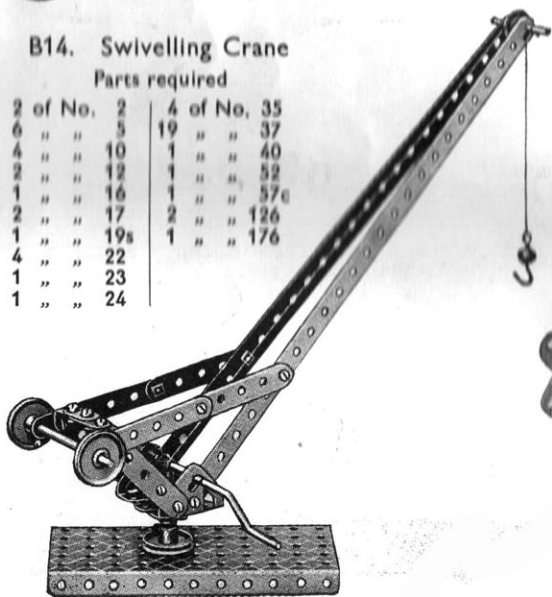
B20. Card Table

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

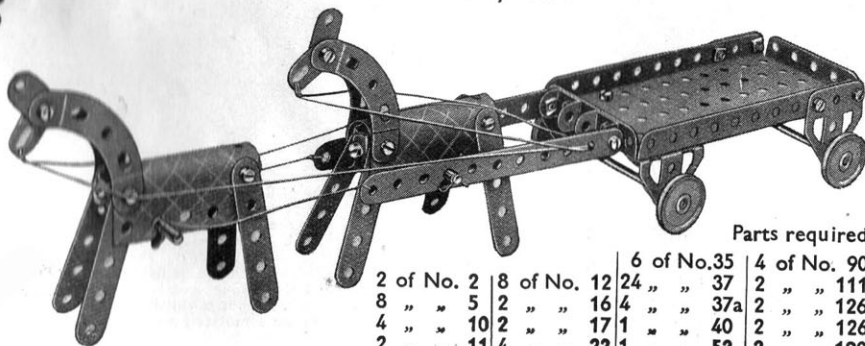


B14. Swivelling Crane

Parts required  
 2 of No. 2 | 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 " " 19a | 1 " " 176  
 4 " " 22  
 1 " " 23  
 1 " " 24

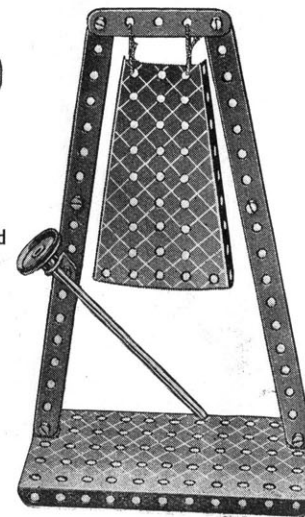


B17. Hay Cart



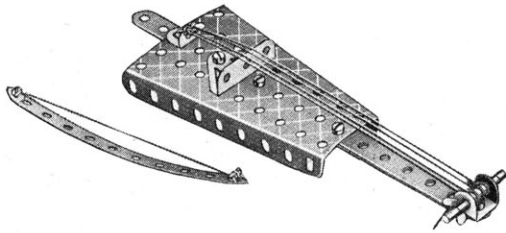
Parts required  
 2 of No. 2 | 8 of No. 12 | 6 of No. 35 | 4 of No. 90a  
 8 " " 5 | 2 " " 16 | 24 " " 37 | 2 " " 111c  
 4 " " 10 | 2 " " 17 | 4 " " 37a | 2 " " 126  
 2 " " 11 | 4 " " 22 | 1 " " 40 | 2 " " 126a  
 2 " " 11 | 4 " " 22 | 1 " " 52 | 2 " " 190

B22. Gong



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

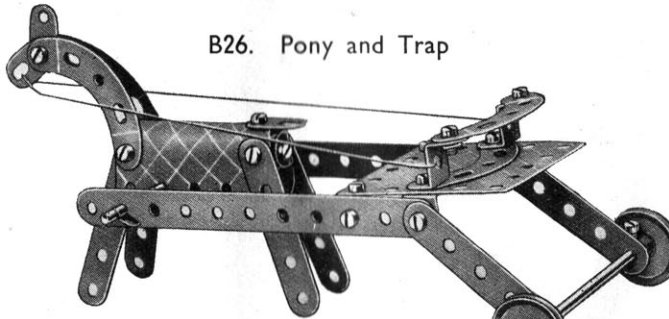
B23. Violin and Bow



Parts required

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

B26. Pony and Trap



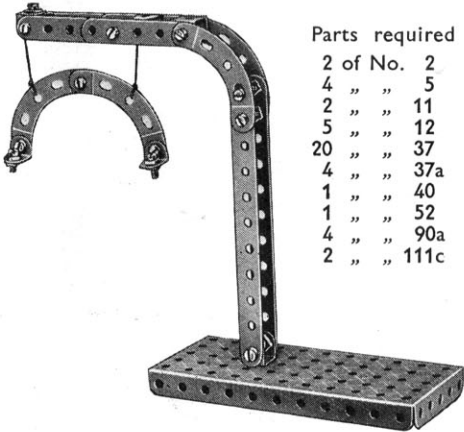
Parts required

9	of No.	5
4	" "	10
8	" "	12
26	" "	37
2	" "	37a
2	" "	48a
4	" "	90a
2	" "	111c
2	" "	190

B30. Rocking Chair



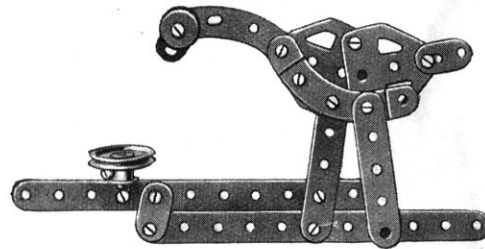
B24. Loading Gauge



Parts required

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

B27. Pecking Hen



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

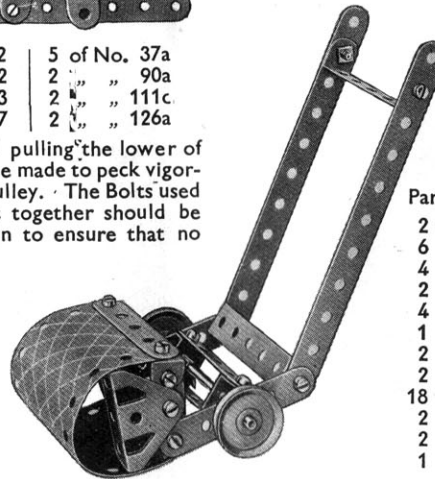
Parts required

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

By alternately pushing and pulling the lower of the 5 1/2 in. Strips, the hen can be made to peck vigorously at the "bowl," a 1 in. Pulley. The Bolts used for securing the 5 1/2 in. Strips together should be locknuttet, care being taken to ensure that no "side play" is permitted.

B28.

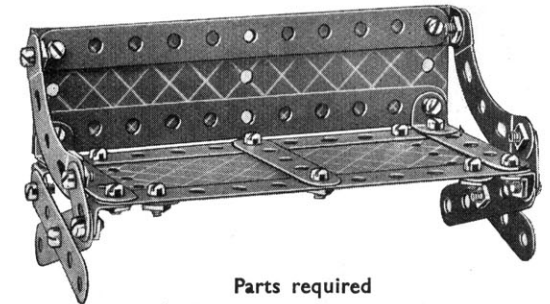
Grass Cutter



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

B31. Station Seat



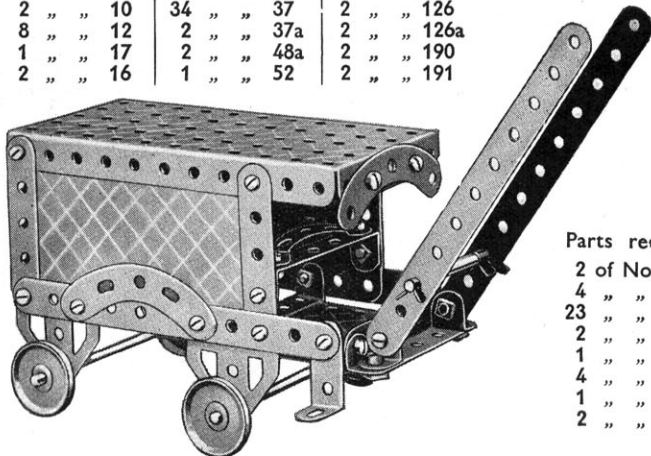
Parts required

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

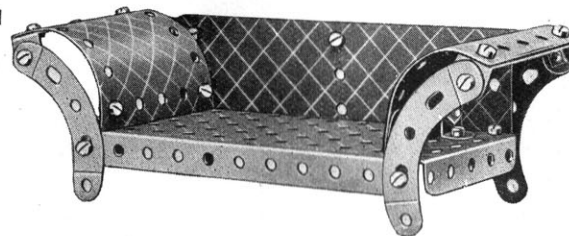
B25. Bread Van

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



B29. Couch



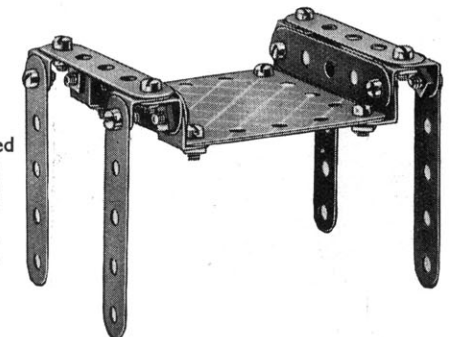
Parts required

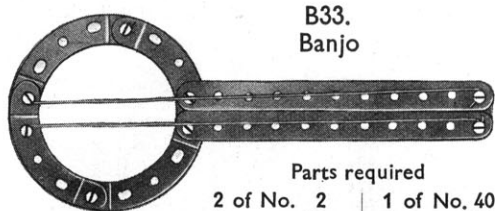
2	of No.	2
4	" "	12
23	" "	37
2	" "	48a
1	" "	52
4	" "	90a
1	" "	189
2	" "	190

Parts required

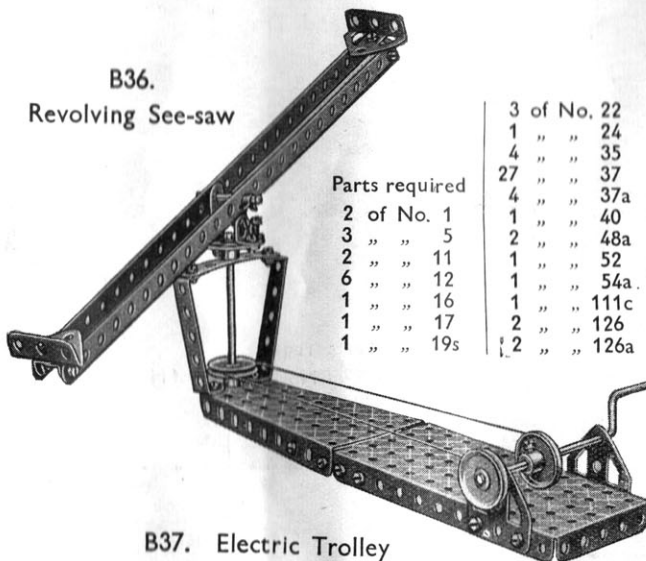
9	of No.	5
8	" "	12
16	" "	37
2	" "	125
1	" "	190

B32. Stool for Dressing Table

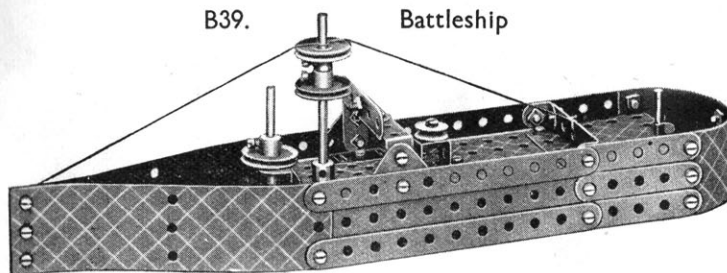




- B33. Banjo**
- Parts required
- |            |             |
|------------|-------------|
| 2 of No. 2 | 1 of No. 40 |
| 1 " " 10   | 4 " " 90a   |
| 8 " " 37   |             |

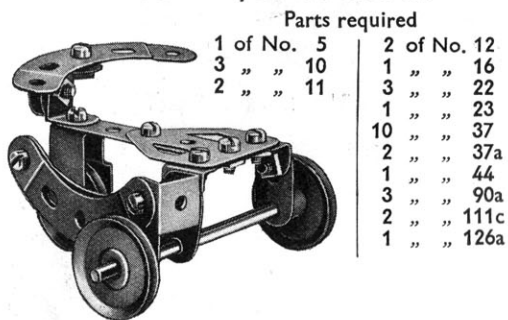


- B36. Revolving See-saw**
- Parts required
- |            |             |
|------------|-------------|
| 2 of No. 1 | 3 of No. 22 |
| 2 " " 5    | 1 " " 24    |
| 2 " " 11   | 4 " " 35    |
| 6 " " 12   | 27 " " 37   |
| 1 " " 16   | 4 " " 37a   |
| 1 " " 17   | 1 " " 40    |
| 1 " " 19s  | 2 " " 48a   |
|            | 1 " " 52    |
|            | 1 " " 54a   |
|            | 1 " " 111c  |
|            | 2 " " 126   |
|            | 2 " " 126a  |



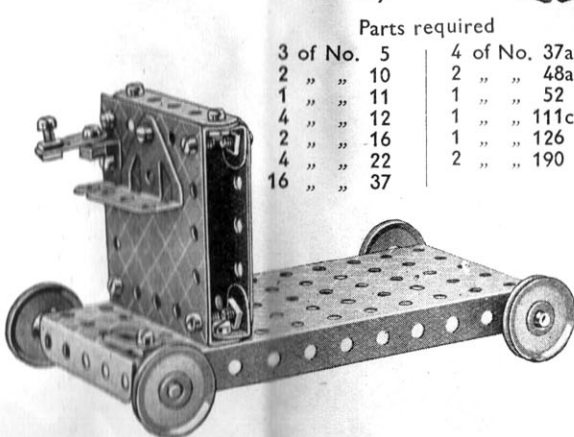
- B39. Battleship**
- Parts required
- |            |             |              |              |
|------------|-------------|--------------|--------------|
| 4 of No. 2 | 2 of No. 17 | 4 of No. 37a | 2 of No. 126 |
| 9 " " 5    | 3 " " 22    | 1 " " 40     | 2 " " 188    |
| 4 " " 10   | 1 " " 23    | 2 " " 48a    | 2 " " 189    |
| 1 " " 11   | 1 " " 24    | 1 " " 52     | 1 " " 190    |
| 5 " " 12   | 5 " " 35    | 4 " " 111c   |              |
| 1 " " 16   | 36 " " 37   | 2 " " 125    |              |

**B34. Motor Cycle and Side-Car**

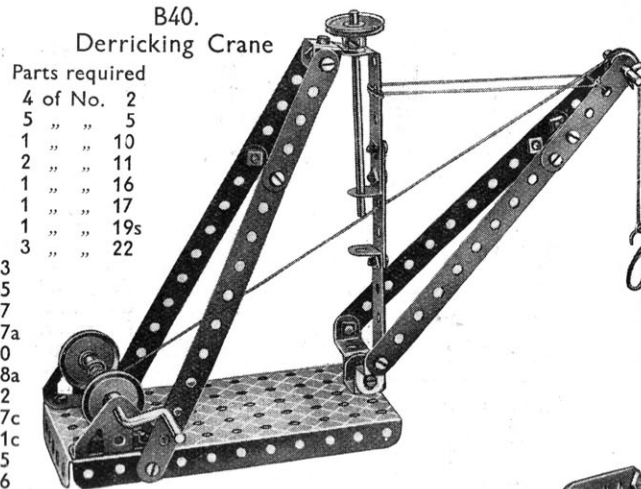


- Parts required
- |            |             |
|------------|-------------|
| 1 of No. 5 | 2 of No. 12 |
| 3 " " 10   | 1 " " 16    |
| 2 " " 11   | 3 " " 22    |
|            | 1 " " 23    |
|            | 10 " " 37   |
|            | 2 " " 37a   |
|            | 1 " " 44    |
|            | 3 " "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

**B37. Electric Trolley**

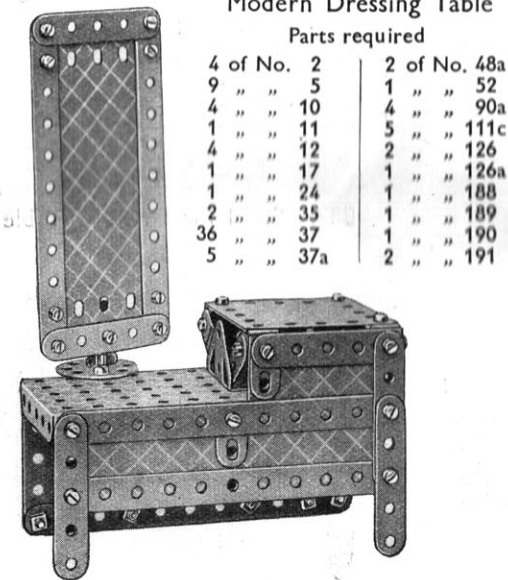


- Parts required
- |            |              |
|------------|--------------|
| 3 of No. 5 | 4 of No. 37a |
| 2 " " 10   | 2 " " 48a    |
| 1 " " 11   | 1 " " 52     |
| 4 " " 12   | 1 " " 111c   |
| 2 " " 16   | 1 " " 126    |
| 4 " " 22   | 2 " " 190    |
| 16 " " 37  |              |



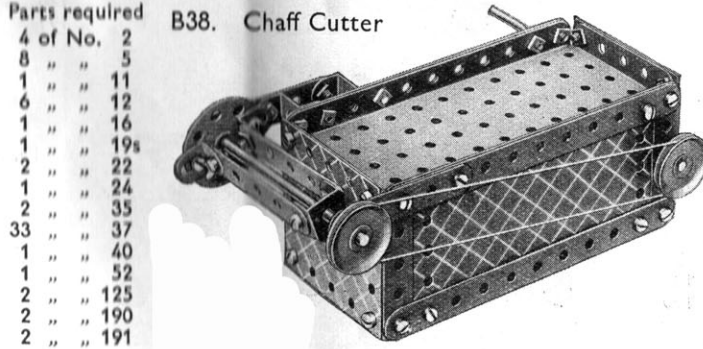
- B40. Derricking Crane**
- Parts required
- |            |             |
|------------|-------------|
| 4 of No. 2 | 1 of No. 23 |
| 5 " " 5    | 2 " " 35    |
| 1 " " 10   | 22 " " 37   |
| 2 " " 11   | 2 " " 37a   |
| 1 " " 16   | 2 " " 40    |
| 1 " " 17   | 1 " " 48a   |
| 1 " " 19s  | 1 " " 52    |
| 3 " " 22   | 1 " " 57c   |
|            | 1 " " 111c  |
|            | 2 " " 125   |
|            | 2 " " 126   |
|            | 1 " " 176   |

**B35. Modern Dressing Table**



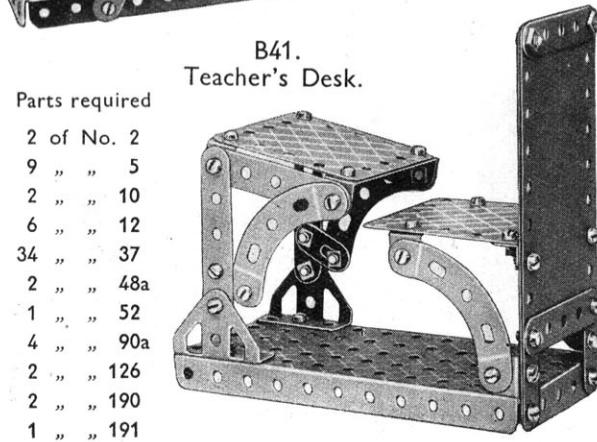
- Parts required
- |            |              |
|------------|--------------|
| 4 of No. 2 | 2 of No. 48a |
| 9 " " 5    | 1 " " 52     |
| 4 " " 10   | 4 " " 90a    |
| 1 " " 11   | 5 " " 111c   |
| 4 " " 12   | 2 " " 126    |
| 1 " " 17   | 1 " " 126a   |
| 1 " " 24   | 1 " " 188    |
| 2 " " 35 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

**B38. Chaff Cutter**



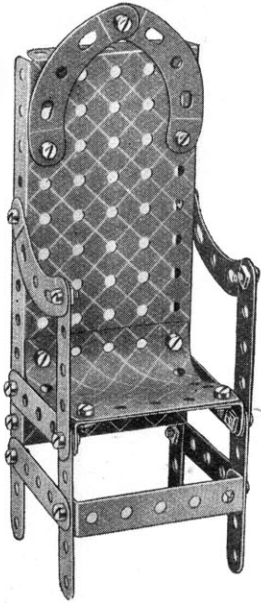
- Parts required
- |            |
|------------|
| 4 of No. 2 |
| 8 " " 5    |
| 1 " " 11   |
| 6 " " 12   |
| 1 " " 16   |
| 1 " " 19s  |
| 2 " " 22   |
| 1 " " 24   |
| 2 " " 35   |
| 33 " " 37  |
| 1 " " 40   |
| 1 " " 52   |
| 2 " " 125  |
| 2 " " 190  |
| 2 " " 191  |

**B41. 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  |

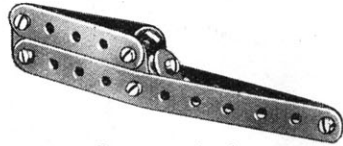
B42. Arm Chair



Parts required

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

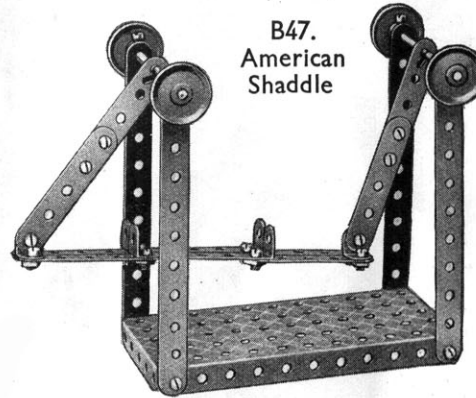
B44. Motor Boat



Parts required

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

B47. American Shaddle



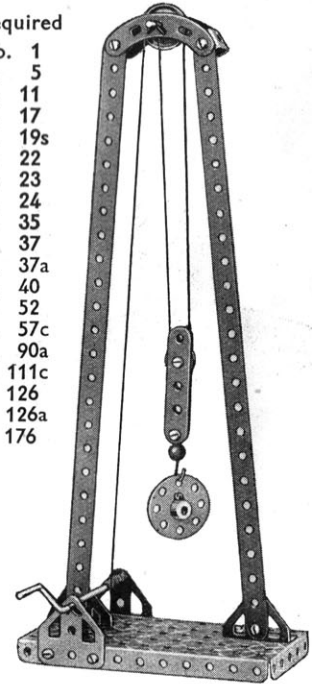
Parts required

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

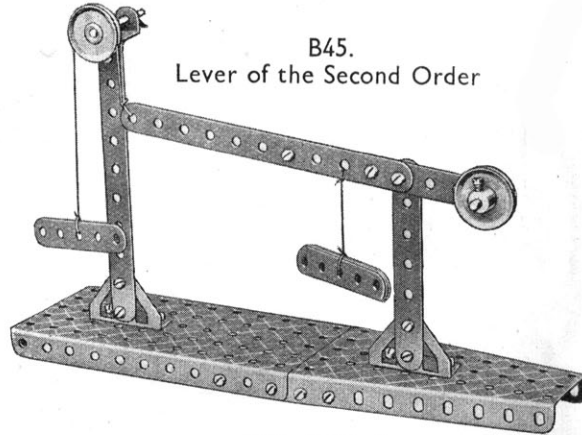
B49. Pulley Block

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



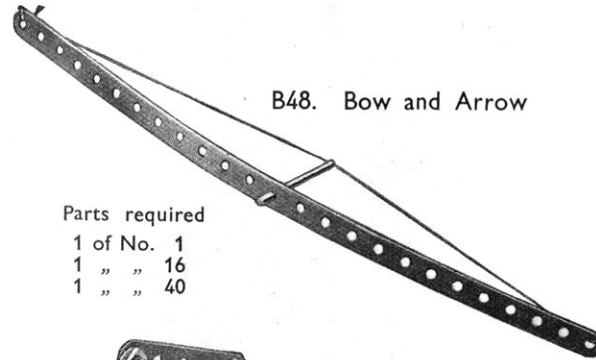
B45. Lever of the Second Order



Parts required

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

B48. Bow and Arrow



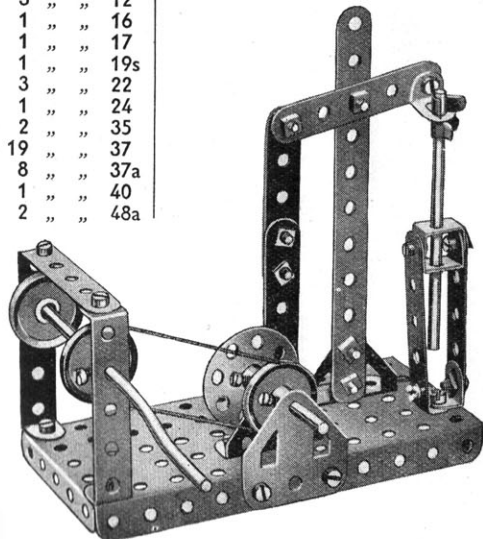
Parts required

1	of No.	1
1	" "	16
1	" "	40

B43. Pump

Parts required

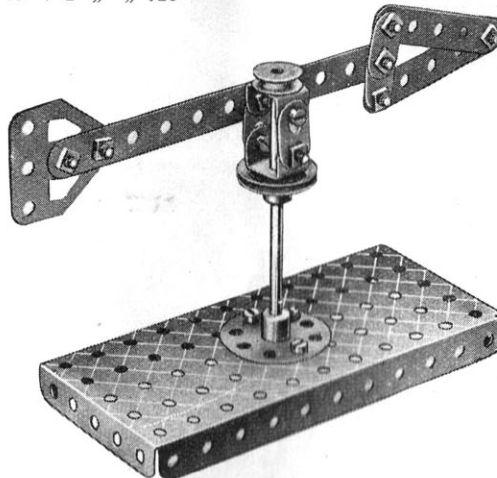
1	of No.	2	1	of No.	52
4	" "	5	4	" "	111c
2	" "	11	2	" "	126
3	" "	12	1	" "	126a
1	" "	16			
1	" "	17			
1	" "	19s			
3	" "	22			
1	" "	24			
2	" "	35			
19	" "	37			
8	" "	37a			
1	" "	40			
2	" "	48a			



B46. Weather Vane

Parts required

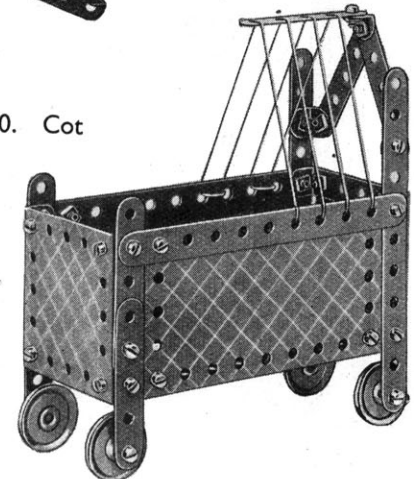
1	of No.	2
2	" "	5
4	" "	10
2	" "	11
1	" "	16
1	" "	22
1	" "	23
1	" "	24
12	" "	37
1	" "	52
1	" "	126a



B50. Cot

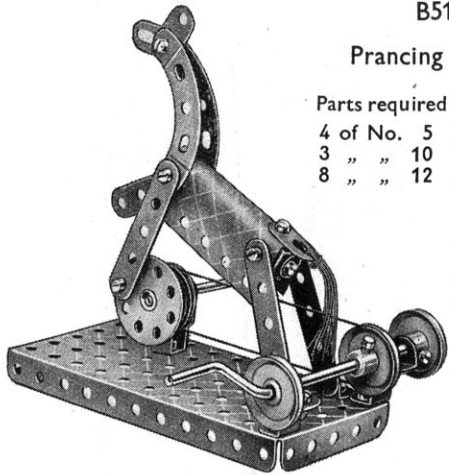
Parts required

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



B51.

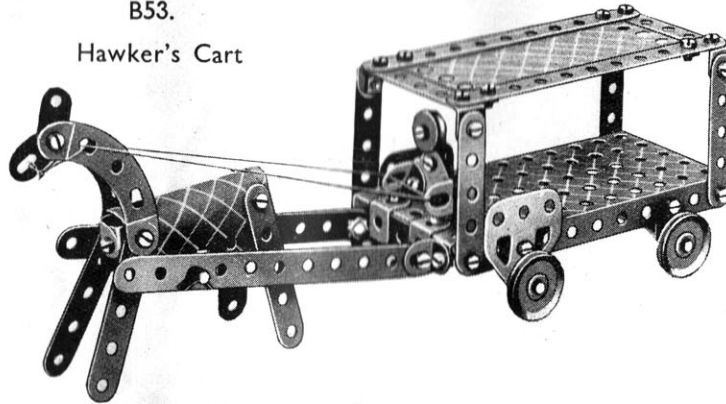
Prancing Horse



Parts required	1 of No. 17
4 of No. 5	1 " " 19s
3 " " 10	4 " " 22
8 " " 12	1 " " 24
	14 " " 37
	8 " " 37a
	1 " " 40
	1 " " 44
	1 " " 52
	2 " " 90a
	4 " " 111c
	2 " " 125
	1 " " 186
	1 " " 190

B53.

Hawker's Cart



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

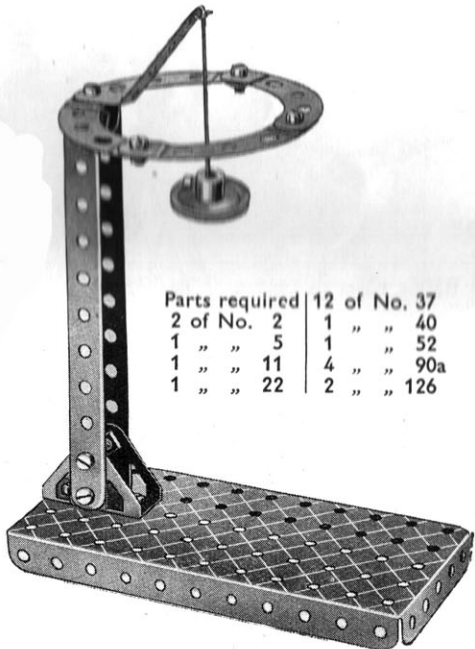
B56. Shepherd's Crook

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



B52.

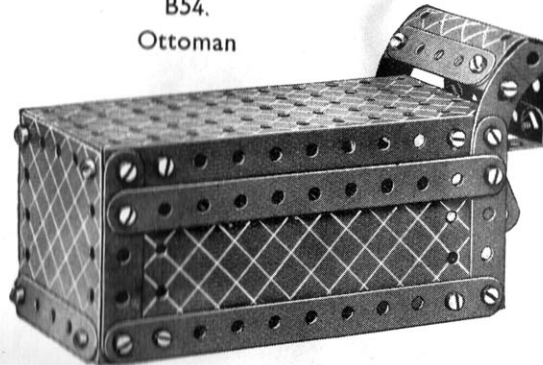
Punching Bag Stand



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

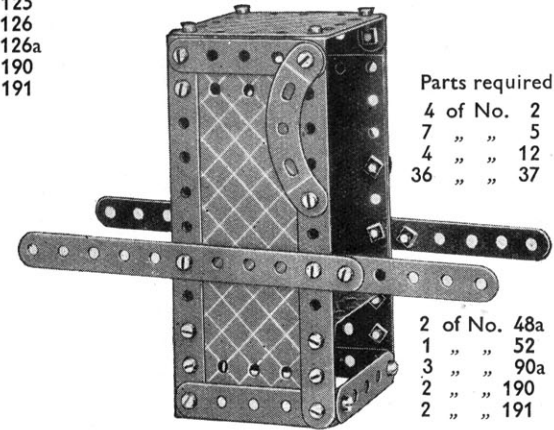
B54.

Ottoman



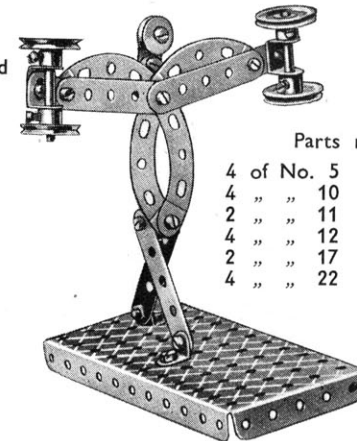
Parts required	4 of No. 2
7 " " 5	2 " " 10
2 " " 11	2 " " 11
4 " " 12	4 " " 12
34 " " 37	1 " " 48a
1 " " 52	1 " " 52
2 " " 90a	2 " " 190
2 " " 190	2 " " 191

B57. Sedan Chair



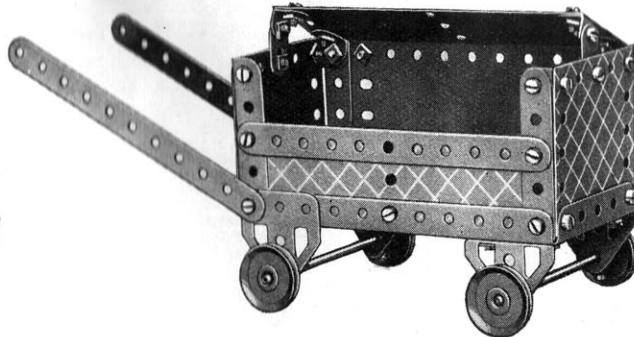
Parts required	4 of No. 2
7 " " 5	4 " " 12
4 " " 12	36 " " 37
2 of No. 48a	1 " " 52
1 " " 52	3 " " 90a
3 " " 90a	2 " " 190
2 " " 190	2 " " 191

B58. Strong Man



Parts required	4 of No. 5	1 of No. 23
4 " " 10	12 " " 37	2 " " 37a
2 " " 11	2 " " 52	1 " " 90a
4 " " 12	4 " " 90a	2 " " 111c
2 " " 17		
4 " " 22		

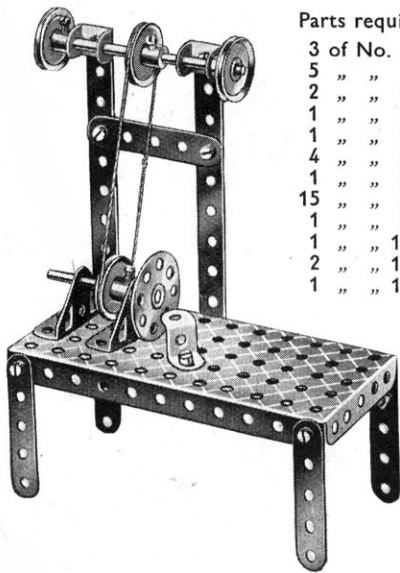
B55. Ash Cart



Parts required	4 of No. 2
4 " " 5	2 " " 10
2 " " 10	4 " " 12
4 " " 12	2 " " 16
2 " " 16	4 " " 22
4 " " 22	34 " " 37
34 " " 37	2 " " 37a
2 " " 37a	2 " " 48a
2 " " 48a	1 " " 52
1 " " 52	2 " " 111c
2 " " 111c	2 " " 126
2 " " 126	2 " " 126a
2 " " 126a	2 " " 189
2 " " 189	2 " " 190
2 " " 190	1 " " 191



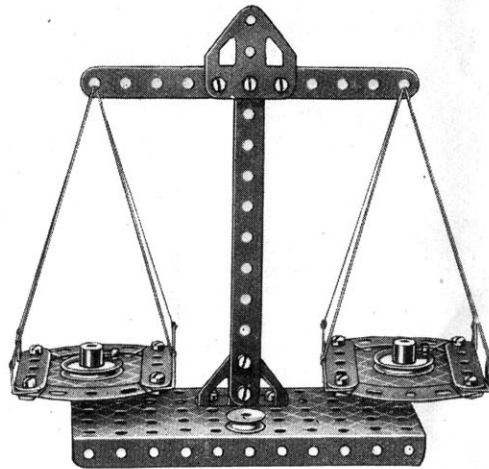
B59. Bench Lathe



Parts required

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

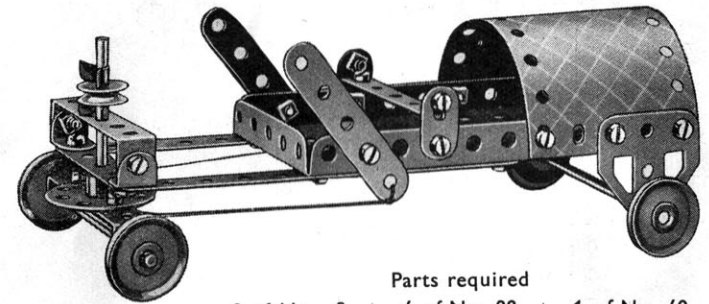
B62. Counter Scales



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

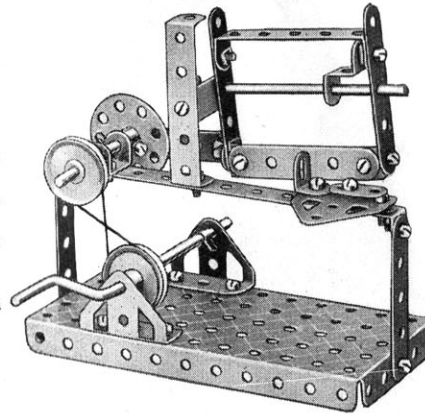
B65. Coaster



Parts required

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

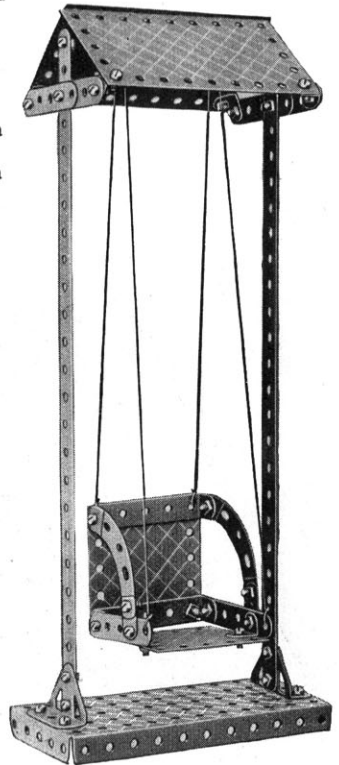
B63. Power Hack Saw



Parts required

1 of No.	2	18 of No.	37
6 "	5	12 "	37a
1 "	10	1 "	45
1 "	11	2 "	48a
6 "	12	1 "	52
1 "	16	5 "	111c
1 "	17	2 "	125
1 "	19s	2 "	126
2 "	22	1 "	126a
1 "	24	1 "	186
3 "	35		

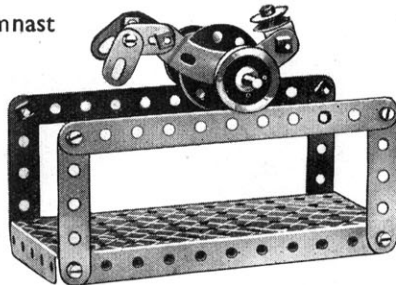
B66. Swing



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

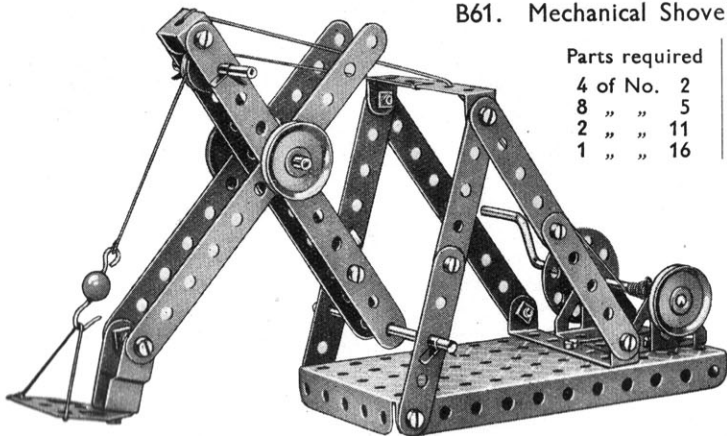
B60. Gymnast



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		

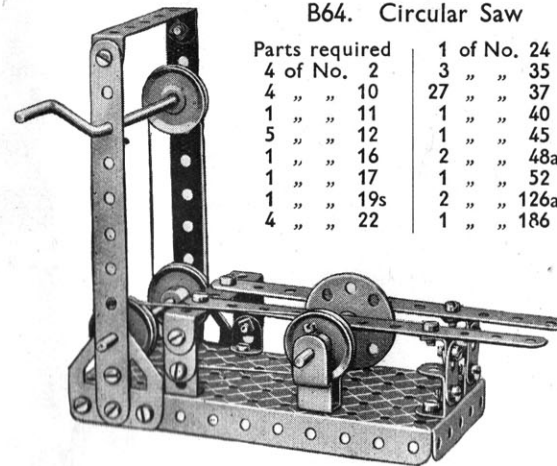
B61. Mechanical Shovel



Parts required

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

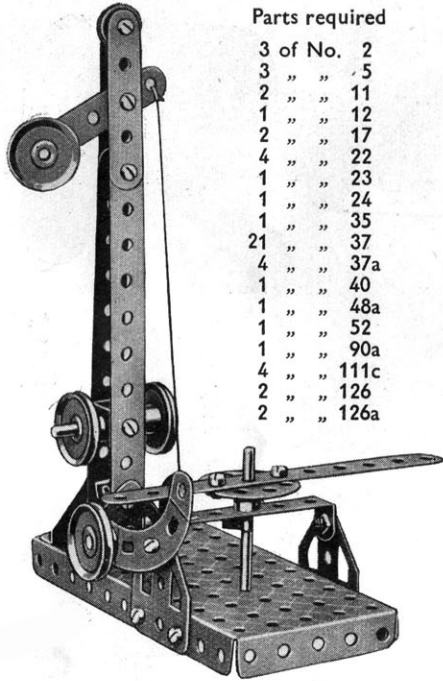
B64. Circular Saw



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

B67. Automatic Signals

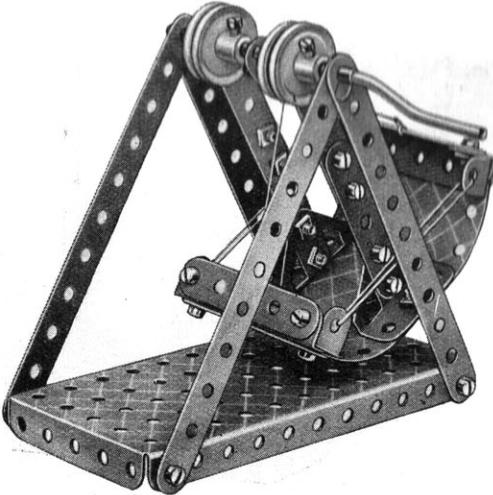


Parts required

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

B68. Swinging Boat

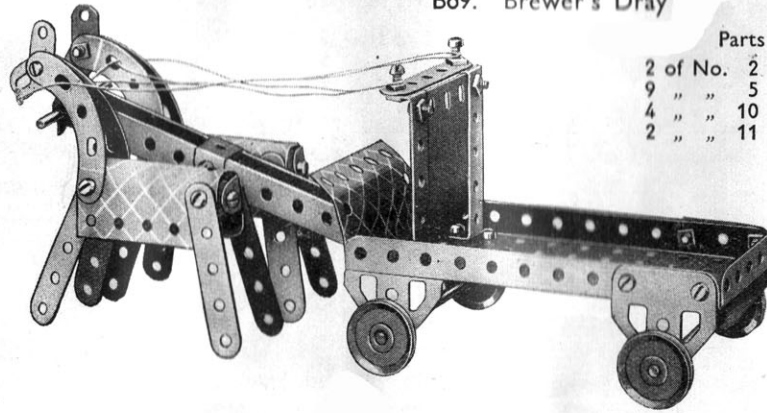
Parts required	1 of No. 19s	1 of No. 40
4 of No. 2	4 " " 22	2 " " 48a
8 " " 5	6 " " 35	1 " " 52
1 " " 10	22 " " 37	2 " " 126
4 " " 12	4 " " 37a	1 " " 191



Parts required

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

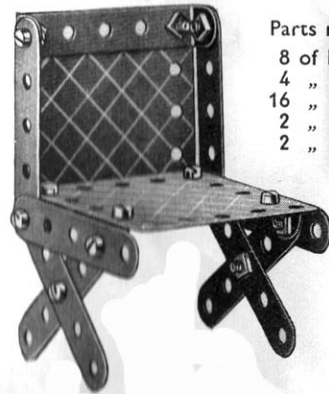
B69. Brewer's Dray



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

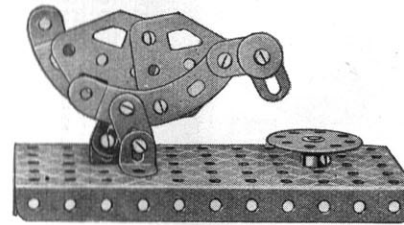
B70. Chair



Parts required

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

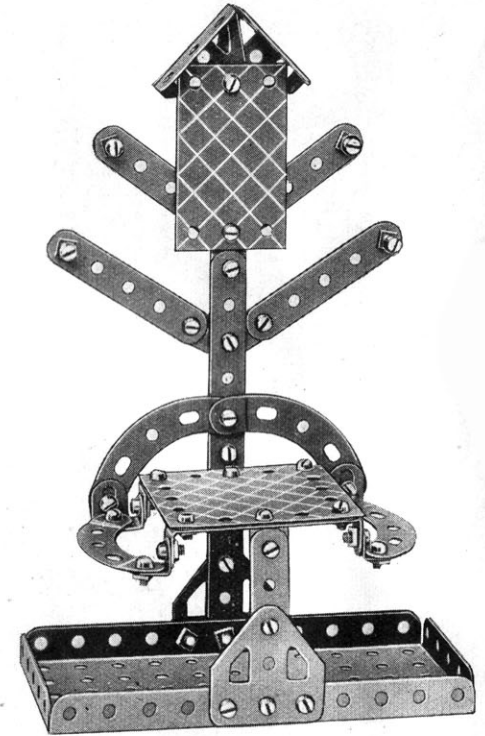
B71. Goose



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

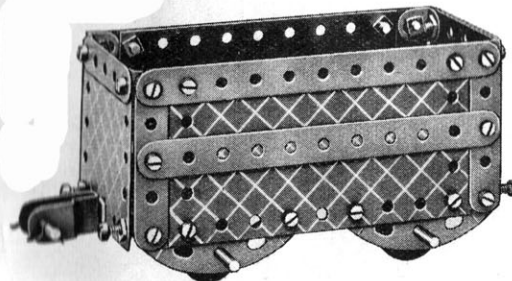
B73. Hat Rack



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			

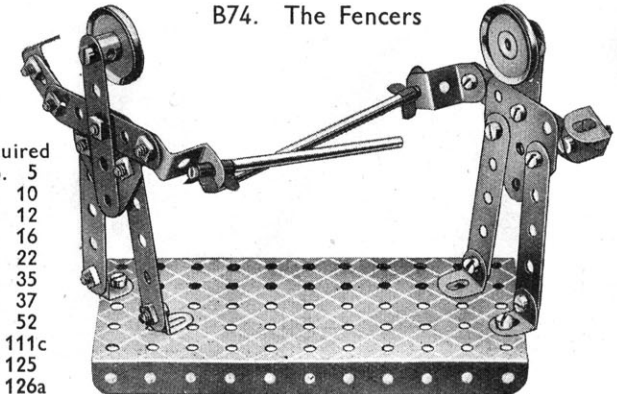
B72. Cattle Truck



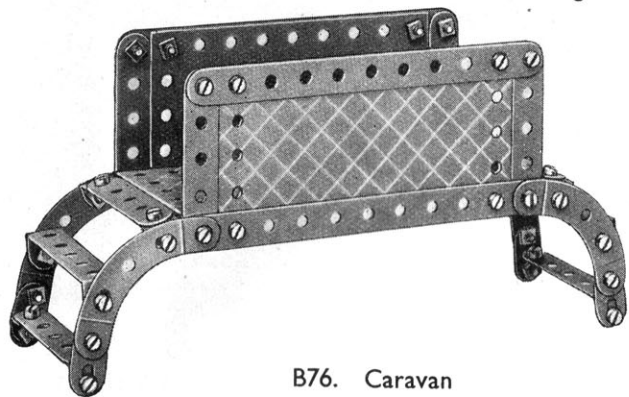
Parts required

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

B74. The Fencers



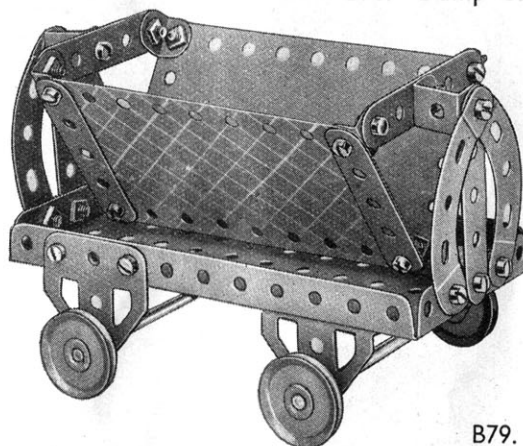
B75. Footbridge



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

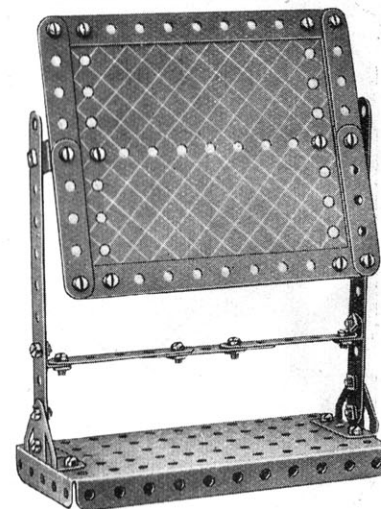
B78. Dump Car



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

B81. School Blackboard



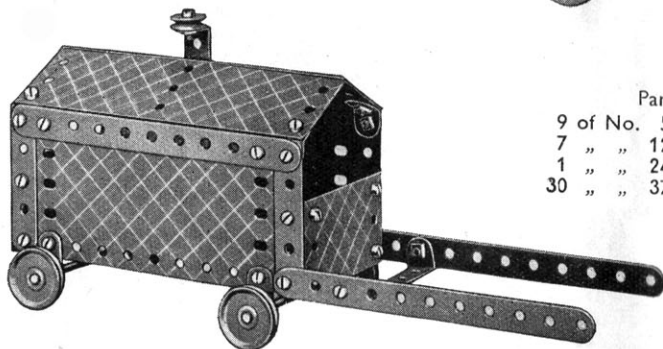
Parts required

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

B76. Caravan

Parts required

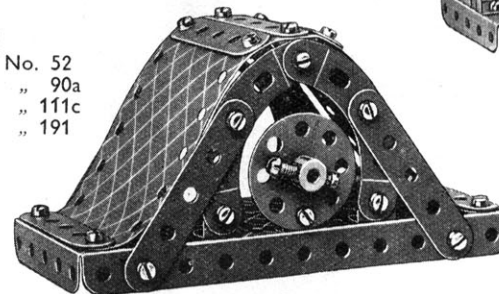
4	of No.	2
4	" "	5
4	" "	10
8	" "	12
2	" "	16
4	" "	22
1	" "	23
35	" "	37
5	of No.	37a
1	" "	48a
1	" "	52
1	" "	111c
1	" "	125
2	" "	188
2	" "	189
2	" "	191



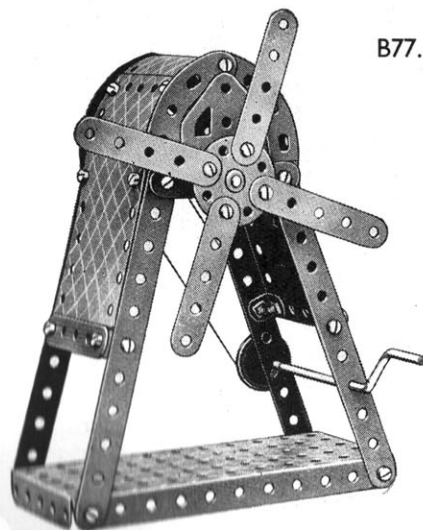
Parts required

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

B79. Clock



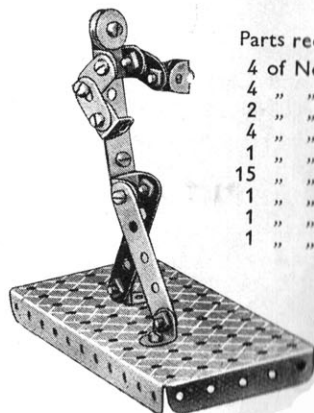
B77. Windmill



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

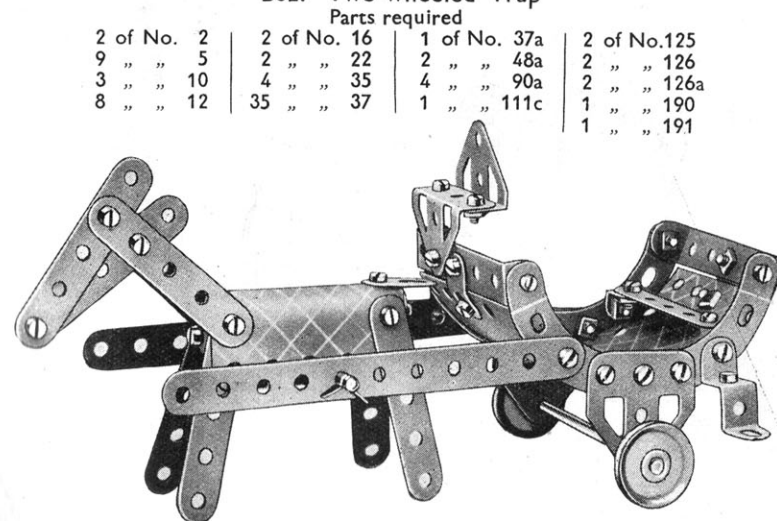
B80. Boxer



Parts required

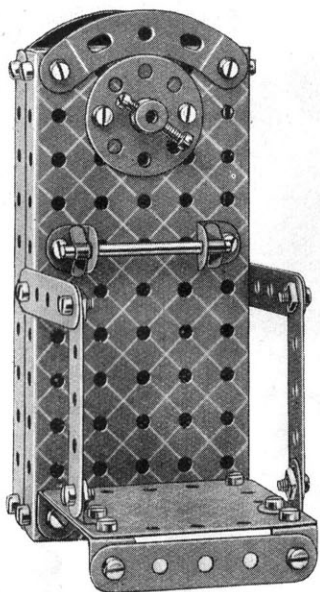
4	of No.	5
4	" "	10
2	" "	11
4	" "	12
1	" "	23
15	" "	37
1	" "	37a
1	" "	52
1	" "	111c

B82. Two-wheeled Trap



Parts required

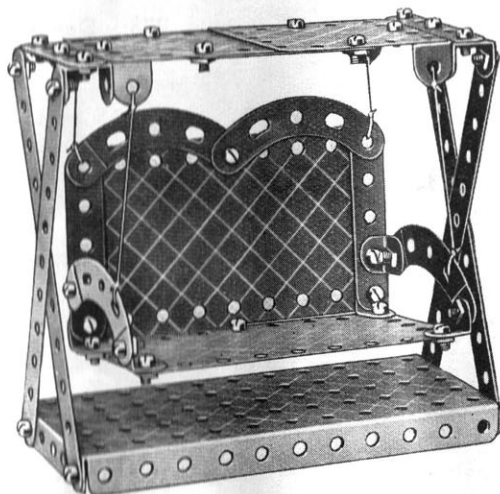
2	of No.	2
9	" "	5
3	" "	10
8	" "	12
2	of No.	16
2	" "	22
4	" "	35
35	" "	37
1	of No.	37a
2	" "	48a
4	" "	90a
1	" "	111c
2	of No.	125
2	" "	126
2	" "	126a
1	" "	190
1	" "	191



**B83.**  
Weighing Machine

Parts required

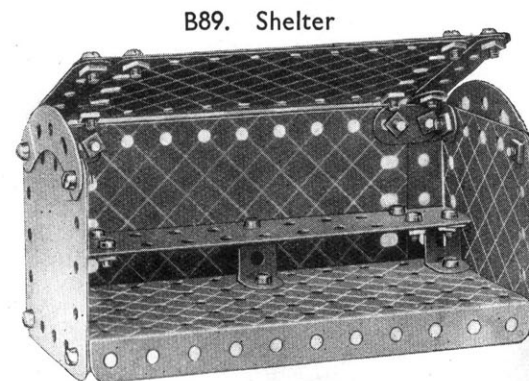
4 of No. 2
7 " " 5
4 " " 10
8 " " 12
1 " " 17
1 " " 24
2 " " 35
36 " " 37
2 " " 37a
2 " " 48a
1 " " 52
2 " " 90a
3 " " 111c
1 " " 190
1 " " 191



**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

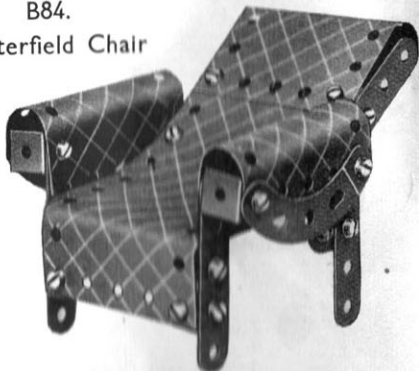


**B89.** Shelter

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	

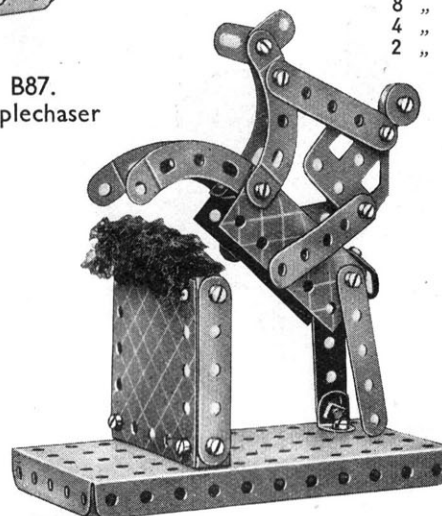
**B84.**  
Chesterfield Chair



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



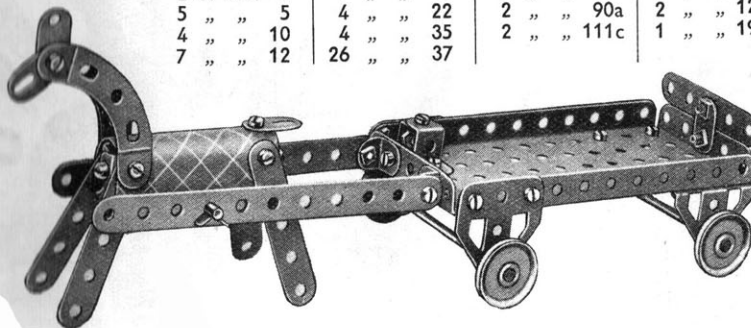
Parts required

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

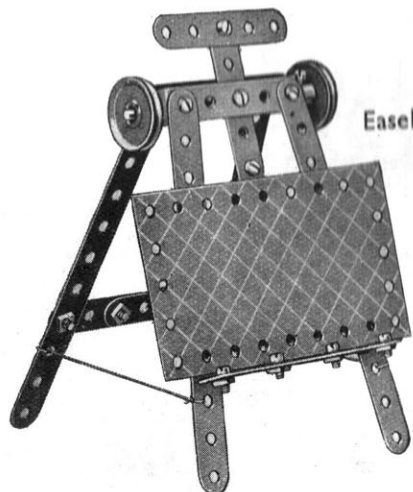
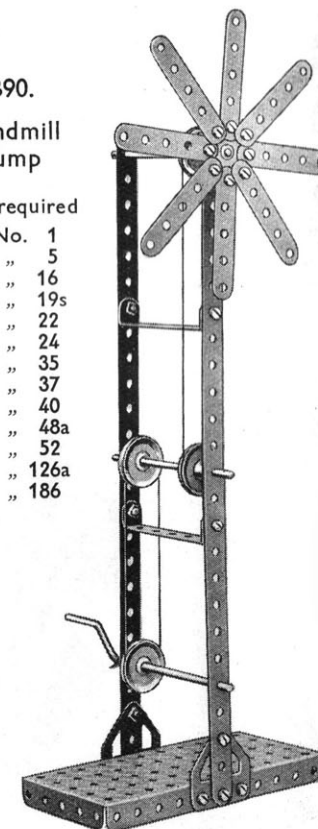
2 of No. 2	2 of No. 16	2 of No. 37a	1 of No.125
5 " " 5	1 " " 17	1 " " 52	2 " " 126
4 " " 10	4 " " 22	2 " " 90a	2 " " 126a
4 " " 12	4 " " 35	2 " " 111c	1 " " 190
7 " " 12	26 " " 37		



**B90.**  
Windmill Pump

Parts required

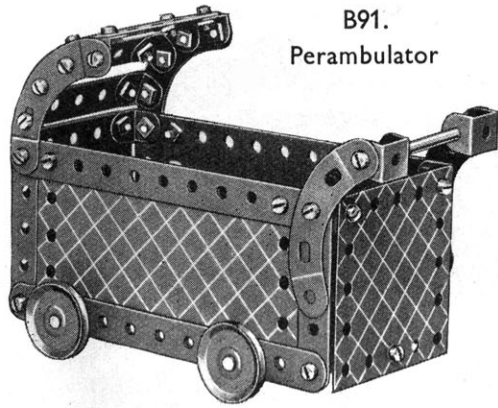
2 of No. 1
8 " " 5
2 " " 16
1 " " 19s
4 " " 22
1 " " 24
1 " " 35
20 " " 37
1 " " 40
2 " " 48a
1 " " 52
2 " " 126a
1 " " 186



**B85.**  
Easel and Board

Parts required

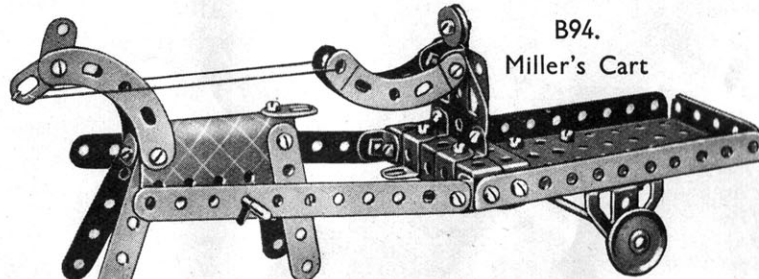
4 of No. 2
7 " " 5
1 " " 10
2 " " 12
1 " " 16
2 " " 22
20 " " 37
1 " " 40
2 " " 48a
1 " " 191



**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

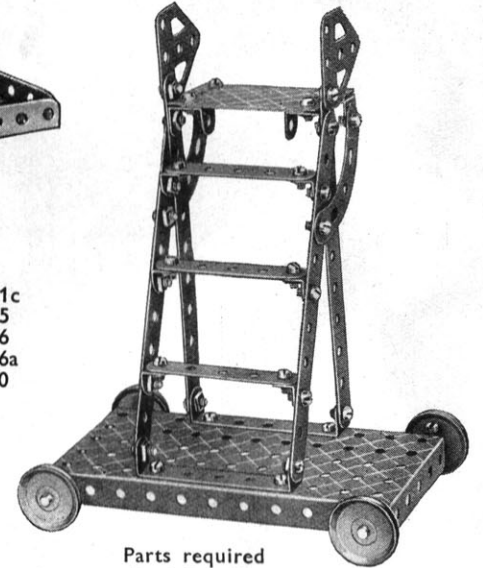


**B94.**  
Miller's Cart

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

**B97.** Step Ladder on Wheels



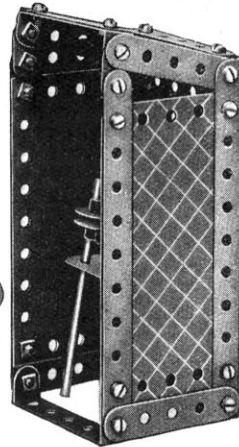
Parts required

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

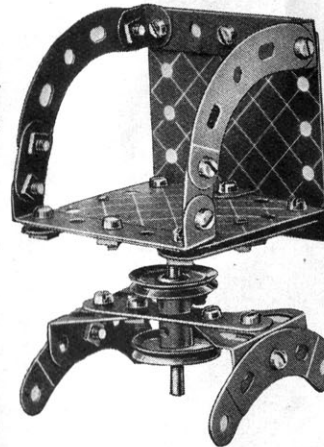
2	of No.	2	2	of No.	35	3	of No.	111c
9	" "	5	34	" "	37	2	" "	126
2	" "	10	3	" "	37a	2	" "	126a
6	" "	12	2	" "	48a	1	" "	188
1	" "	16	1	" "	52	1	" "	190
1	" "	23	4	" "	90a	2	" "	191



**B95.**  
Revolving Office Chair

Parts required

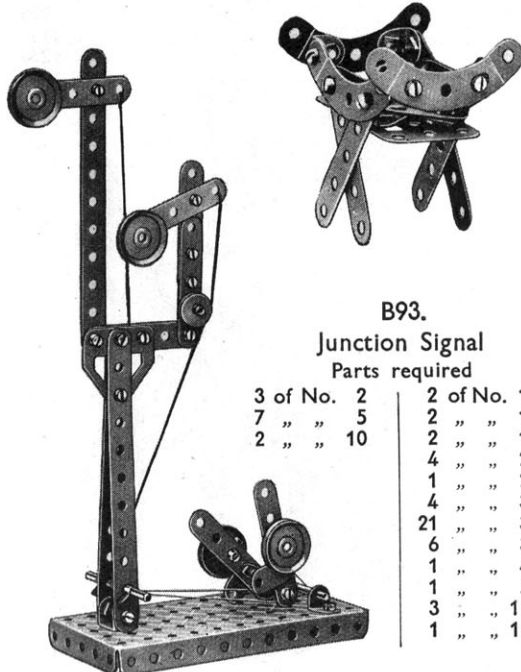
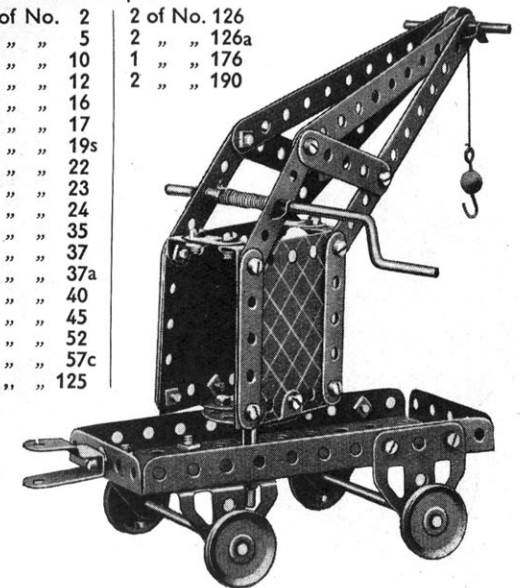
6	of No.	5
4	" "	10
3	" "	12
1	" "	17
2	" "	22
1	" "	24
26	" "	37
4	" "	37a
1	" "	48a
4	" "	90a
2	" "	126
2	" "	190



**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			

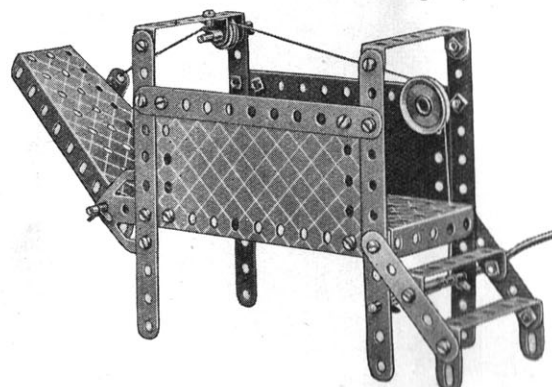


**B93.**  
Junction Signal

Parts required

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

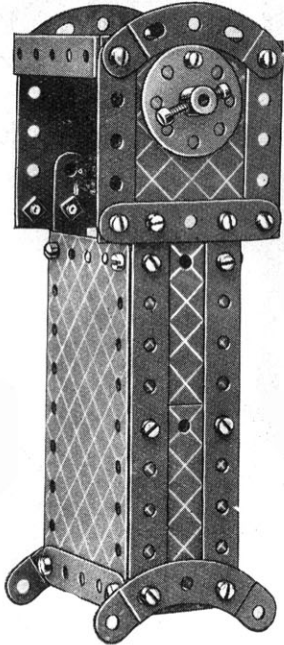
**B96.** Gangway



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

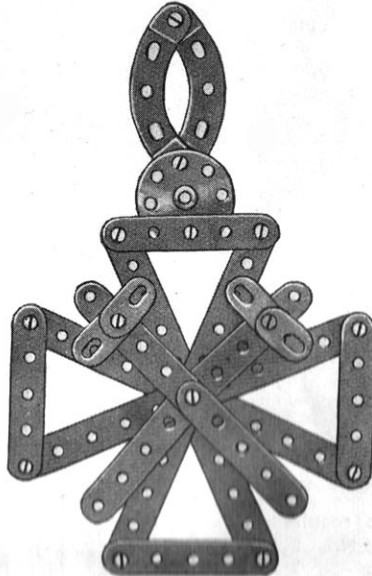
**B99. Grandfather Clock**



Parts required

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

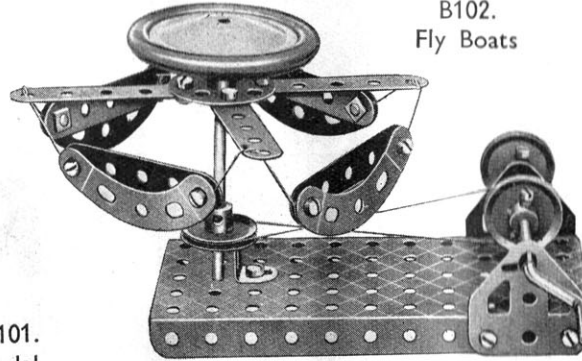
**B101. Medal**



Parts required

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

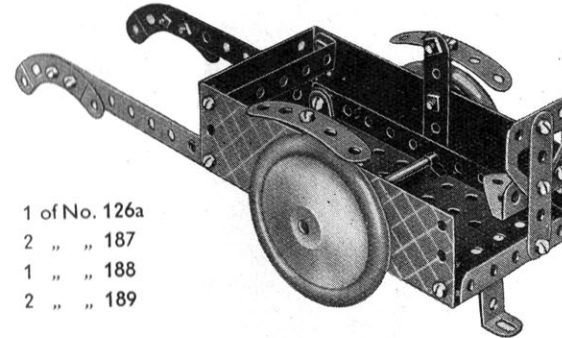
**B102. Fly Boats**



Parts required

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

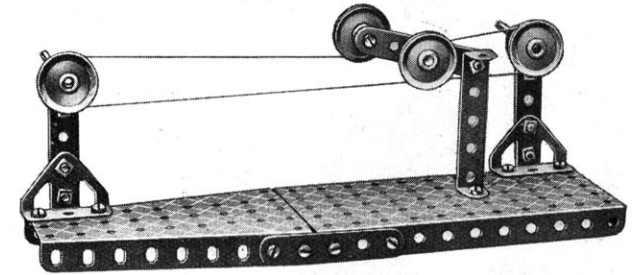
**B103. Milk Float**



Parts required

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

**B105. Jockey Pulley**

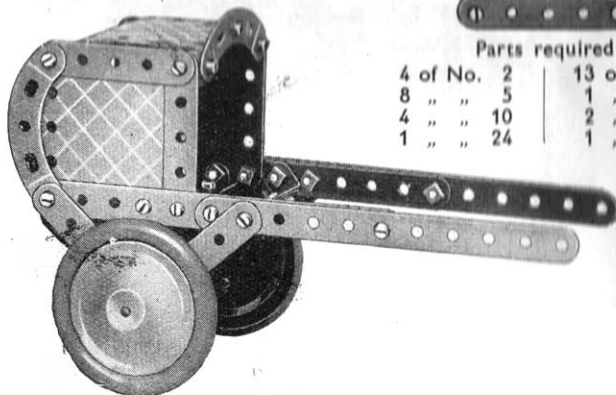


5	of No. 2	1	of No. 37a	1	of No. 54a
2	" " 17	1	" " 40	2	" " 111c
4	" " 22	1	" " 48a	2	" " 125
2	" " 35	1	" " 52	2	" " 126
20	" " 37				

**B100. Rickshaw**

Parts required

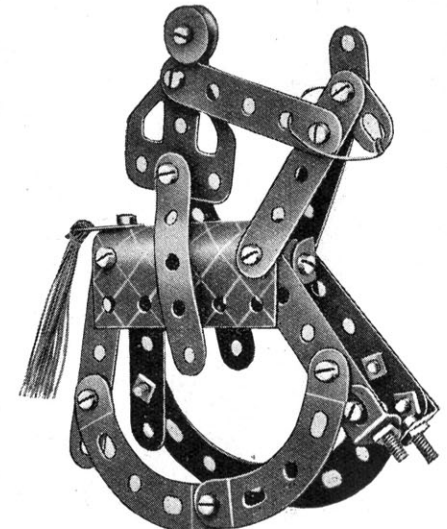
4	of No. 2	3	of No. 90a
9	" " 5	2	" " 126a
7	" " 12	2	" " 187
1	" " 15b	2	" " 190
31	" " 37	2	" " 191
2	" " 48a		



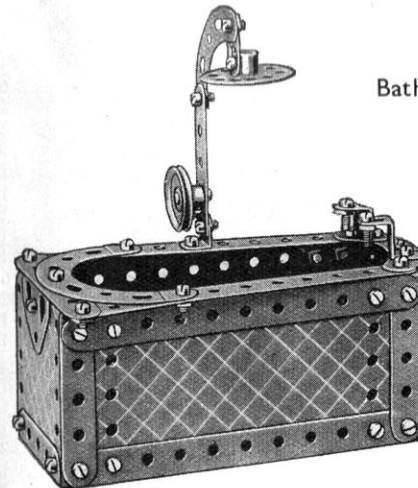
**B106. Rocking Horse**

Parts required

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



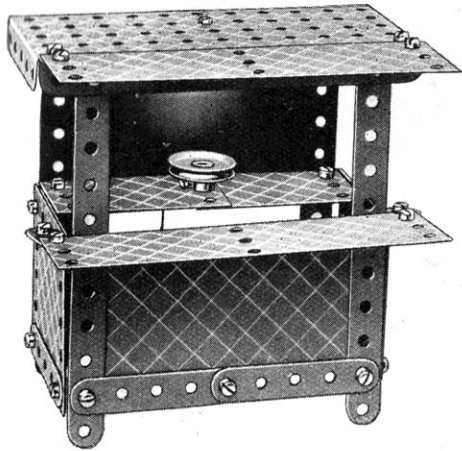
**B104. Bath with Shower**



Parts required

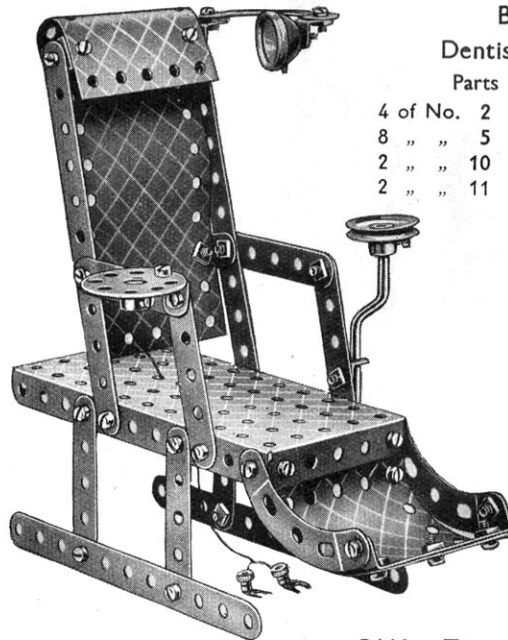
4	of No. 2
7	" " 5
1	" " 10
8	" " 12
1	" " 22
1	" " 23
1	" " 24
36	" " 37
4	" " 37a
1	" " 52
4	" " 90a
5	" " 111c
2	" " 125
1	" " 126
2	" " 190
2	" " 191

**B107.**  
Coffee Stall



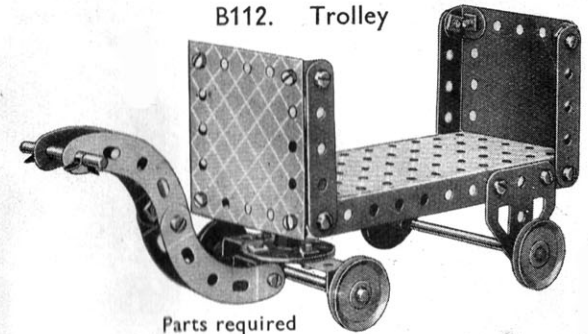
- Parts required
- 4 of No. 2
  - 8 " " 5
  - 4 " " 10
  - 8 " " 12
  - 1 " " 22
  - 35 " " 37
  - 2 " " 48a
  - 1 " " 52
  - 1 " " 111c
  - 2 " " 188
  - 2 " " 189
  - 2 " " 190
  - 2 " " 191
- Lighting Set

**B109.**  
Dentist's Chair



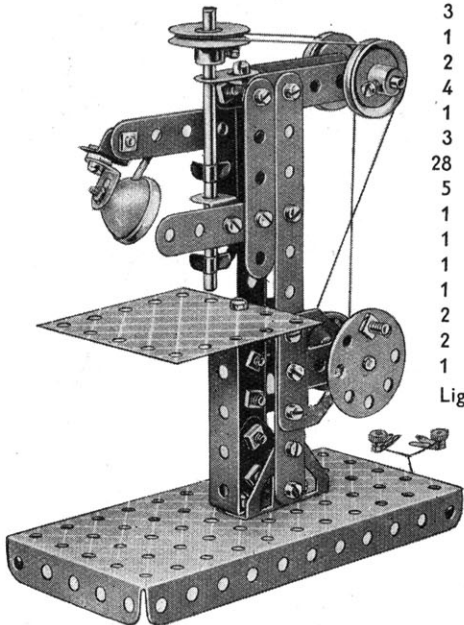
- Parts required
- |            |             |
|------------|-------------|
| 4 of No. 2 | 7 of No. 12 |
| 8 " " 5    | 1 " " 19s   |
| 2 " " 10   | 1 " " 22    |
| 2 " " 11   | 1 " " 24    |
|            | 3 " " 35    |
|            | 36 " " 37   |
|            | 6 " " 37a   |
|            | 1 " "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

**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   |

**B108.**  
Sensitive Drill

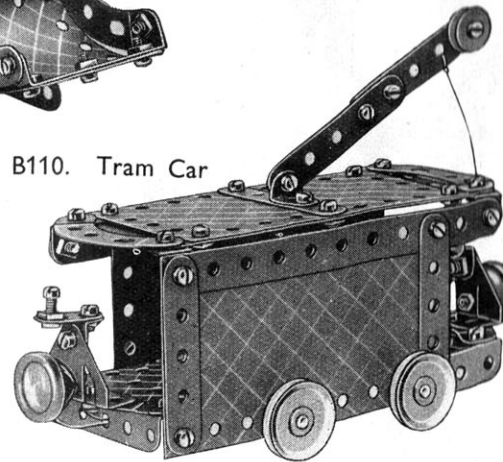


- Parts required
- 2 of No. 2
  - 6 " " 5
  - 2 " " 10
  - 2 " " 11
  - 3 " " 12
  - 1 " " 16
  - 2 " " 17
  - 4 " " 22
  - 1 " " 24
  - 3 " " 35
  - 28 " " 37
  - 5 " " 37a
  - 1 " " 40
  - 1 " " 48a
  - 1 " " 52
  - 1 " " 111c
  - 2 " " 126
  - 2 " " 126a
  - 1 " " 190
- Lighting Set

Parts required

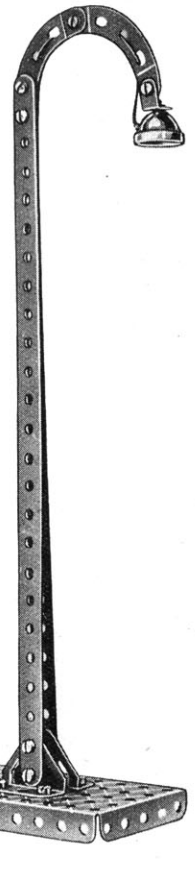
- |            |             |
|------------|-------------|
| 4 of No. 2 | 1 of No. 40 |
| 2 " " 10   | 2 " " 48a   |
| 2 " " 11   | 1 " " 52    |
| 3 " " 12   | 4 " " 90a   |
| 2 " " 16   | 3 " " 111c  |
| 4 " " 22   | 2 " " 126   |
| 1 " " 23   | 2 " " 190   |
| 34 " " 37  | 2 " " 191   |
| 6 " " 37a  |             |
- Lighting Set

**B110. Tram Car**

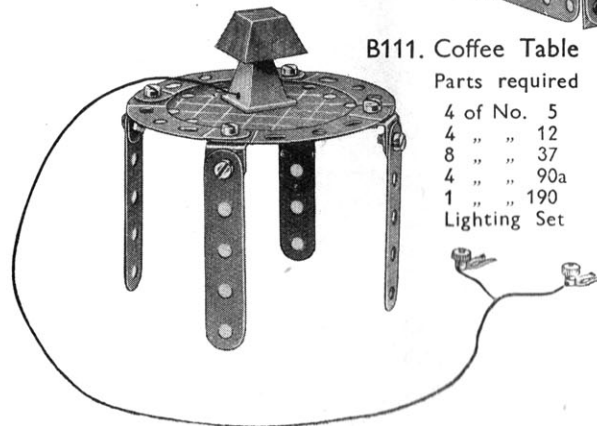


**B113.**  
Arc Lamp

- Parts required
- 2 of No. 1
  - 12 " " 37
  - 1 " " 52
  - 2 " " 90a
  - 2 " " 126
- Lighting Set



**B111. Coffee Table**



- Parts required
- 4 of No. 5
  - 4 " " 12
  - 8 " " 37
  - 4 " " 90a
  - 1 " " 190
- Lighting Set

**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 spot lights, and a fancy lamp shade, the appearance and uses of which are shown on this page in models B107, B108, B109, B110, B111 and B113.

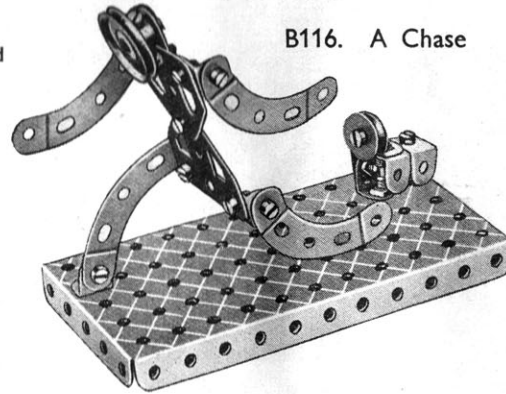
B114. Dressing Table



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

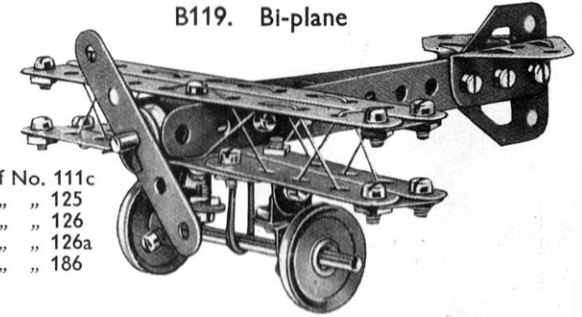
B116. A Chase



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

B119. Bi-plane



3 of No. 111c

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

B120. Sideboard



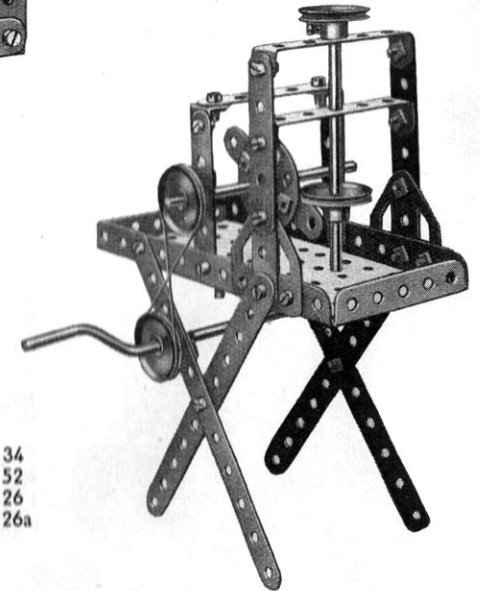
Parts required

2	of No.	2	3	of No.	22	1	of No.	52
5	" "	5	1	" "	24	3	" "	90a
8	" "	12	2	" "	35	2	" "	125
2	" "	17	28	" "	37	2	" "	190
			2	" "	37a	2	" "	191

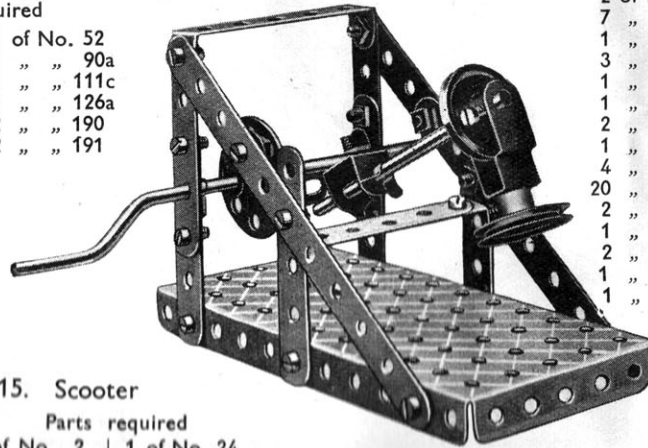
B121. Stamping Machine

Parts required

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



B117. Trip Hammer



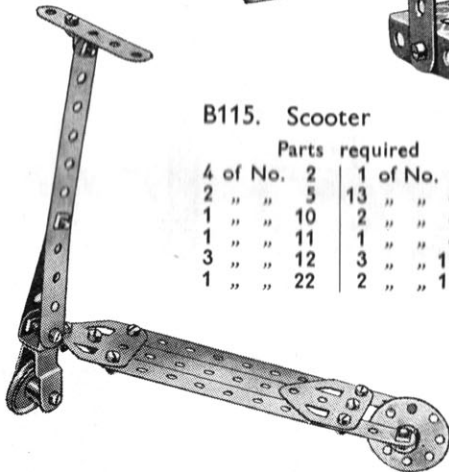
Parts required

2	of No.	2
7	" "	5
1	" "	11
3	" "	12
1	" "	16
1	" "	19s
2	" "	22
1	" "	24
4	" "	35
20	" "	37
2	" "	37a
1	" "	45
2	" "	48a
1	" "	52
1	" "	111c

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			

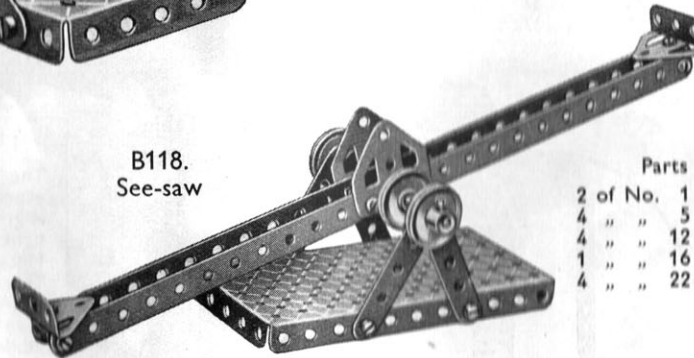
B115. Scooter



Parts required

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

B118. See-saw



Parts required

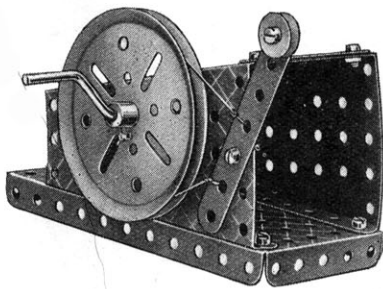
2	of No.	1	14	of No.	34
4	" "	5	1	" "	52
4	" "	12	2	" "	126
1	" "	16	2	" "	126a
4	" "	22			

HOW TO CONTINUE

This completes our examples of models that may be made with MECCANO Outfit B (or Outfits A and Aa). The next models are a little more advanced, requiring extra parts to construct them. The necessary parts are all contained in a Ba Accessory Outfit, the price of which may be obtained from any Meccano dealer.



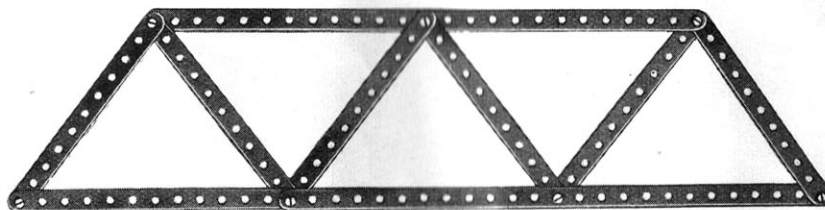
C1. Band Brake



Parts required

1	of No.	3
2	" "	5
1	" "	19s
1	" "	19b
1	" "	22
9	" "	23
1	" "	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

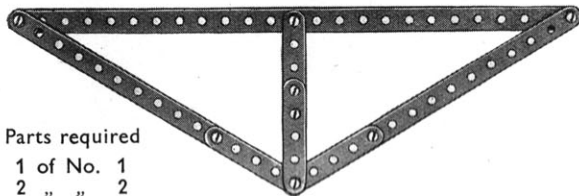
C7. Mounted Cowboy

Parts required

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



C2. Triangulated Truss



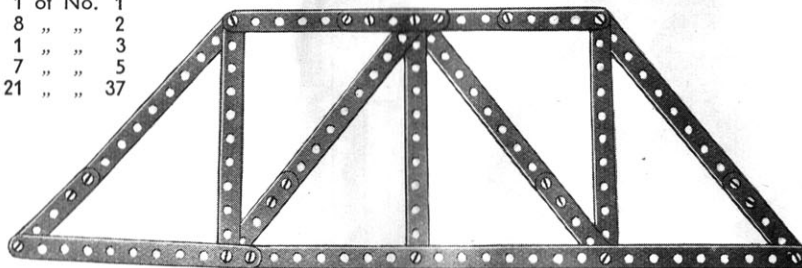
Parts required

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

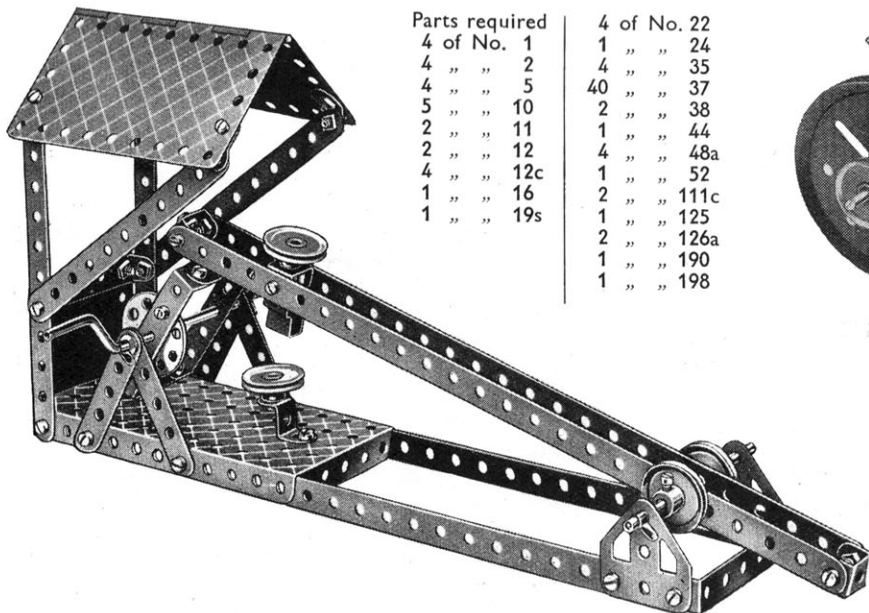
Parts required

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

C5. Howe Truss



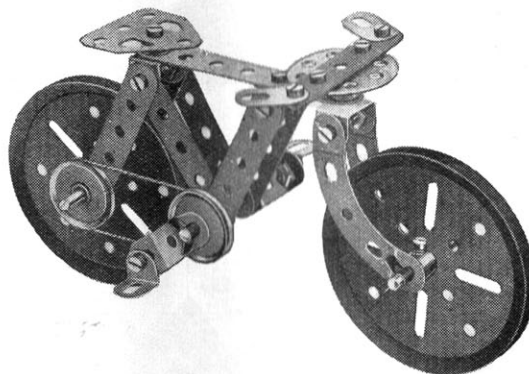
C3. Helve Hammer



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. Bicycle



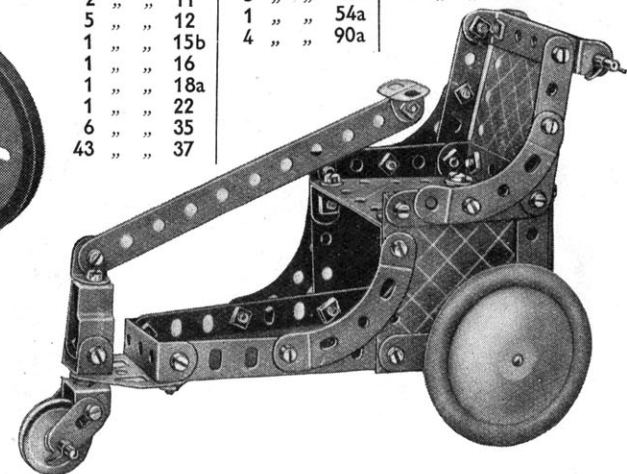
Parts required

1	of No.	3
2	" "	5
2	" "	10
2	" "	11
4	" "	12
1	" "	17
2	" "	18a
2	" "	19b
2	" "	22
1	of No.	24
4	" "	35
14	" "	37
4	" "	37a
3	" "	38
2	" "	90a
1	" "	111c
2	" "	125
1	" "	126a
1	" "	186

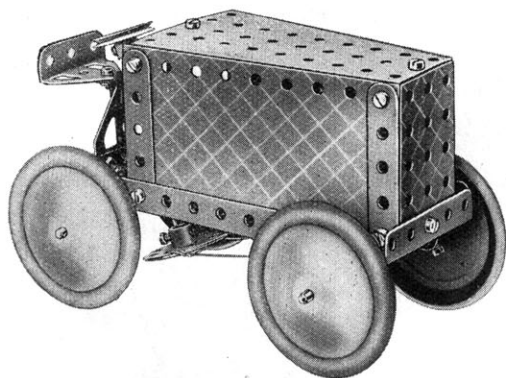
C8. Bath Chair

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. Motor Tractor



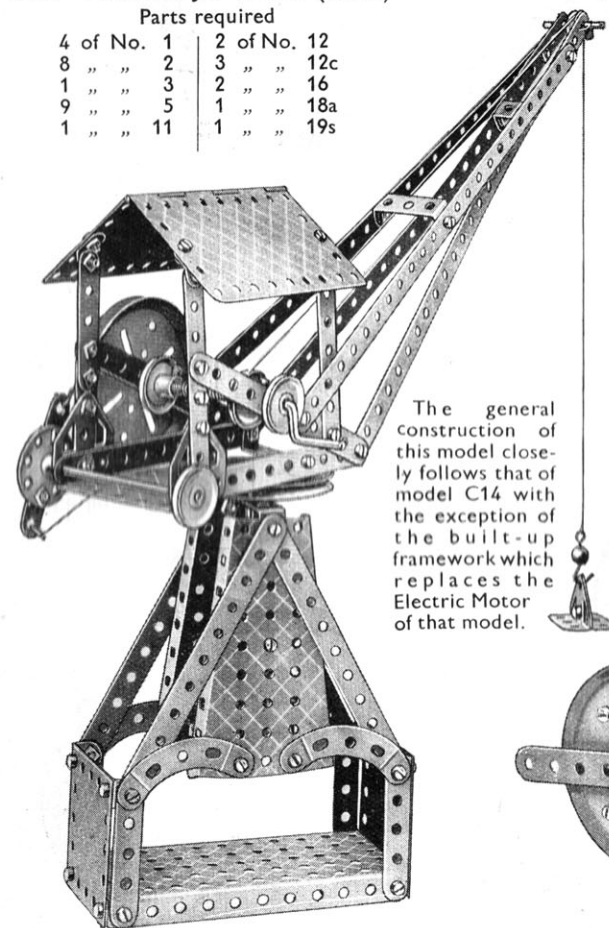
Parts required

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
2	" " 191

C10. 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

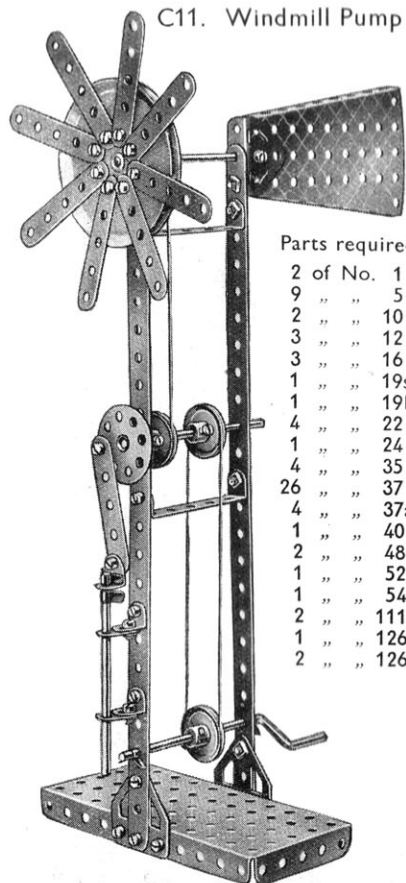


The general construction of this model closely follows that of model C14 with the exception of the built-up framework which replaces the Electric Motor of that model.

Parts required for C10 (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

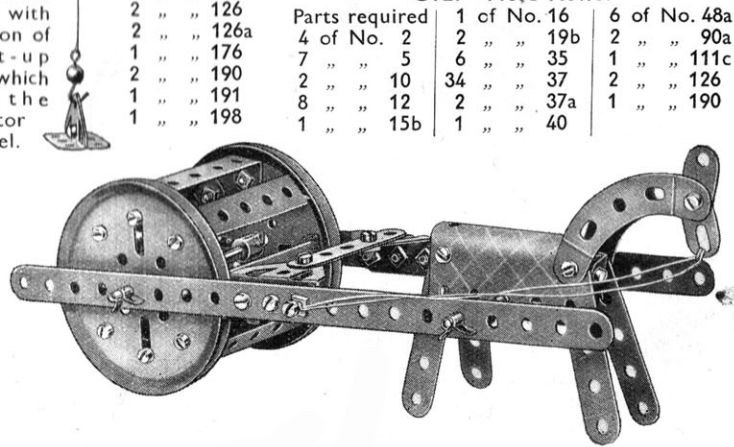
C11. Windmill Pump



Parts required

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

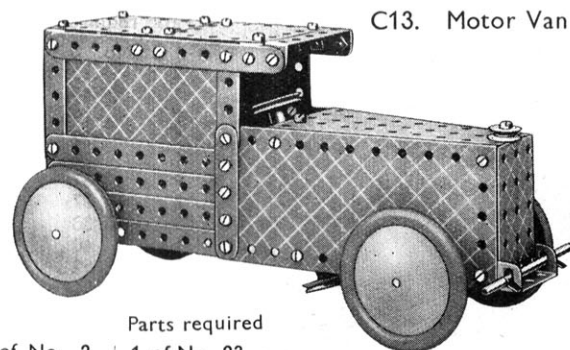
C12. Field Roller



Parts required

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

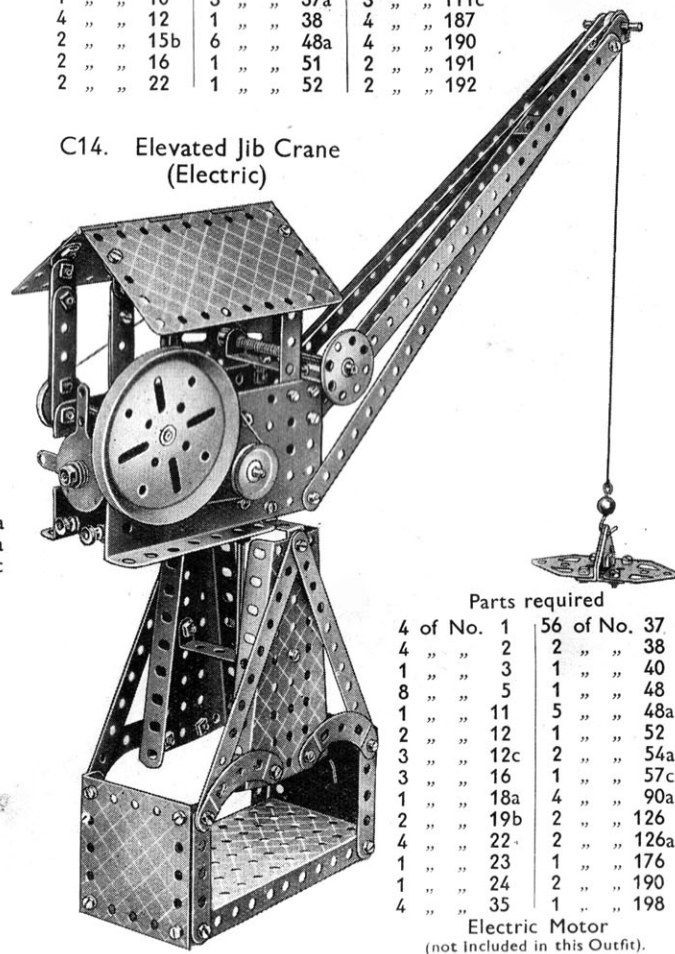
C13. Motor Van



Parts required

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

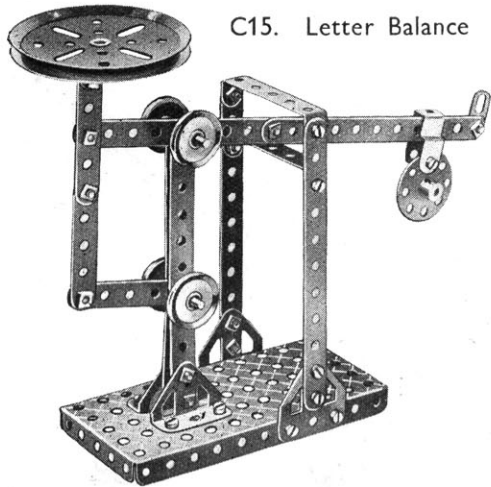
C14. Elevated Jib Crane (Electric)



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

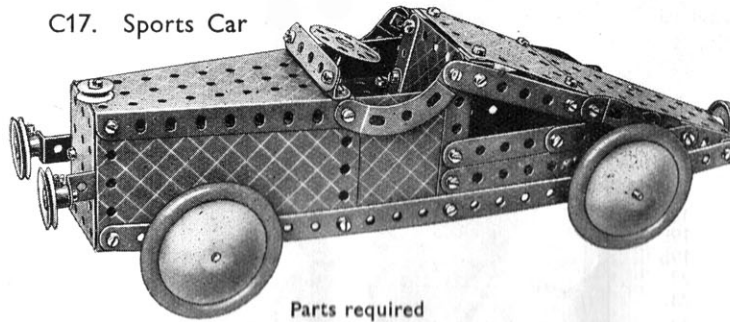
Electric Motor (not included in this Outfit).



C15. Letter Balance

Parts required

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



C17. Sports Car

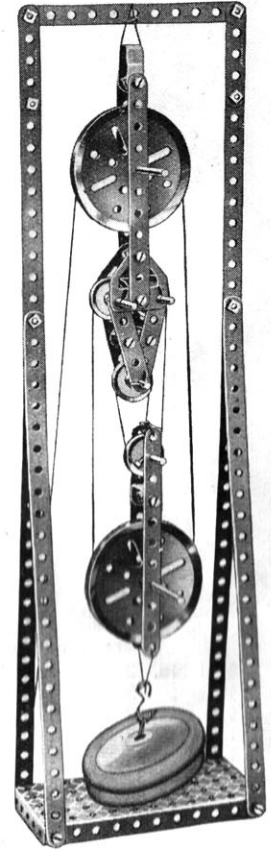
Parts required

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

C19. Pulley Block, 5:1

Parts required

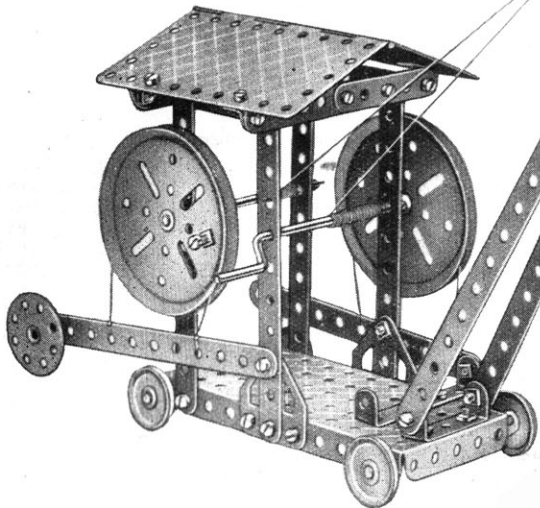
4	of No.	1
7	" "	2
6	" "	5
2	" "	11
2	" "	12
2	" "	16
2	" "	17
2	" "	18a
2	" "	19b
4	" "	22
6	" "	35
24	" "	37
2	" "	38
1	" "	40
1	" "	44
1	" "	52
1	" "	57c
2	" "	126a
2	" "	187



C16. Travelling Crane

Parts required

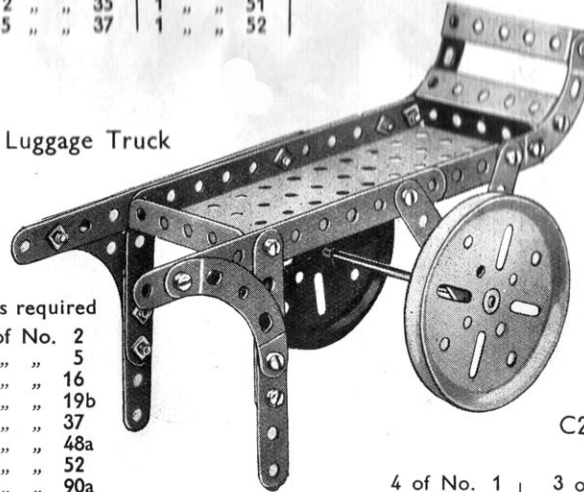
2	of No.	1	2	of No.	19b	1	of No.	48
6	" "	2	4	" "	22	1	" "	48a
6	" "	5	1	" "	23	1	" "	52
1	" "	11	1	" "	24	1	" "	57c
8	" "	12	3	" "	35	4	" "	111c
3	" "	16	34	" "	37	2	" "	126a
1	" "	18a	9	" "	37a	1	" "	176
1	" "	19s	1	" "	40	1	" "	198



C18. Luggage Truck

Parts required

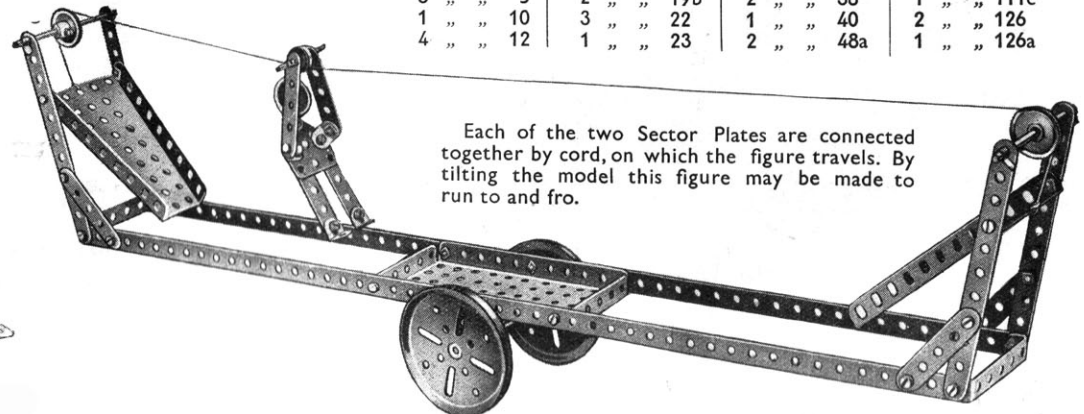
2	of No.	2
8	" "	5
1	" "	16
2	" "	19b
18	" "	37
2	" "	48a
1	" "	52
4	" "	90a



C20. Aerial Flight

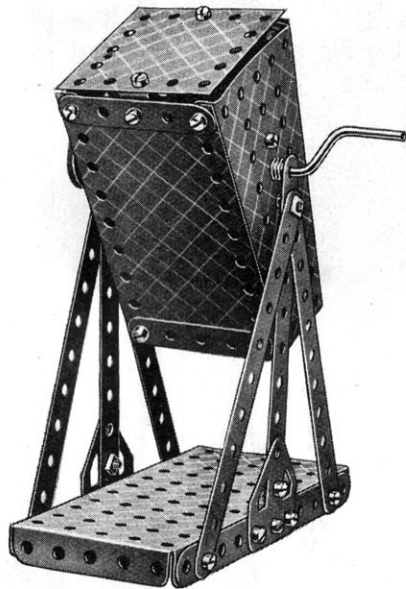
Parts required

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.

C21. Butter Churn



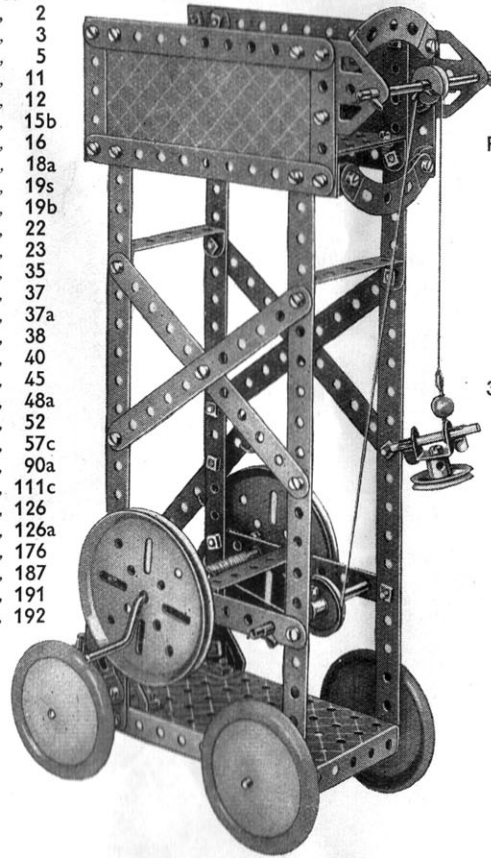
Parts required

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

Parts required

4 of No. 1
8 " " 2
1 " " 3
8 " " 5
1 " " 11
4 " " 12
2 " " 15b
2 " " 16
2 " " 18a
1 " " 19s
2 " " 19b
2 " " 22
1 " " 23
8 " " 35
52 " " 37
2 " " 37a
3 " " 38
1 " " 40
1 " " 45
5 " " 48a
1 " " 52
1 " " 57c
4 " " 90a
2 " " 111c
2 " " 126
2 " " 126a
1 " " 176
4 " " 187
1 " " 191
2 " " 192

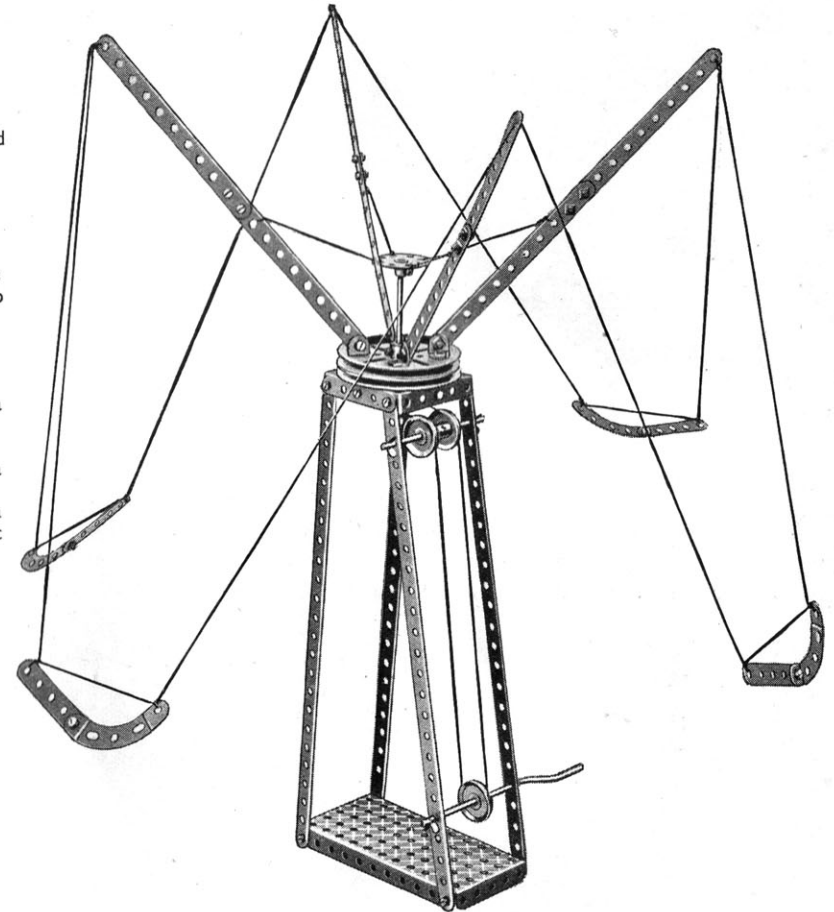
C22. Tower Wagon



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

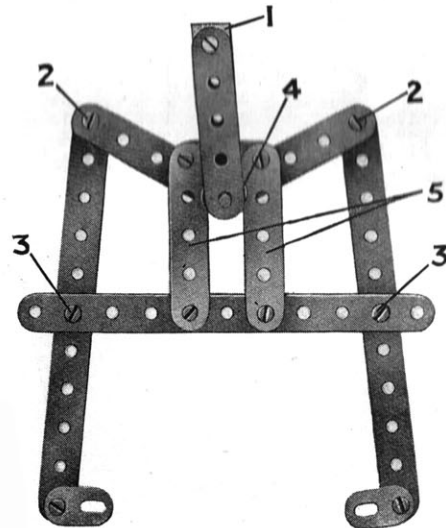
C24. Fly Boats



Parts required

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

C23. Friction Grip Tong

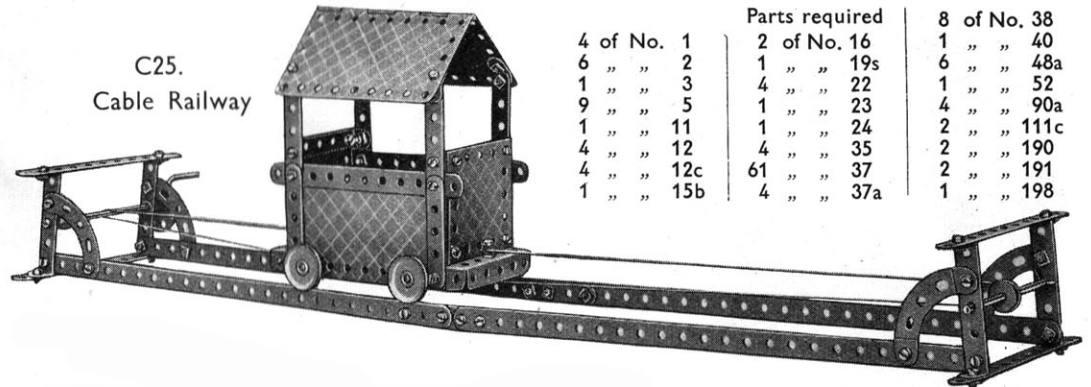


The hoisting cord is attached to the Double Bracket 1. The joints 2, 3 are lock-nutted, so that when the grip is raised the  $\frac{1}{2}$ " loose Pulley Wheel 4 slides upward between the  $2\frac{1}{2}$ " Strips 5, and the grip closes upon the block of wood or other material placed between its jaws.

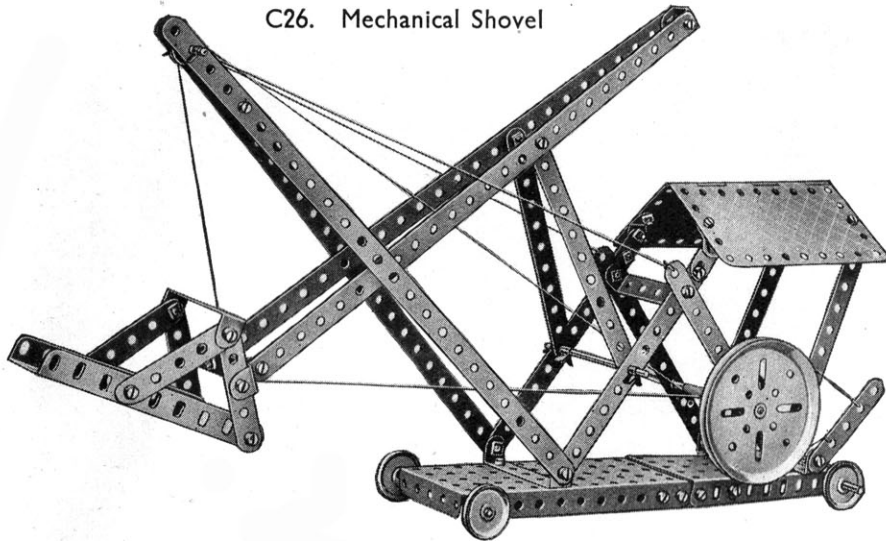
Parts required

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

C25. Cable Railway



C26. Mechanical Shovel

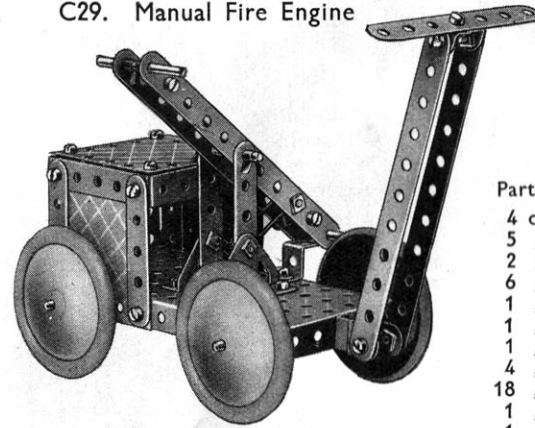


Parts required

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	" "	54a
2	" "	111c
1	" "	176
1	" "	198

The digging arm is carried on two pivotally attached 5½" Strips in order to give the bucket a direct vertical movement. The cord from the bucket is secured at its inner end to a Crank Handle that is controlled by the hand brake shown in the photograph.

C29. Manual Fire Engine



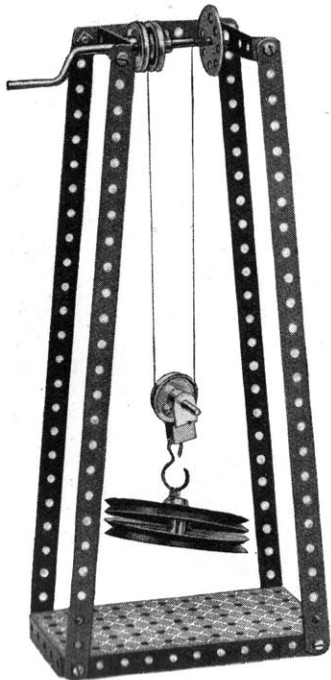
4	of No.	2
1	" "	3
8	" "	5
2	" "	11
6	" "	12
2	" "	15b
2	" "	17
1	of No.	18a
6	" "	35
34	" "	37
6	" "	37a
1	" "	38
1	" "	45
2	" "	48a
1	of No.	52
2	" "	111c
1	" "	125
2	" "	126
1	" "	186
4	" "	187
4	" "	190

C31. Telescope 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
1	" "	52
2	" "	126a
1	" "	176

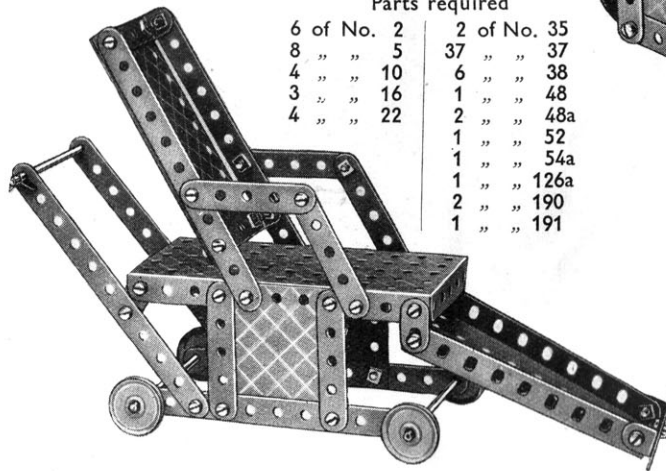
C27. Chinese Windlass



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

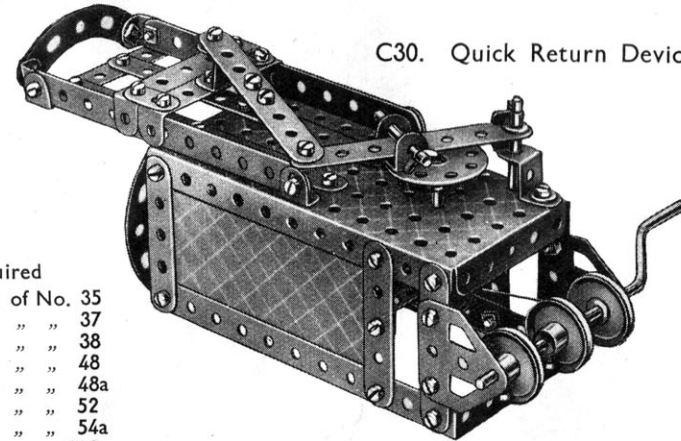
C28. Invalid Chair



Parts required

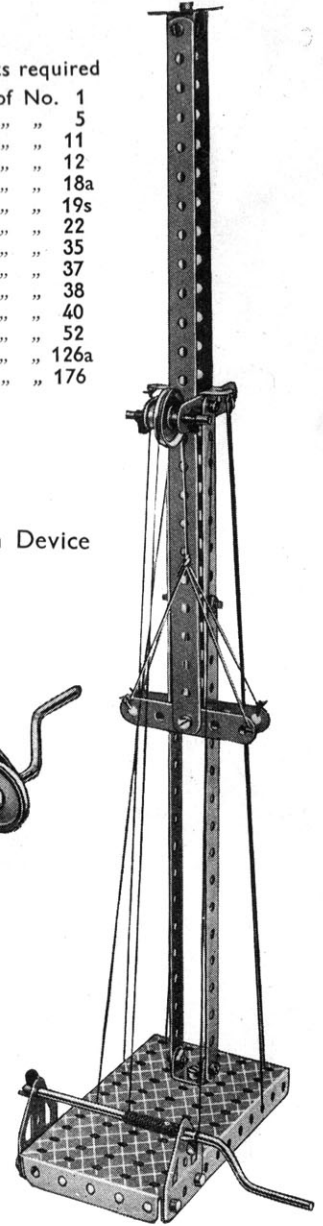
6	of No.	2
8	" "	5
4	" "	10
3	" "	16
4	" "	22
2	of No.	35
37	" "	37
6	" "	38
1	" "	48
2	" "	48a
1	" "	52
1	" "	54a
1	" "	126a
2	" "	190
1	" "	191

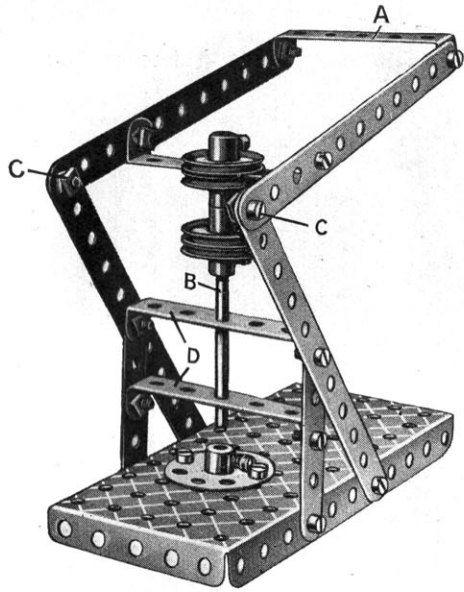
C30. Quick Return Device



Parts required

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





C32.  
Punching  
Machine

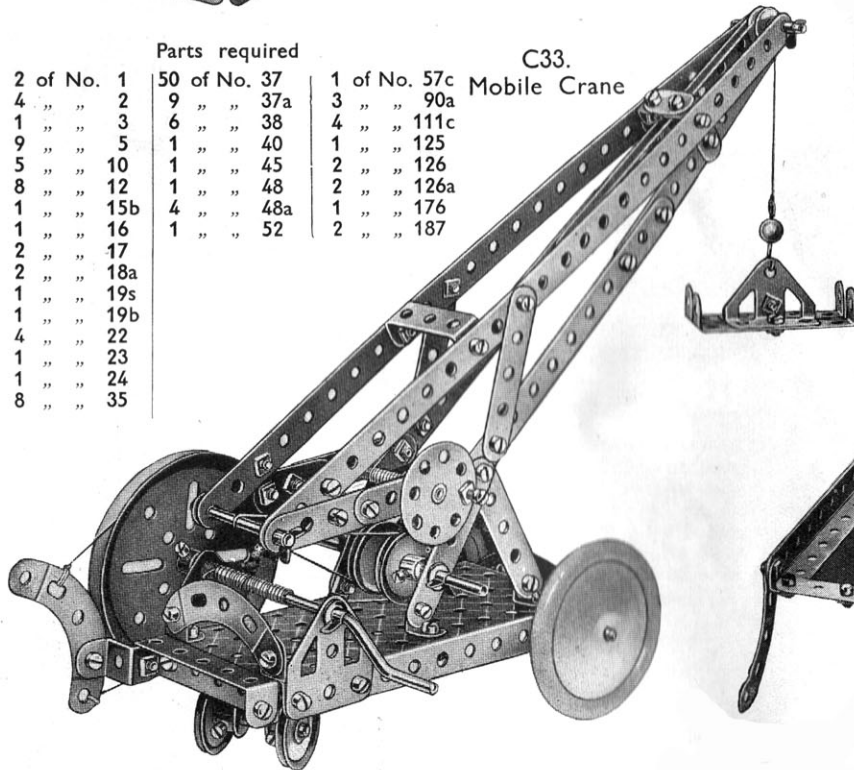
Parts required

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

The punch B, a 3½ in. Rod, slides vertically in two 2½ in. x ½ in. Double Angle Strips D. The operating handle A is locknutted at the points C.

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

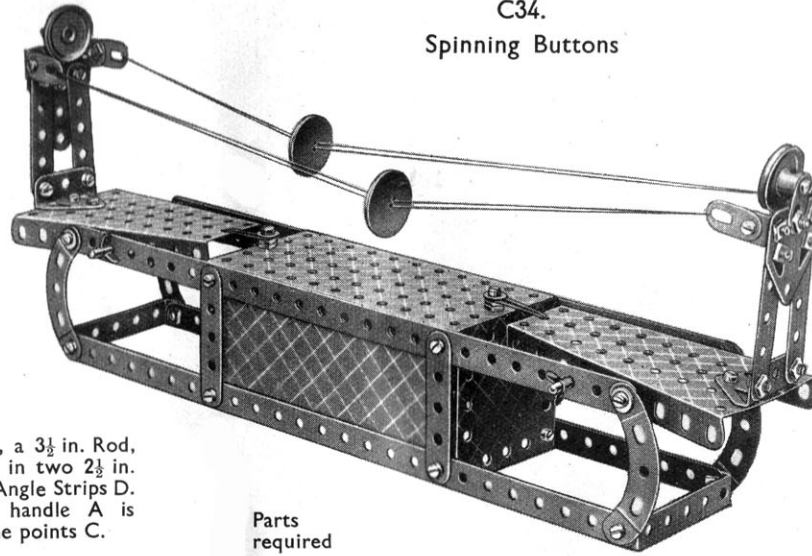
C33.  
Mobile Crane



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	" " 54	2	" " 192
4	" " 35				

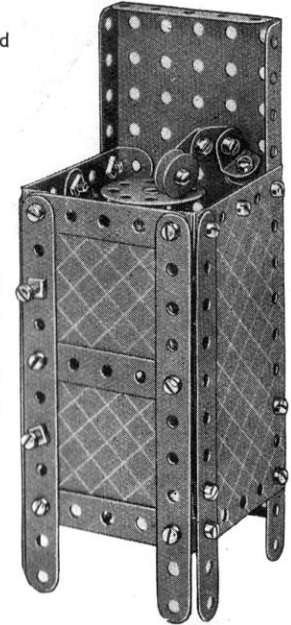
C34.  
Spinning Buttons



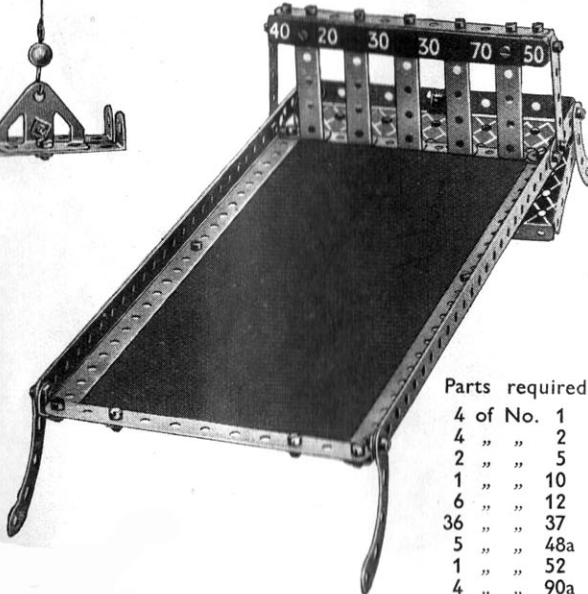
Parts required

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

C36.  
Gramophone



C35. Box Ball Alley



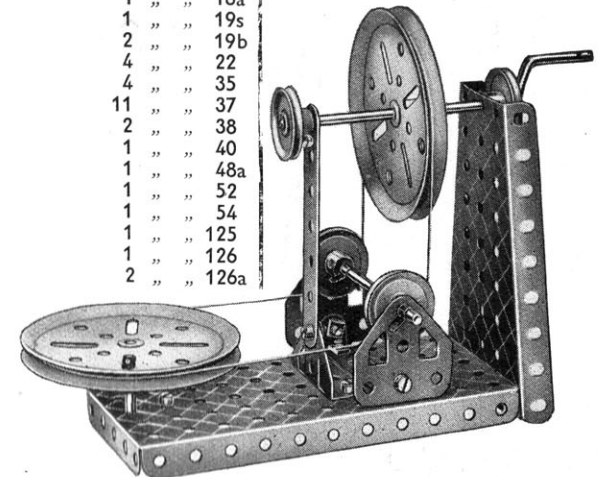
Parts required

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

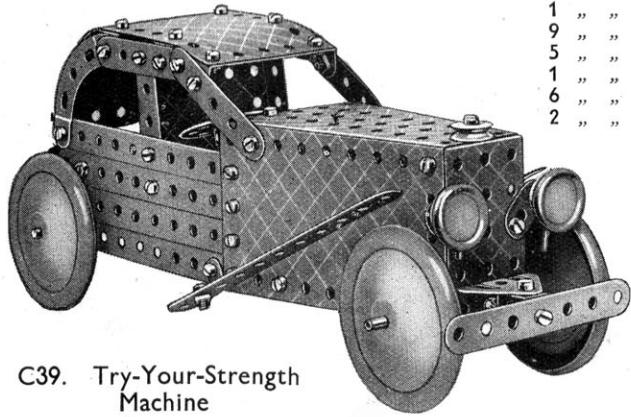
Parts required

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	" " 54
1	" " 125
1	" " 126
2	" " 126a

C37.  
Belt Gear

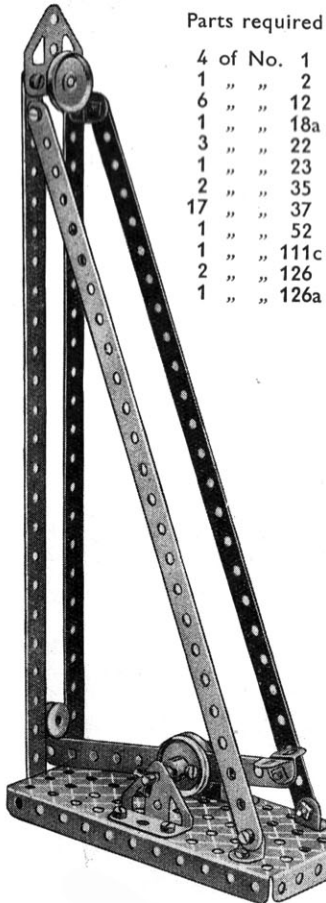


C38. Sports' Coupé



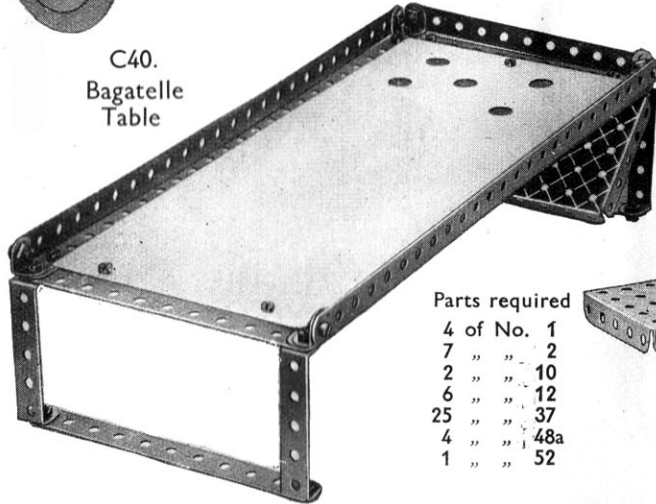
Parts required	1 of No. 17
8 of No. 2	2 " " 22
1 " " 3	66 " " 37
9 " " 5	4 " " 37a
5 " " 10	6 " " 48a
1 " " 11	1 " " 51
6 " " 12	1 " " 52
2 " " 15b	2 " " 54
	2 " " 90a
	6 " " 111c
	1 " " 125
	1 " " 126
	2 " " 126a
	4 " " 187
	2 " " 190
	2 " " 191
	1 " " 192
	Lighting Set (not included in Outfit)

C39. 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	

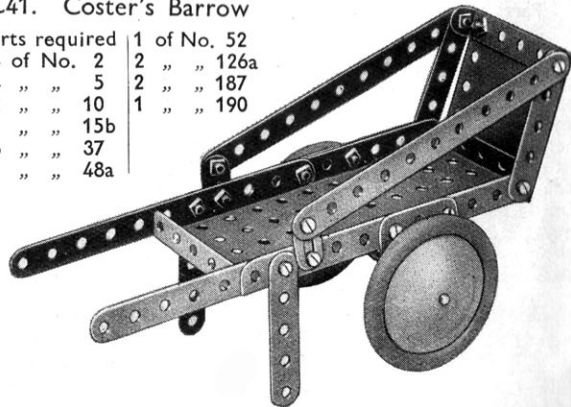
C40. Bagatelle Table



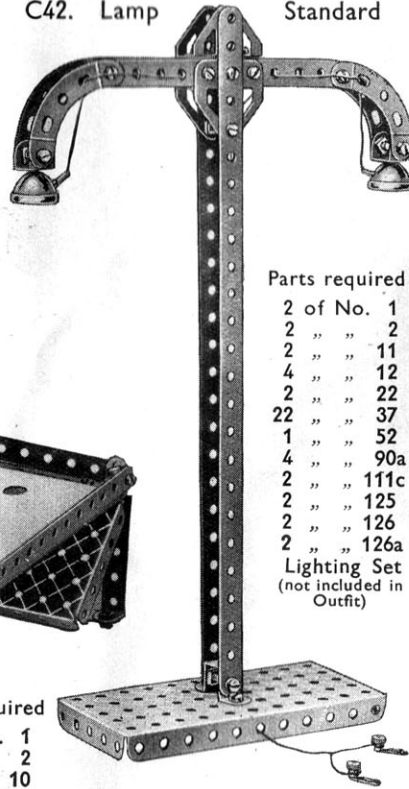
Parts required	4 of No. 1
7 " " 2	2 " " 10
6 " " 12	25 " " 37
4 " " 48a	1 " " 52

C41. 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	



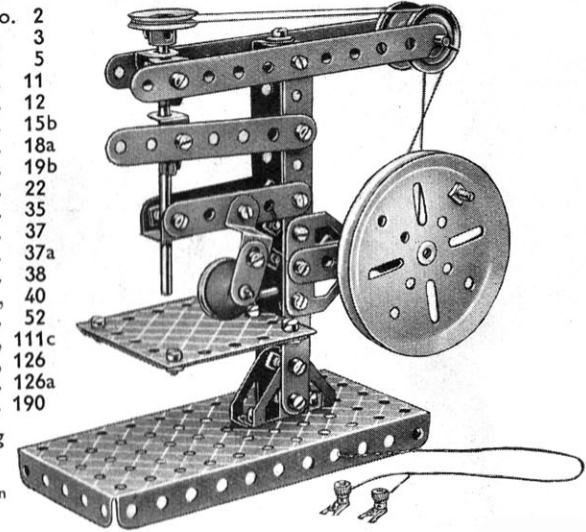
C42. Lamp Standard



Parts required	2 of No. 1
2 " " 2	2 " " 11
4 " " 12	2 " " 22
2 " " 22	22 " " 37
1 " " 52	4 " " 90a
2 " " 111c	2 " " 125
2 " " 126	2 " " 126a
Lighting Set (not included in Outfit)	

C43. Drill

Parts required	4 of No. 2
1 " " 3	9 " " 5
9 " " 5	2 " " 11
2 " " 11	8 " " 12
8 " " 12	1 " " 15b
1 " " 15b	2 " " 18a
2 " " 18a	1 " " 19b
1 " " 19b	4 " " 22
4 " " 22	5 " " 35
5 " " 35	33 " " 37
33 " " 37	3 " " 37a
3 " " 37a	5 " " 38
5 " " 38	1 " " 40
1 " " 40	1 " " 52
1 " " 52	2 " " 111c
2 " " 111c	2 " " 126
2 " " 126	2 " " 126a
2 " " 126a	1 " " 190



Lighting Set  
(not included in  
Outfit)

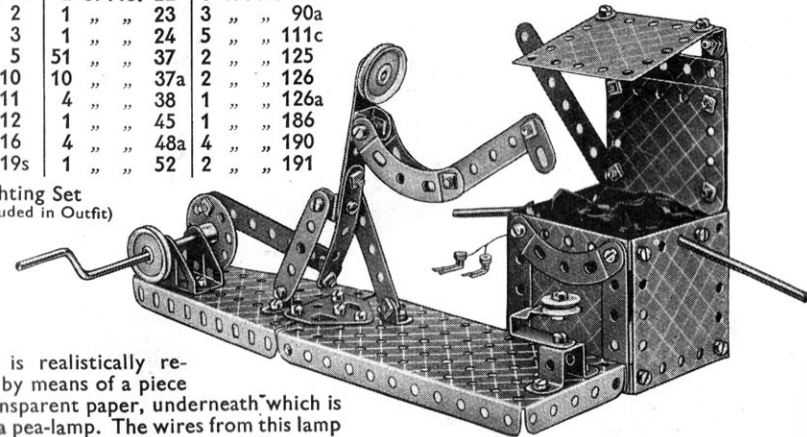
**MECCANO LIGHTING SET**

The appearance of many Meccano models, especially those built with Outfit A, B, C, may 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 spot lights, and a fancy lamp shade, the appearance and uses of which are shown in models C38, C42, C43 and C44.

C44. Blacksmith

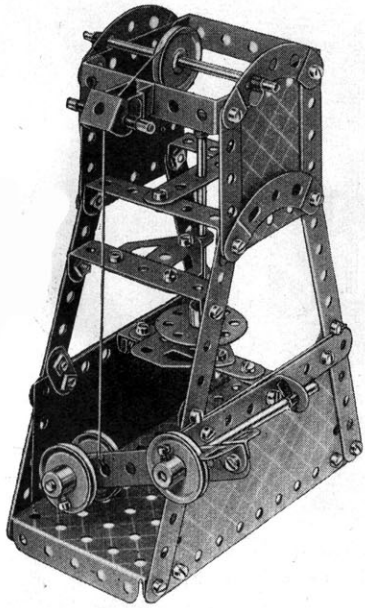
Parts required	2 of No. 22	1 of No. 54
3 of No. 2	1 " " 23	3 " " 90a
1 " " 3	1 " " 24	5 " " 111c
7 " " 5	51 " " 37	2 " " 125
2 " " 10	10 " " 37a	2 " " 126
2 " " 11	4 " " 38	1 " " 126a
7 " " 12	1 " " 45	1 " " 186
2 " " 16	4 " " 48a	4 " " 190
1 " " 19s	1 " " 52	2 " " 191

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.

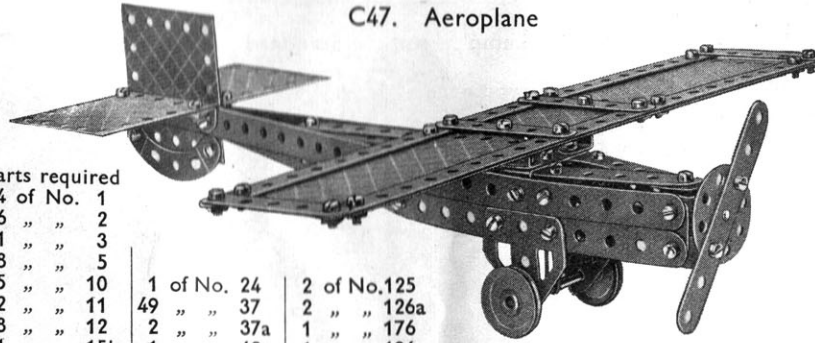
C45. Pneumatic Hammer



Parts required

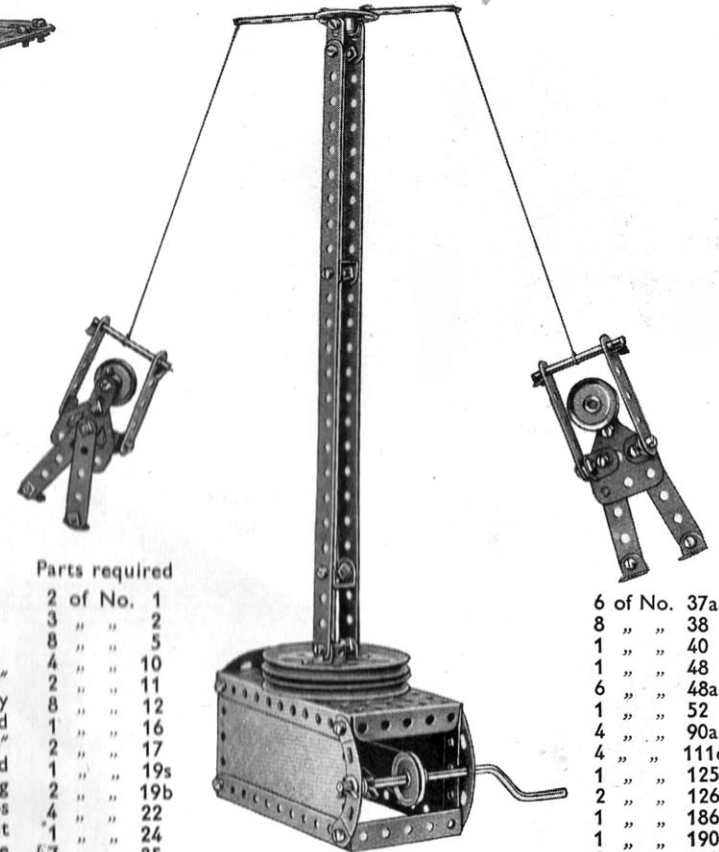
4 of No. 1
6 " " 2
1 " " 3
8 " " 5
5 " " 10
2 " " 11
8 " " 12
1 " " 15b
1 " " 17
2 " " 22

C47. Aeroplane



1 of No. 24	2 of No. 125
49 " " 37	2 " " 126a
2 " " 37a	1 " " 176
1 " " 48	1 " " 186
2 " " 90a	4 " " 190
2 " " 111c	2 " " 191

C49. Revolving Gymnasts



Parts required

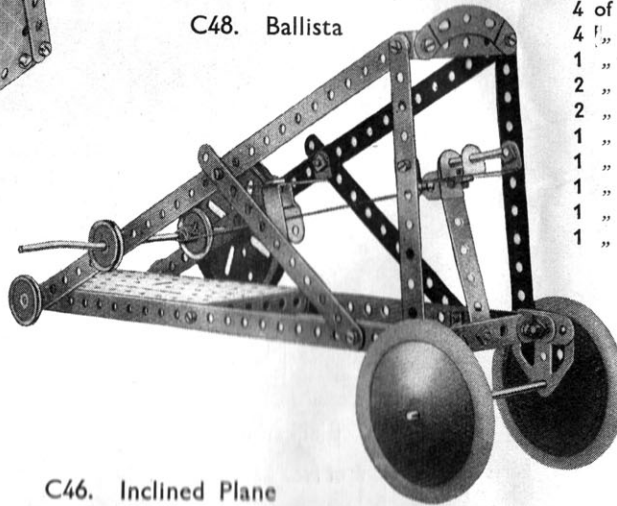
4 of No. 1	4 of No. 22
4 " " 2	1 " " 37
1 " " 3	1 " " 40
2 " " 11	21 " " 45
2 " " 12	4 " " 48a
1 " " 15b	1 " " 52
1 " " 16	1 " " 90a
1 " " 17	2 " " 126a
1 " " 19s	1 " " 176
1 " " 19b	2 " " 187

Parts required

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

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

C48. Ballista

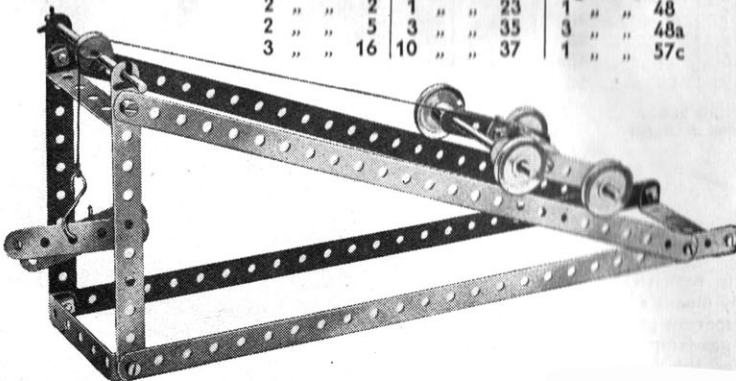


The "bolt," a 1 1/2" Rod, is carried loosely in a Double Bracket and is projected by a 3 1/2" Strip, bent backward until the retaining Double Bracket slips off the end, allowing it to strike one end of the "bolt."

Parts required

4 of No. 2	39 of No. 37
1 " " 3	8 " " 38
9 " " 5	1 " " 40
5 " " 10	1 " " 45
1 " " 11	6 " " 48a
4 " " 12	1 " " 52
3 " " 16	4 " " 90a
2 " " 18a	2 " " 126a
4 " " 22	1 " " 176
1 " " 23	2 " " 190
1 " " 24	2 " " 191
6 " " 35	

C46. Inclined Plane



Parts required

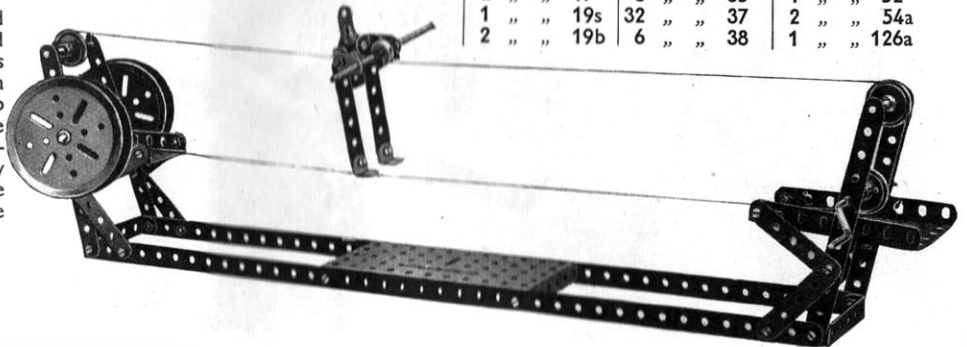
4 of No. 1	4 of No. 22	1 of No. 40
2 " " 2	1 " " 23	1 " " 48
2 " " 5	3 " " 35	3 " " 48a
3 " " 16	10 " " 37	1 " " 57c

C50. Tight-rope Walker

Parts required

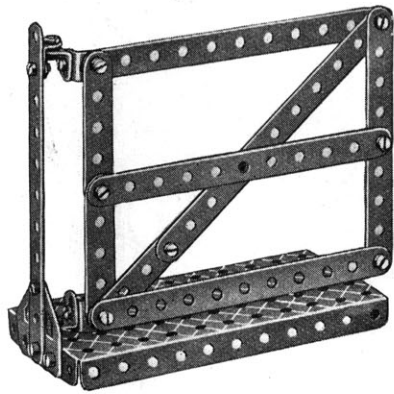
4 of No. 1	4 of No. 2	9 of No. 5	4 of No. 12	4 of No. 22	1 of No. 40
1 " " 3	1 " " 3	3 " " 10	2 " " 16	1 " " 23	2 " " 48a
			2 " " 17	8 " " 35	1 " " 52
			1 " " 19s	32 " " 37	2 " " 54a
			2 " " 19b	6 " " 38	1 " " 126a

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.





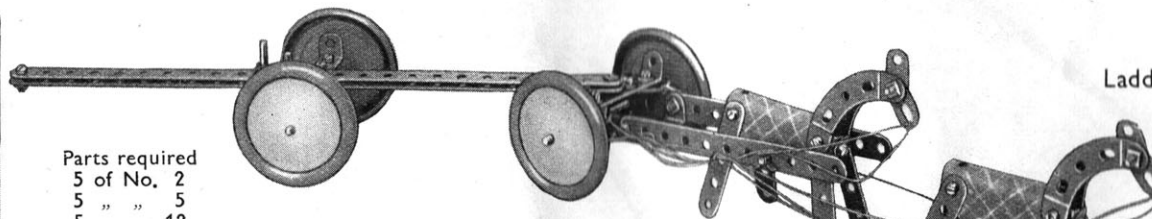
C51. Gate



Parts required

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

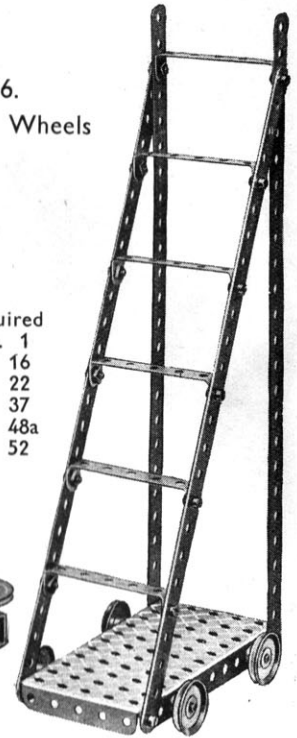
C53. Timber Drag



Parts required

2	of No. 1	8	of No. 12	3	of No. 37a
2	" " 2	2	" " 15b	8	" " 38
8	" " 5	2	" " 17	1	" " 40
4	" " 10	8	" " 18a	1	" " 48
2	" " 11	8	" " 35	3	" " 48a
		27	" " 37	4	" " 90a

C56. Ladder on Wheels



Parts required

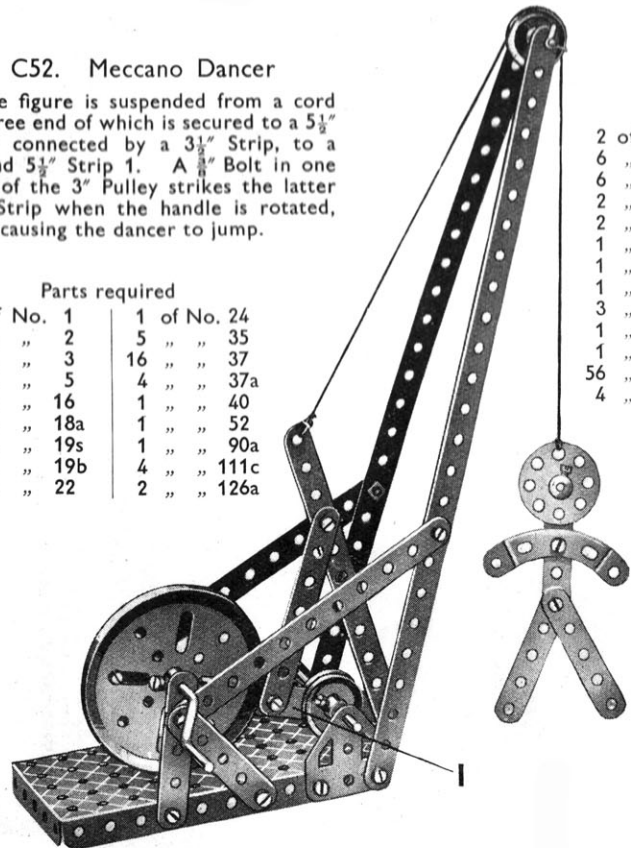
4	of No. 1
2	" " 16
4	" " 22
16	" " 37
6	" " 48a
1	" " 52

C52. Meccano Dancer

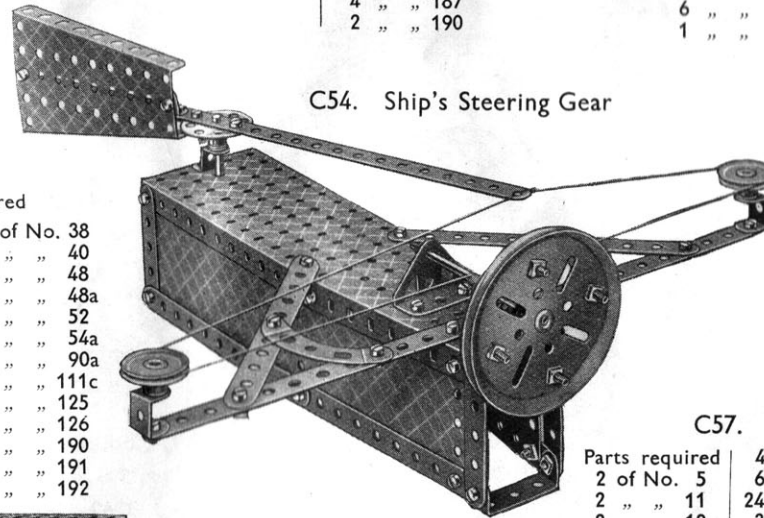
The figure is suspended from a cord the free end of which is secured to a 5 1/2" Strip connected by a 3 1/2" Strip, to a second 5 1/2" Strip 1. A 1/2" Bolt in one hole of the 3" Pulley strikes the latter 5 1/2" Strip when the handle is rotated, thus causing the dancer to jump.

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



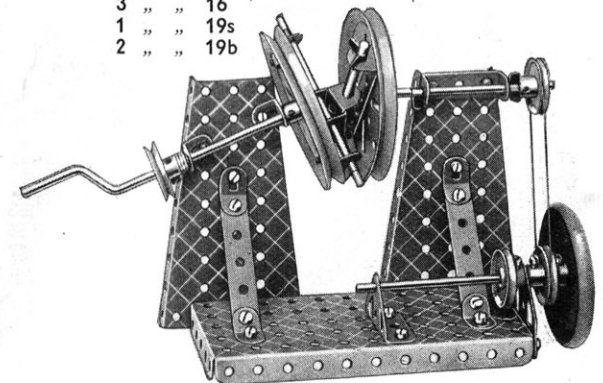
C54. Ship's Steering Gear



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

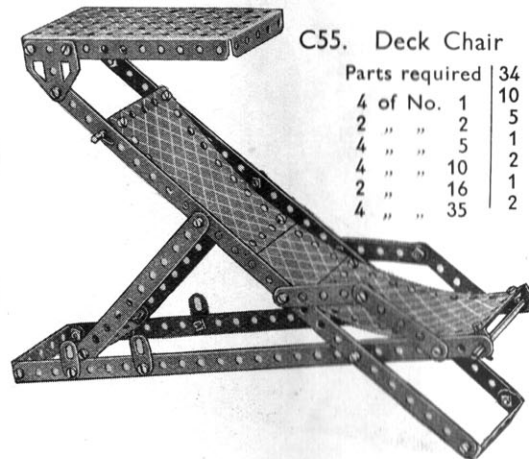
C57. Hooke's Coupling



Parts required

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

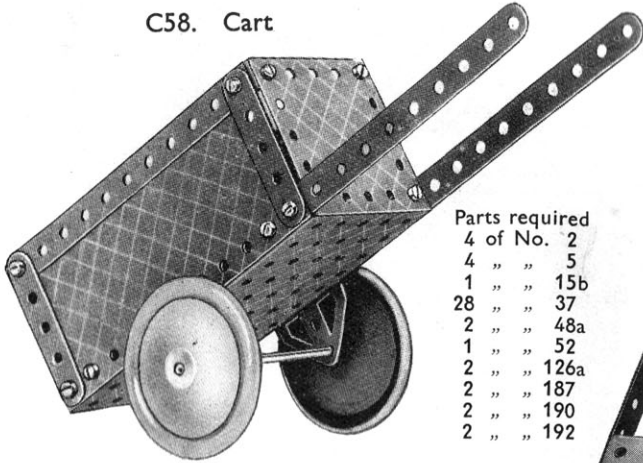
C55. Deck Chair



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

C58. Cart



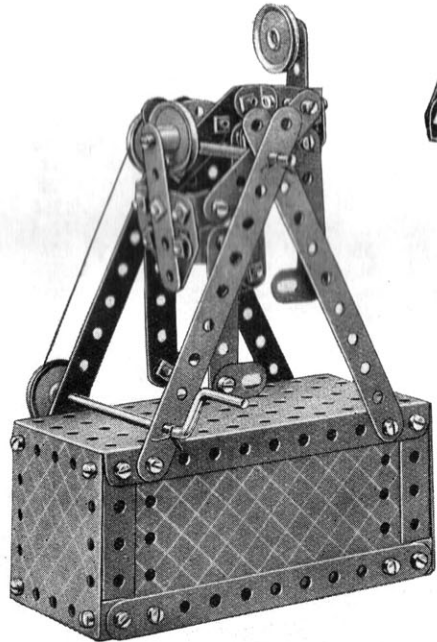
Parts required

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

C59. Wrestlers

Parts required

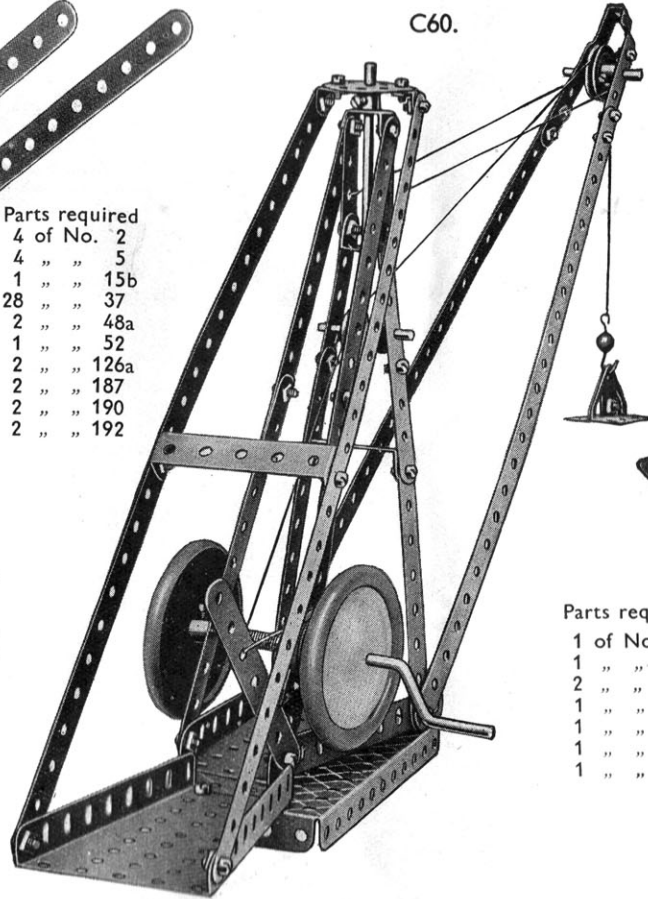
6 of No. 2	4 of No. 22	6 of No. 48a
8 " " 5	1 " " 24	1 " " 52
4 " " 10	2 " " 35	6 " " 111c
8 " " 12	44 " " 37	2 " " 126a
1 " " 16	12 " " 37a	2 " " 190
1 " " 19s	6 " " 38	2 " " 191
	1 " " 40	2 " " 191



Parts required

4 of No. 1	2 of No. 37a	2 of No. 126
6 " " 2	1 " " 40	1 " " 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		

C60.



Jib Crane

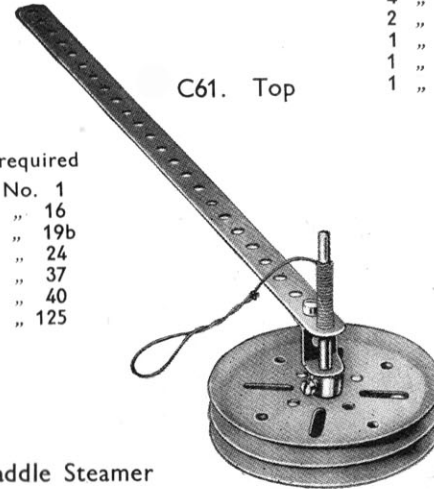
Parts required

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

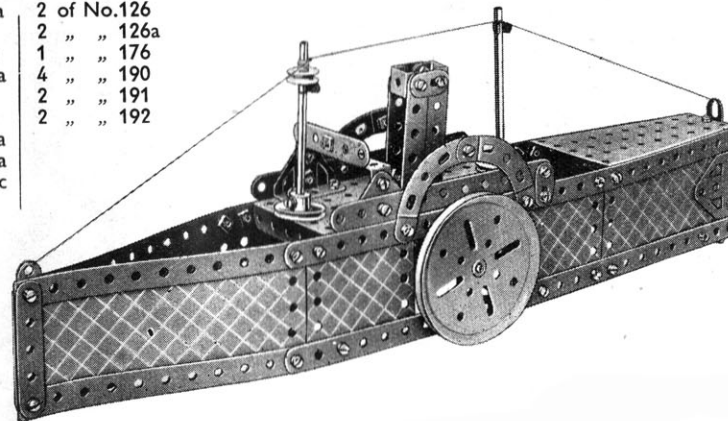
Parts required

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

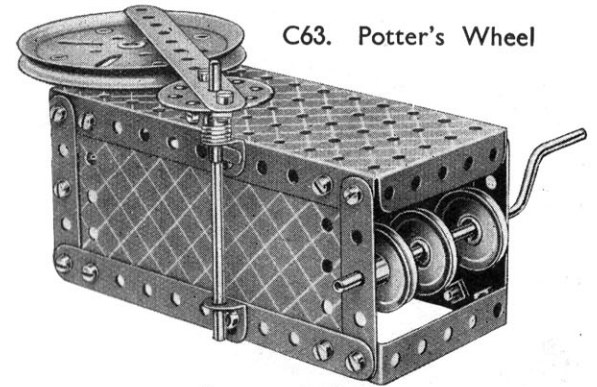
C61. Top



C62. Paddle Steamer



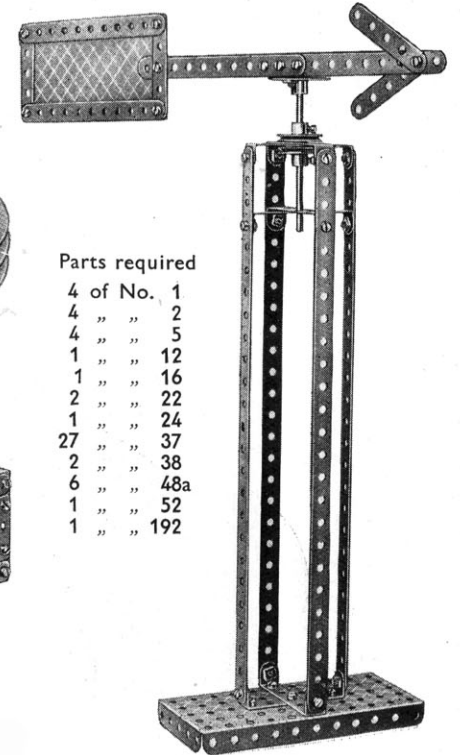
C63. Potter's Wheel



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	

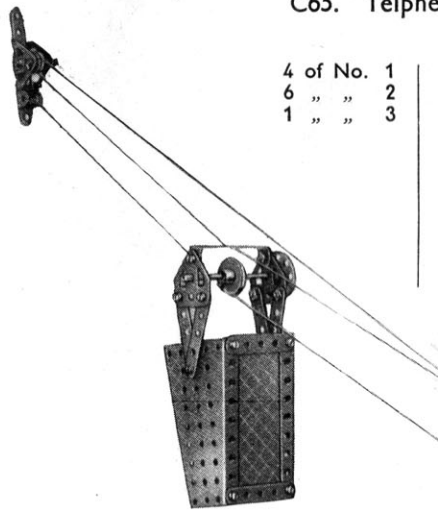
C64. Weather Vane



Parts required

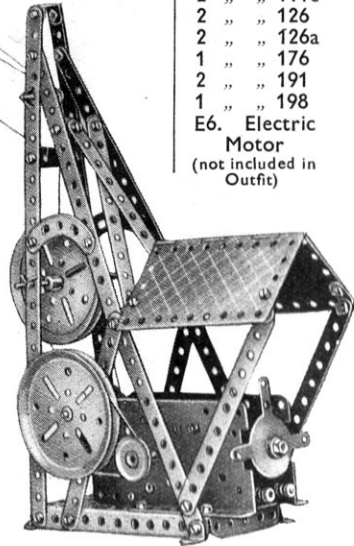
4 of No. 1
4 " " 2
4 " " 5
1 " " 12
1 " " 16
2 " " 22
1 " " 24
27 " " 37
2 " " 38
6 " " 48a
1 " " 52
1 " " 192

**C65. Telfer Span (Electric)**

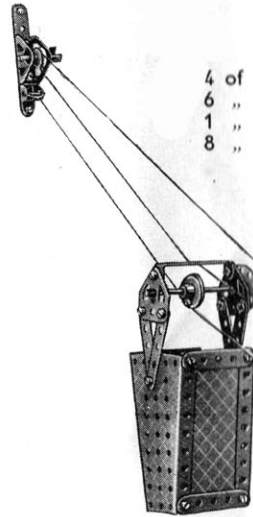


Parts required		
4 of No. 1	8 of No. 5	1 of No. 24
6 " " 2	2 " " 11	8 " " 35
1 " " 3	8 " " 12	61 " " 37
	2 " " 12c	4 " " 37a
	3 " " 16	7 " " 38
	1 " " 17	1 " " 40
	1 " " 18a	1 " " 48
	2 " " 19b	3 " " 48a
	4 " " 22	1 " " 52
	1 " " 23	2 " " 54a
		2 " " 90a
		2 " " 111c
		2 " " 126
		2 " " 126a
		1 " " 176
		2 " " 191
		1 " " 198
		<b>E6. Electric Motor</b>
		(not included in Outfit)

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.

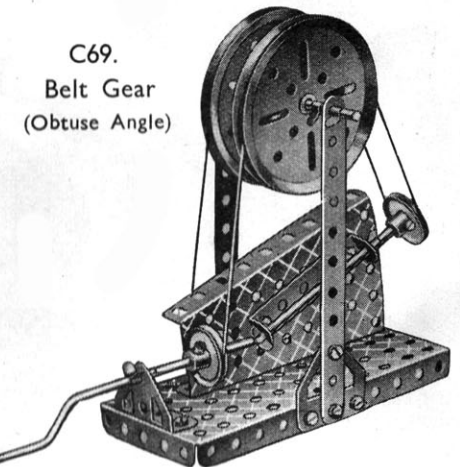
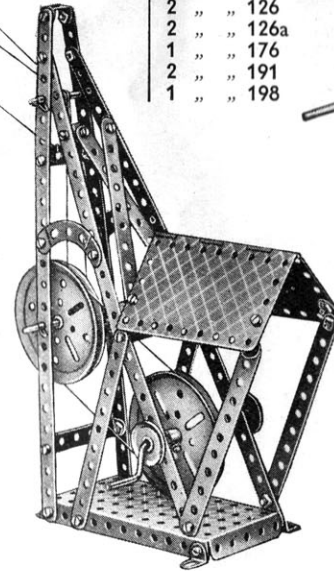


**C67. Telfer Span (Hand)**



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

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



**C69. Belt Gear (Obtuse Angle)**

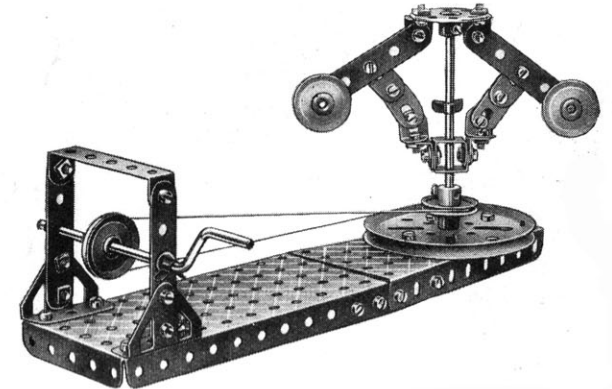
Parts required

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

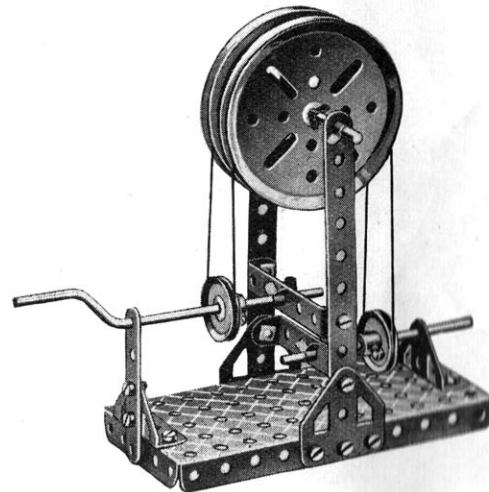
**C70. Centrifugal Governor**

Parts required

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



**C68. Belt Gear (Shafts not in Line)**



Parts required

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

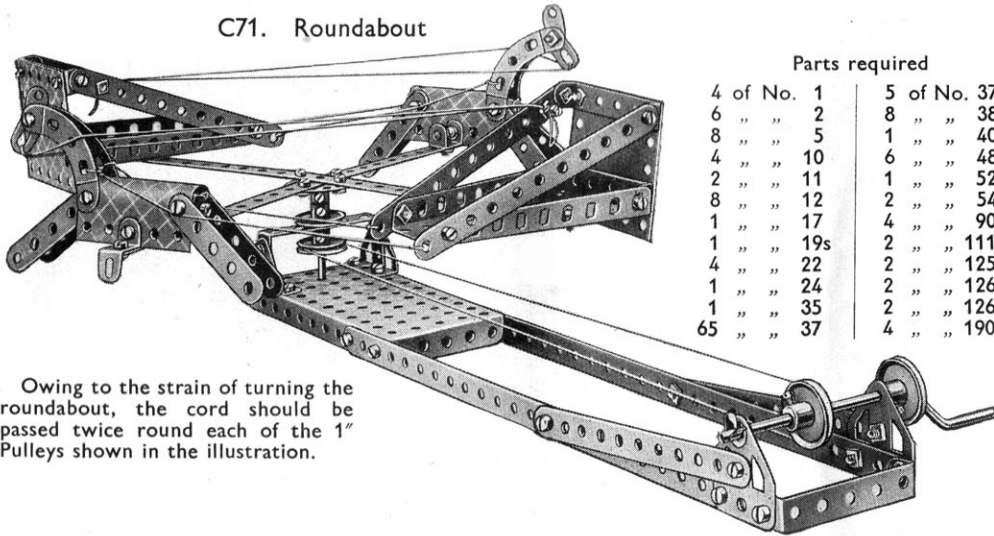
**C66. Sliding Gate**



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

C71. Roundabout

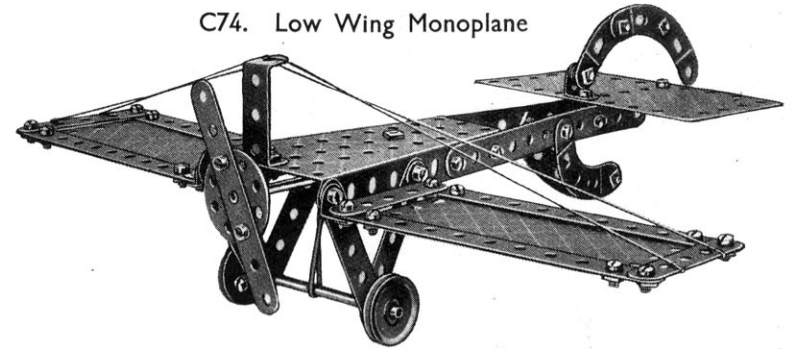


Parts required

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.

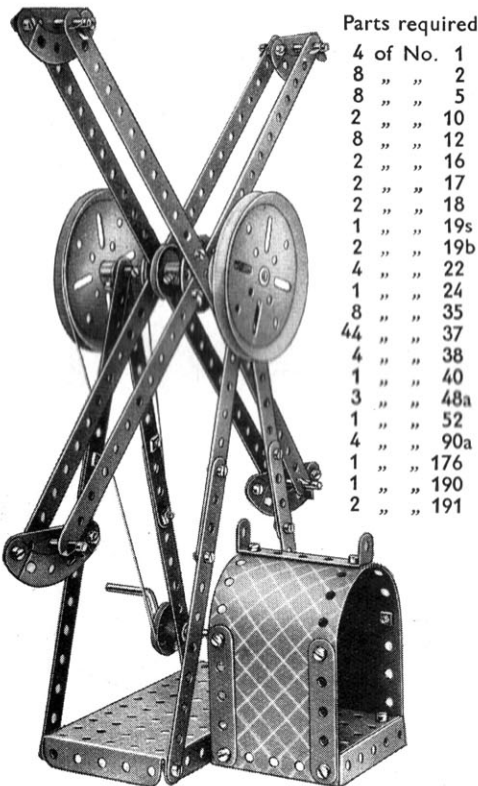
C74. Low Wing Monoplane



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

C72. Flying Boats

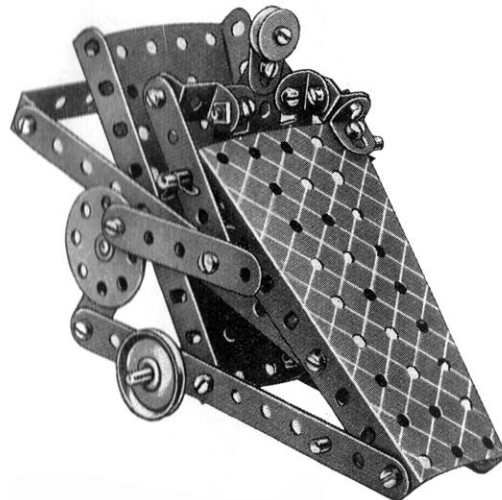


Parts required

4 of No. 1
8 " " 2
8 " " 5
2 " " 10
8 " " 12
2 " " 16
2 " " 17
2 " " 18
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

C73. The Invalid

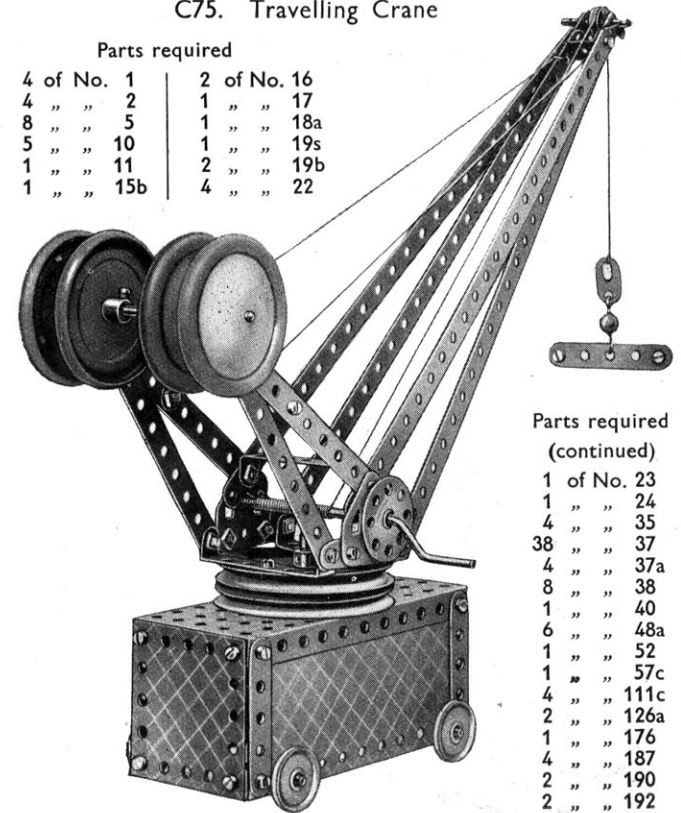
When wheeled along the table the "invalid" appears to push himself energetically along. His neck is a Flat Bracket: his right (or propelling) arm consists of one Angle Bracket and one 1/2" Reversed Angle Bracket, and his left arm—the hand of which is bolted loosely to the chair—is formed by three Angle Brackets. The chair is composed principally of two Sector Plates and four 5 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 also carries a BushWheel 1. As will be seen, a 2 1/2" Strip is pivoted at one end to this BushWheel and at the other end to a second 2 1/2" Strip 2, which, rocking about an axle journalled 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

C75. Travelling Crane



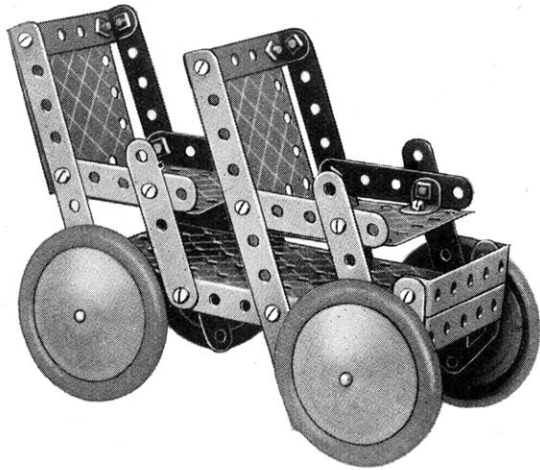
Parts required

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

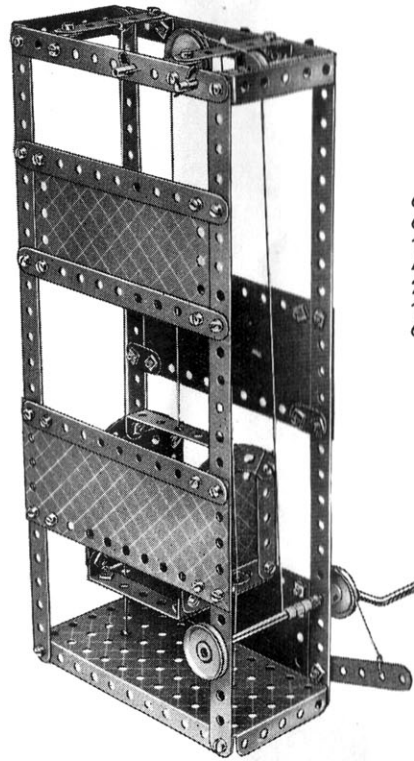
C76. Tandem Car



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

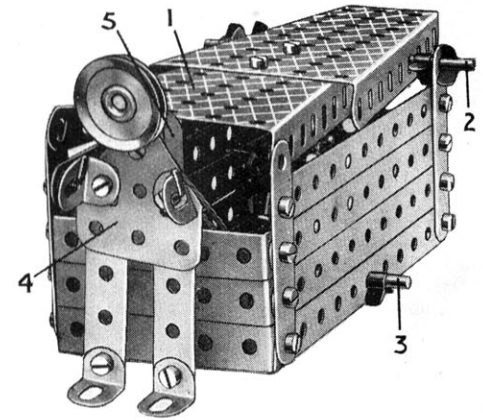
C78. Elevator



Parts required

4 of No. 1
7 " " 2
1 " " 3
8 " " 5
4 " " 10
6 " " 12
2 " " 16
1 " " 19s
3 " " 22
1 " " 23
6 " " 35
61 " " 37
2 " " 37a
7 " " 38
1 " " 40
5 " " 48a
1 " " 52
2 " " 90a
1 " " 111c
1 " " 176
3 " " 190
2 " " 191
2 " " 192

C80. Disappearing Meccantian



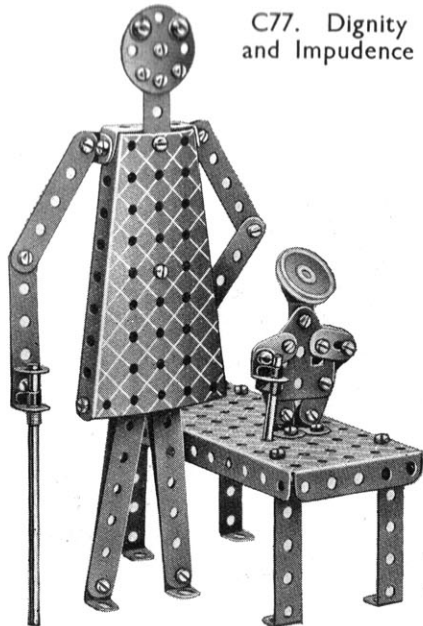
Parts required

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

Four short lengths of elastic

The bottom of the box-like portion of the model consists of a 5 1/2" x 2 1/2" Flanged Plate ; three 5 1/2" Strips bolted to upright 2 1/2" Strips form each side and each end consists of three 2 1/2" x 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 "Meccantian" 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.

C77. Dignity and Impudence



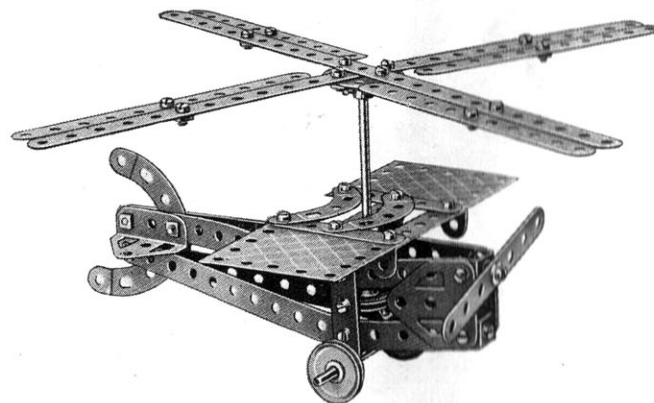
Parts required

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

C79. Autogiro

Parts required

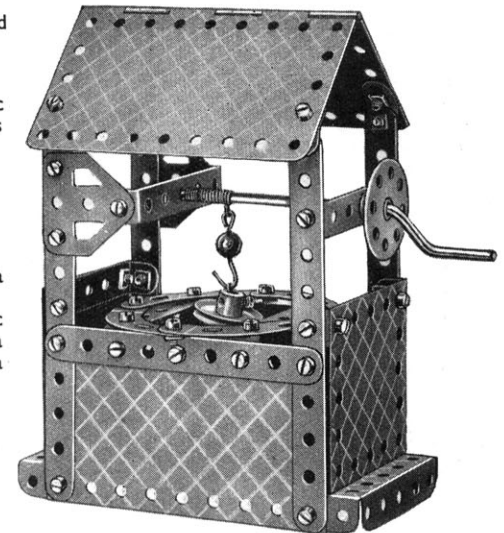
2 of No. 1	2 of No. 11	33 of No. 37	4 of No. 90a
8 " " 2	2 " " 12	3 " " 37a	2 " " 111c
1 " " 3	2 " " 16	7 " " 38	2 " " 126
9 " " 5	4 " " 22	1 " " 48	2 " " 126a
5 " " 10	1 " " 24	1 " " 48a	2 " " 190

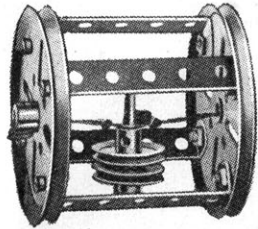


C81. Well Windlass

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

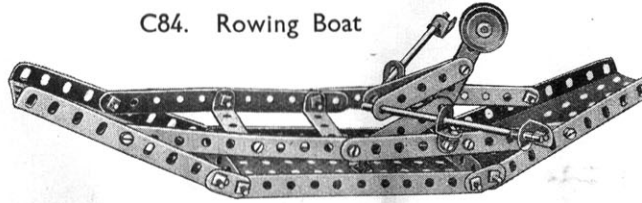




- C82. Cum Bak**  
 Parts required  
 1 of No. 18a  
 2 " " 19b  
 2 " " 22  
 1 " " 35  
 8 " " 37  
 4 " " 48a  
 1 " " 186

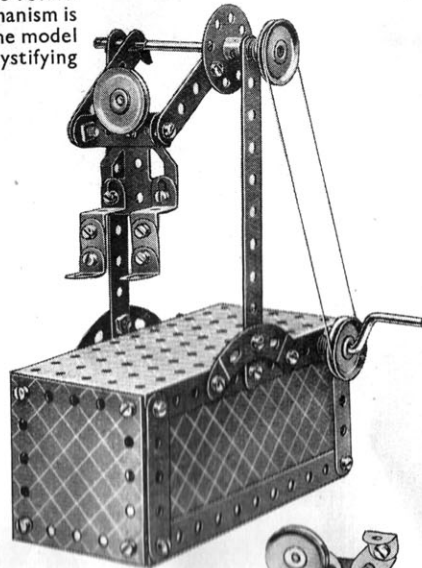
A Driving Band is doubled and stretched between the centres of the 3" Pulley Wheels. A weight, consisting of two 1" fast Pulley Wheels and a 1½" Rod, is suspended from it in the middle of the drum. When the Cum Bak is rolled along any smooth level surface, the elastic becomes twisted and stores up sufficient 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.

**C84. Rowing Boat**



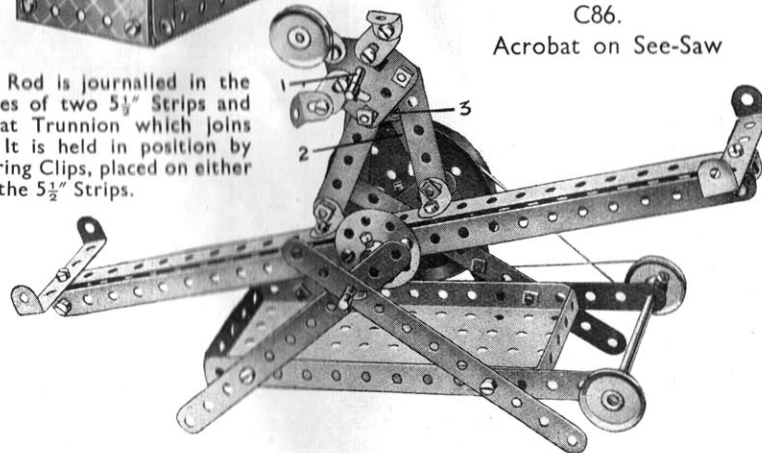
- Parts required  
 4 of No. 2  
 4 " " 5  
 4 " " 10  
 7 " " 12  
 2 of No. 16  
 1 " " 22  
 6 " " 35  
 25 " " 37  
 3 of No. 48a  
 1 " " 52  
 2 " " 54a  
 1 " " 111c

**C85. Gymnast**



- Parts required  
 4 of No. 2  
 6 " " 5  
 3 " " 10  
 2 " " 12  
 1 " " 16  
 1 " " 19s  
 3 " " 22  
 1 " " 24  
 4 " " 35  
 32 " " 37  
 4 " " 37a  
 8 " " 38  
 1 " " 40  
 1 " " 48  
 2 " " 48a  
 2 " " 52  
 2 " " 90a  
 3 " " 111c  
 2 " " 125  
 1 " " 126a  
 2 " " 190  
 2 " " 192

**C86. Acrobat on See-Saw**



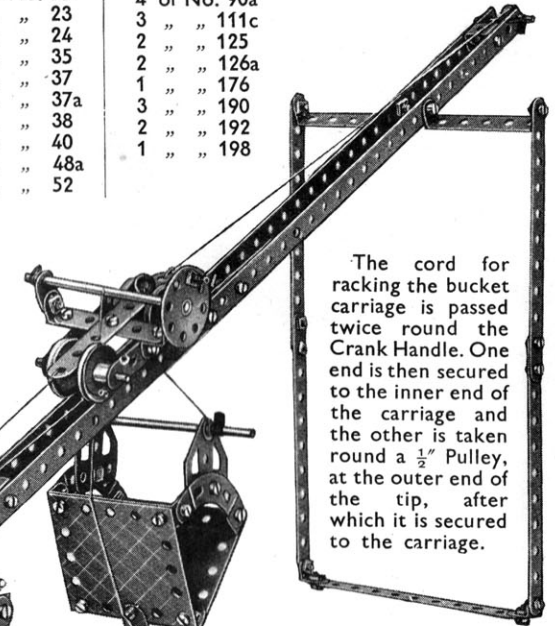
A 1" Rod is journaled in the end holes of two 5½" Strips and in a Flat Trunnion which joins them. It is held in position by two Spring Clips, placed on either side of the 5½" Strips.

- Parts required  
 4 of No. 1  
 7 " " 2  
 1 " " 3  
 9 " " 5  
 5 " " 10  
 2 " " 11  
 6 " " 12  
 2 " " 12c  
 1 " " 15b  
 2 " " 16  
 2 " " 17  
 1 " " 18a  
 1 " " 19s  
 2 " " 19b

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

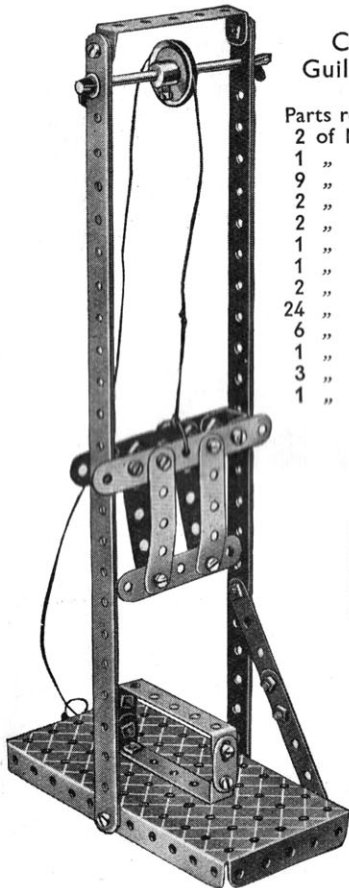
**C87. Extended Ash Tip**

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



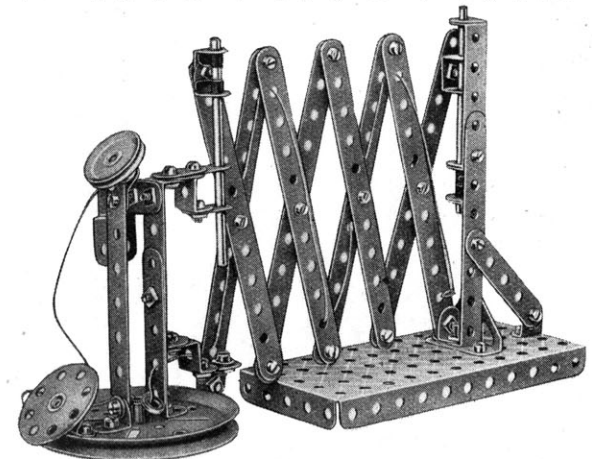
The cord for racking the bucket carriage is passed twice round the Crank Handle. One end is then secured to the inner end of the carriage and the other is taken round a ½" Pulley, at the outer end of the tip, after which it is secured to the carriage.

**C83. Guillotine**



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

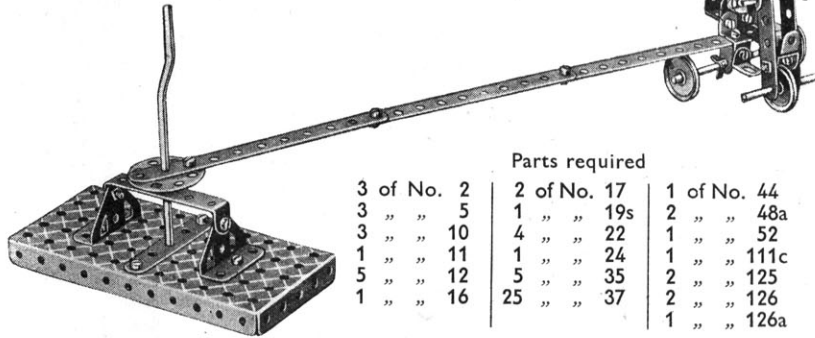
**C88. Telephone**



- Parts required  
 8 of No. 2  
 1 " " 3  
 4 " " 5  
 5 " " 10  
 2 " " 11  
 8 " " 12  
 2 " " 16  
 1 of No. 19b  
 1 " " 22  
 1 " " 24  
 4 " " 35  
 37 " " 37  
 20 " " 37a  
 4 " " 38  
 1 of No. 40  
 1 " " 44  
 5 " " 48a  
 1 " " 52  
 4 " " 111c  
 2 " " 125  
 1 " " 126

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

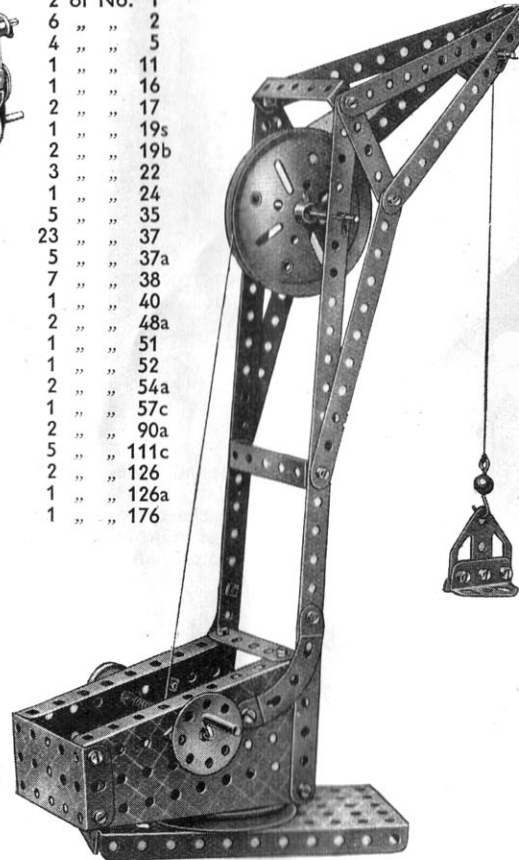
C89. Revolving Tricyclist



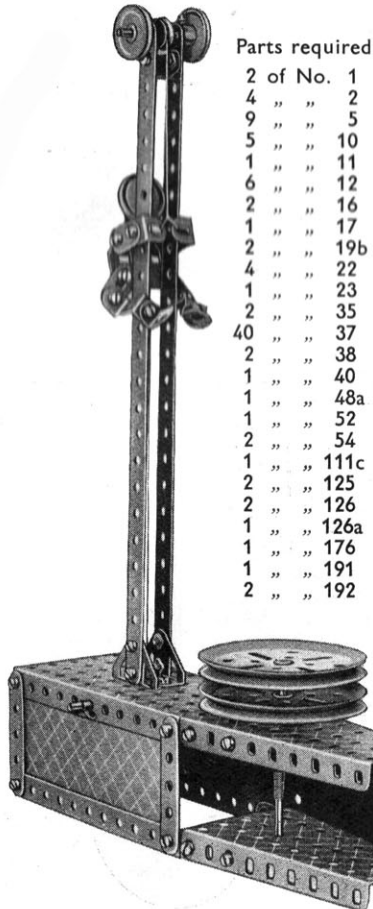
3 of No. 2	2 of No. 17	1 of No. 44
3 " " 5	1 " " 19s	2 " " 48a
3 " " 10	4 " " 22	1 " " 52
1 " " 11	1 " " 24	1 " " 111c
5 " " 12	5 " " 35	2 " " 125
1 " " 16	25 " " 37	2 " " 126
		1 " " 126a

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

C91. Warehouse Crane



C90. Man Climbing Pole



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

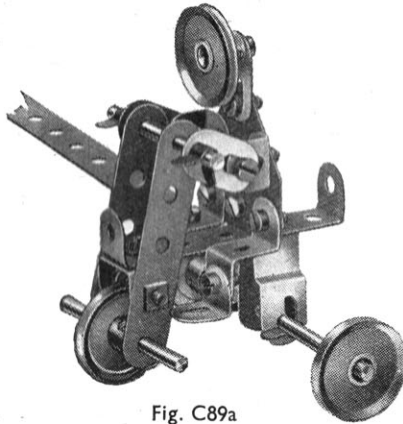


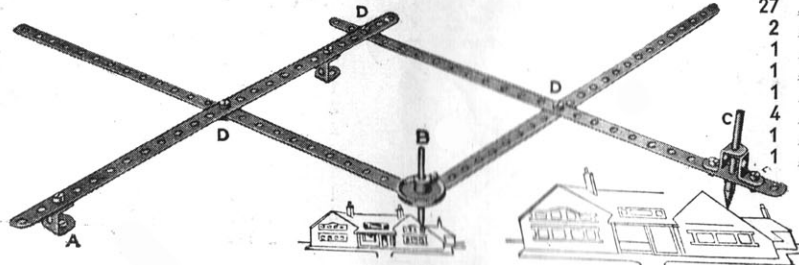
Fig. C89a

C92. 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.

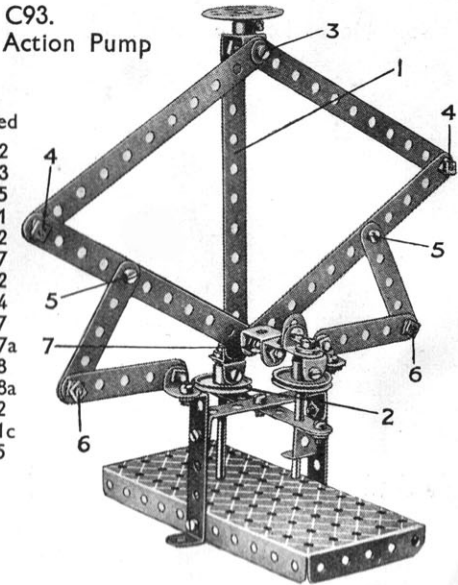
The Bolts at D are fitted with lock-nuts to allow free movement of the 12 1/2" Strips.

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



C93. Double Action Pump

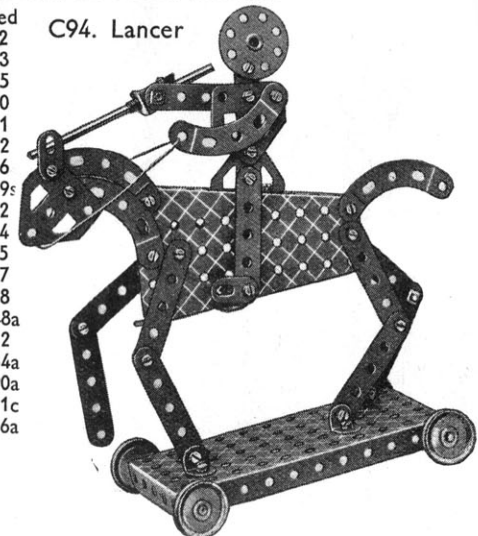
Parts required	
5 of No. 2	
1 " " 3	
4 " " 5	
2 " " 11	
6 " " 12	
2 " " 17	
2 " " 22	
1 " " 24	
24 " " 37	
9 " " 37a	
7 " " 38	
3 " " 48a	
1 " " 52	
3 " " 111c	
2 " " 125	



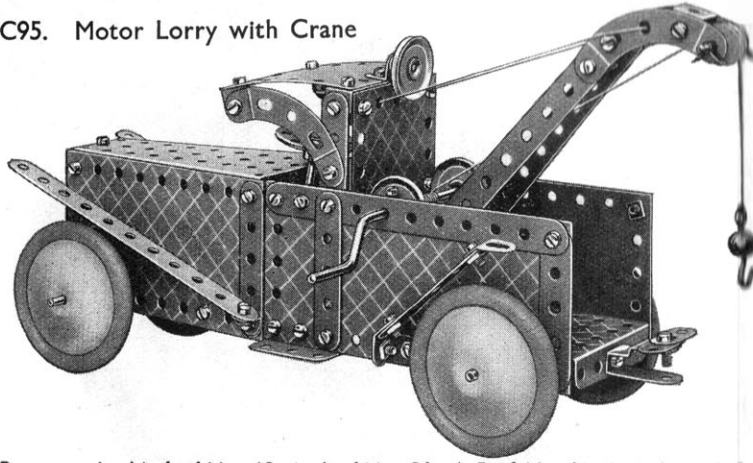
The 5 1/2" Strip 1 is attached to the 1" Pulley Wheel 2 by means of two Angle Brackets, through the lower of which passes the Set-Screw that secures the Pulley to its 2" Rod. Two Washers are placed beneath the head of the Bolt joining the Angle Brackets in order to prevent its shank from binding on the boss of the Pulley 2. The joints 3, 4, 5, 6, 7, are all lock-nutted, 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 " " 3	
9 " " 5	
2 " " 10	
2 " " 11	
5 " " 12	
2 " " 16	
1 " " 19s	
4 " " 22	
1 " " 24	
1 " " 35	
27 " " 37	
2 " " 38	
1 " " 48a	
1 " " 52	
1 " " 54a	
4 " " 90a	
1 " " 111c	
1 " " 126a	

C94. Lancer



C95. Motor Lorry with Crane

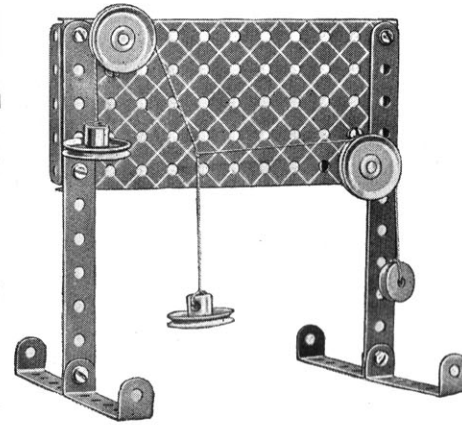


Parts required

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

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	" " 126a
1	" " 3	1	" " 16	66	" " 37	2	" " 176
9	" " 5	2	" " 17	1	" " 37a	2	" " 187
4	" " 10	1	" " 19s	2	" " 38	1	" " 190
1	" " 11	4	" " 22	1	" " 40	2	" " 191
7	" " 12	1	" " 23	2	" " 111c	1	" " 192

C98. Triangle of Forces

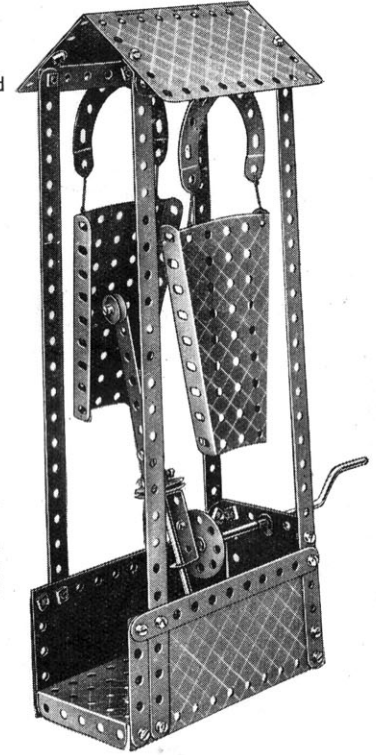


The suspended weights represent three forces acting on a central point. If a triangle is drawn with its sides respectively parallel to the three converging cords, i.e., parallel to the directions of the three forces, the lengths of the sides will be found to be proportional to the respective magnitudes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

C99. 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

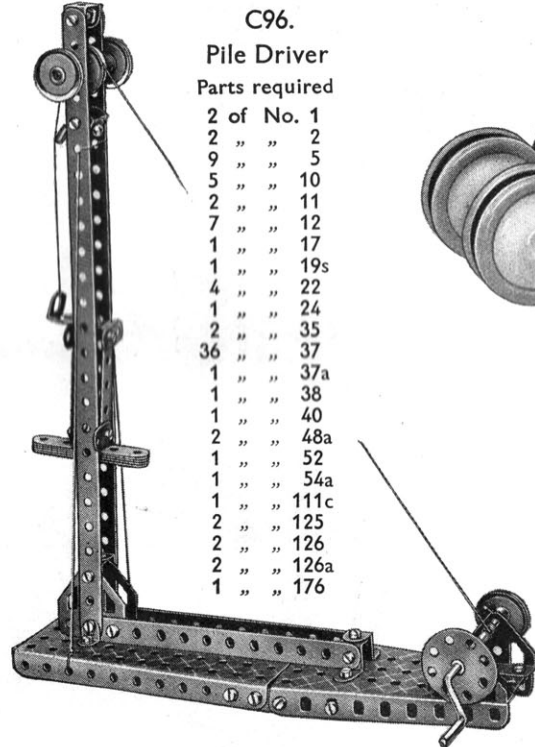


C96.

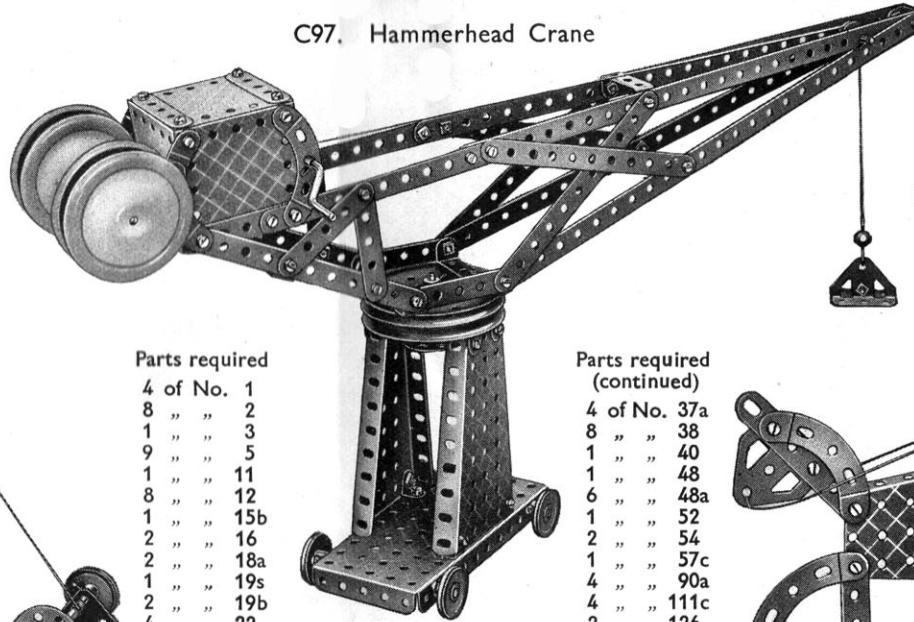
Pile Driver

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



C97. Hammerhead Crane



Parts required

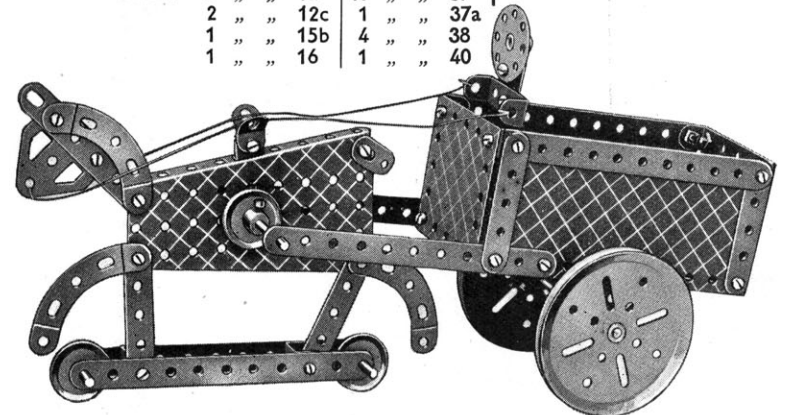
4	of No. 1
8	" " 2
1	" " 3
9	" " 5
1	" " 11
8	" " 12
1	" " 15b
2	" " 16
2	" " 18a
1	" " 19s
2	" " 19b
4	" " 22
1	" " 23
1	" " 24
4	" " 35
51	" " 37

Parts required (continued)

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

C100. Horse and Cart

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

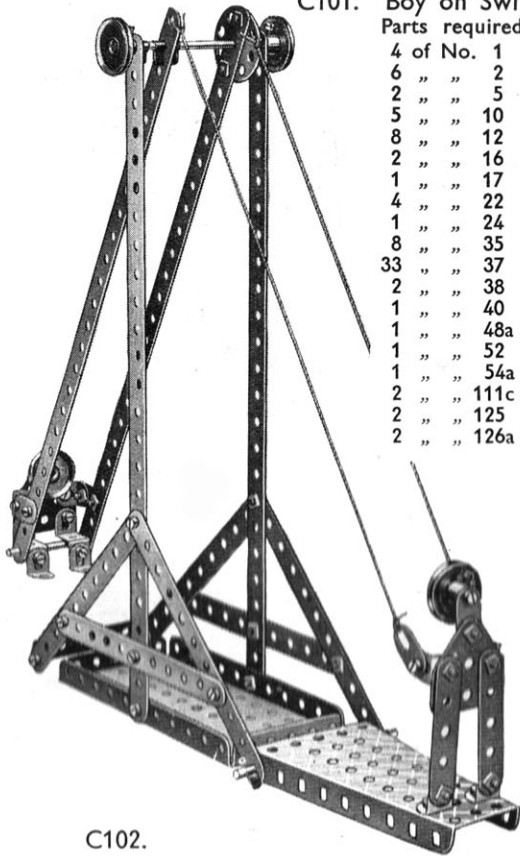




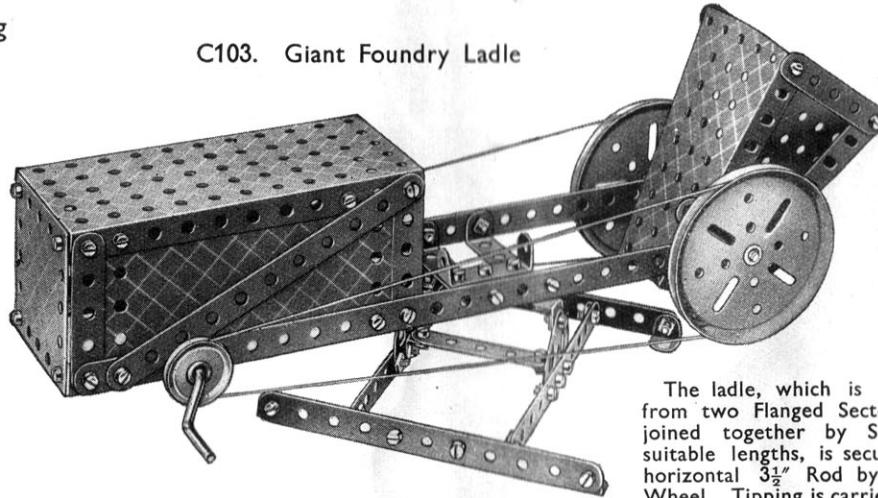
C101. Boy on Swing

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



C103. Giant Foundry Ladle

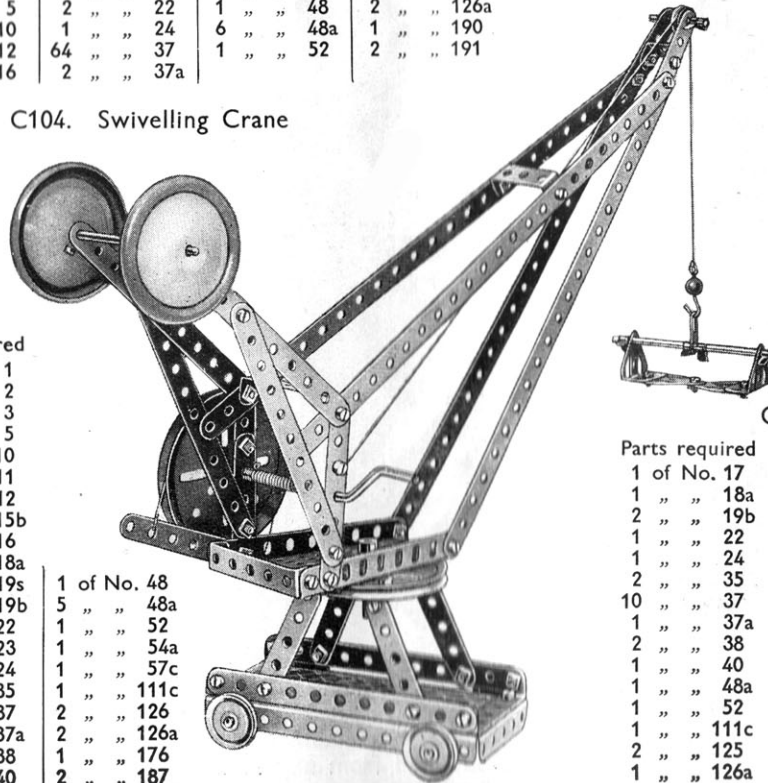


The ladle, which is built up from two Flanged Sector Plates joined together by Strips of suitable lengths, is secured to a horizontal  $3\frac{1}{2}$ " Rod by a Bush Wheel. Tipping is carried out by two cords as shown.

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		

C104. Swivelling Crane



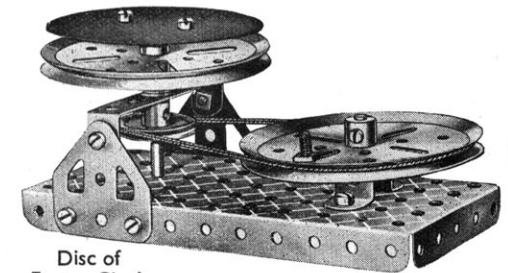
Parts required

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

C106. Rotary Linisher

Parts required

1	of No. 17
1	" " 18a
2	" " 19b
1	" " 22
1	" " 24
2	" " 35
10	" " 37
1	" " 37a
2	" " 38
1	" " 40
1	" " 48a
1	" " 52
1	" " 111c
2	" " 125
1	" " 126a

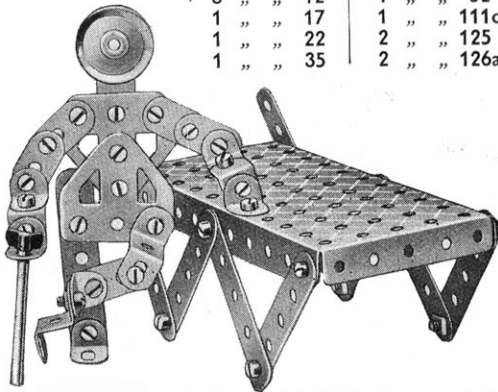


Disc of Emery Cloth (not included in Outfit)

C102. King Meccano

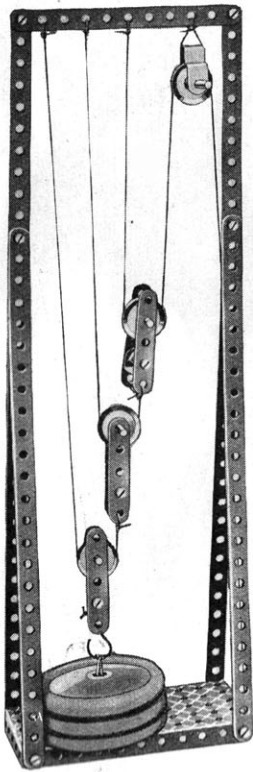
Parts required

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



Parts required

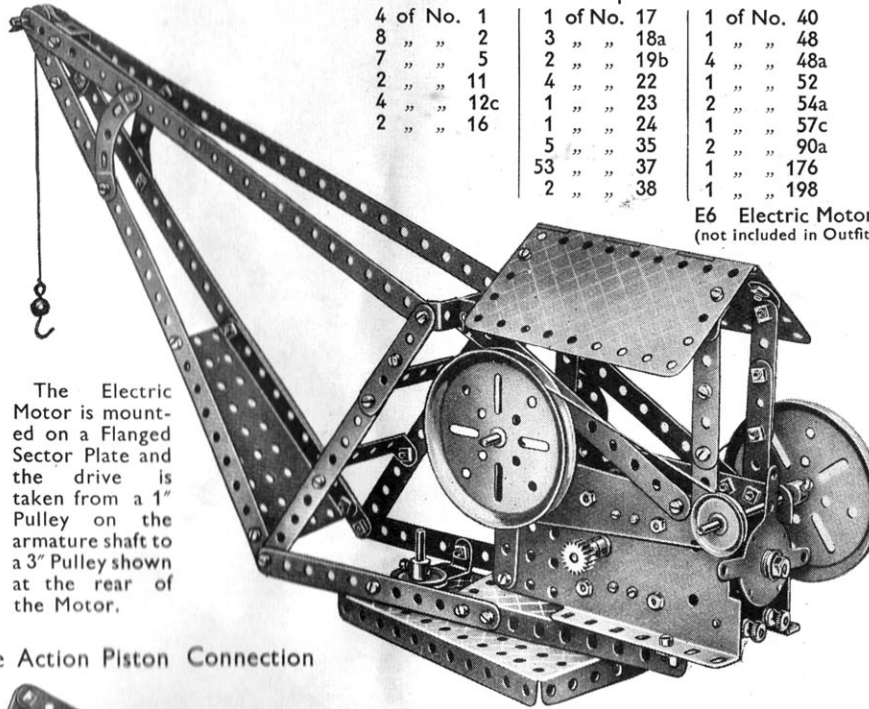
4	of No. 1
8	" " 2
1	" " 3
8	" " 5
1	" " 10
1	" " 11
4	" " 12
1	" " 15b
3	" " 16
2	" " 18a
1	" " 19s
2	" " 19b
4	" " 22
1	" " 23
1	" " 24
6	" " 35
46	" " 37
2	" " 37a
6	" " 38
1	" " 40
1	" " 48
5	" " 48a
1	" " 52
1	" " 54a
1	" " 57c
1	" " 111c
2	" " 126
2	" " 126a
1	" " 176
2	" " 187



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



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

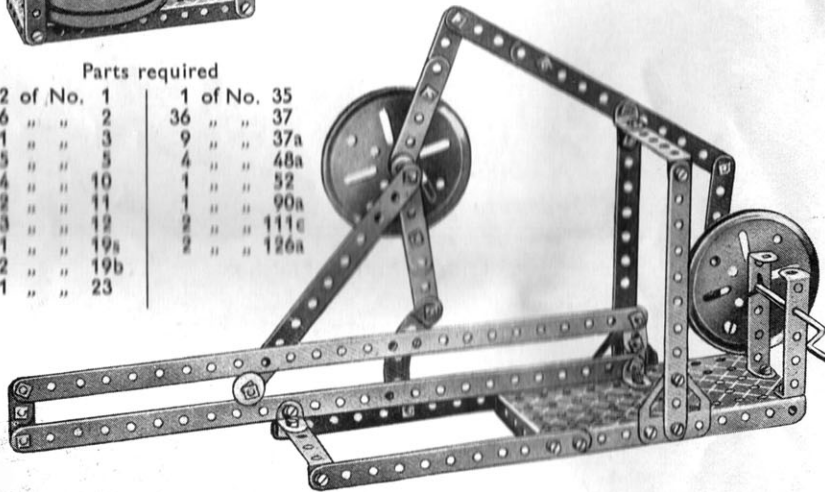
E6 Electric Motor  
(not included in Outfit)

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.

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 "	19a	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		

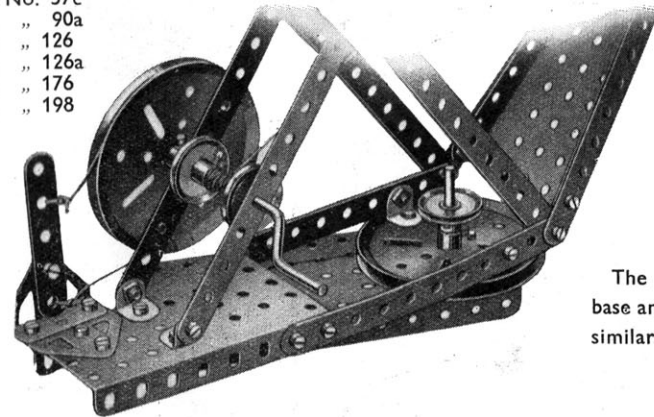
C110.  
Overhead  
Crane

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



C111. Swivelling Jib Crane  
(Hand)



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

HOW TO CONTINUE

This completes our examples of models that may be made with MECCANO Outfit C (or Outfits B and Ba). The next models are a little more advanced, requiring a number of extra parts to construct them. The necessary parts are all contained in a Ca Accessory Outfit, the price of which may be obtained from any Meccano Dealer.

# 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.

The side plates and bases of each motor are pierced with the standard Meccano equidistant holes, which enables the motor to be built into any Meccano model in the exact position required.

## Meccano Clockwork Motors

These are the finest clockwork Motors obtainable for driving models. 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.

**X SERIES CLOCKWORK MOTOR.** A fine Motor specially designed to drive with ease any of the X Series models. It is non-reversing.

**No. 1 CLOCKWORK MOTOR.** An efficient and long-running Motor fitted with a brake lever. 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 start, stop and reverse levers.

**No. 2 CLOCKWORK MOTOR.** This is a Motor of super quality. Brake and reverse levers enable the Motor to be started stopped or reversed, as required.

## Meccano Electric Motors

The five Meccano Electric Motors detailed below provide smooth-running power units for the operation of Meccano models. The 6-volt Motors may be operated either from a 6-volt Accumulator, or through a Transformer direct from the mains providing that the supply is alternating current. They cannot be run satisfactorily from dry cells. The 20-volt Motors are most conveniently operated through a 20-volt Transformer from alternating current supply mains.

No. E1 Electric Motor (6-volt). Non-reversing.

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

No. E120 Electric Motor (20-volt). Non-reversing.

No. E20A Electric Motor (20-volt). Non-reversing.

No. E20B Electric Motor (20-volt). Reversing.

## Meccano Transformers

A Meccano Transformer provides a convenient and safe means of driving a Meccano Electric Motor from the mains supply where this is alternating current.

There are six Transformers in the series, 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.

**No. T6 Transformer** (Output 25 VA at 9 volts) for 6-volt Electric Motors. Fitted with speed regulator.

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

**No. T6A Transformer** (Output 40 VA at 9/3½ volts) for 6-volt Electric Motors. Fitted with speed regulator and separate circuit for supplying current for eighteen 3½-volt lamps.

**No. T20 Transformer** (Output 20 VA at 20 volts) for 20-volt Electric Motors. Fitted with 5-stud speed regulator.

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

**No. T20A Transformer** (Output 35 VA at 20/3½ volts) for 20-volt Electric Motors. Fitted with speed regulator and output sockets for lighting lamps.

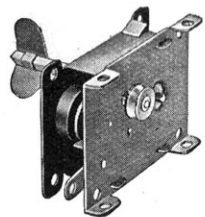
## Accumulators

The 6-volt 20-amp. hr. Accumulator is specially suitable for running Meccano 6-volt Motors and Hornby 6-volt Electric Trains.

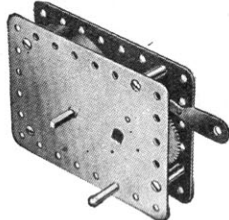
The 2-volt 20-amp. hr. Meccano Accumulator is supplied for converting 4-volt Accumulators to 6-volt.

## Resistance Controller

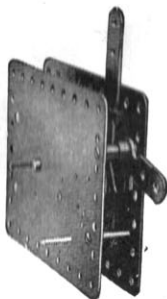
This Controller enables the speed of Meccano 6-volt and 20-volt Motors and Hornby 6-volt and 20-volt Electric Trains to be regulated as desired.



X Clockwork Motor



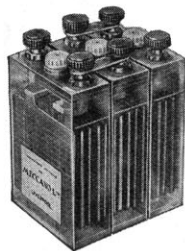
No. 1 Clockwork Motor



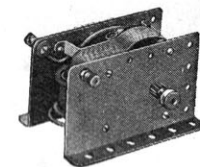
No. 2 Clockwork Motor



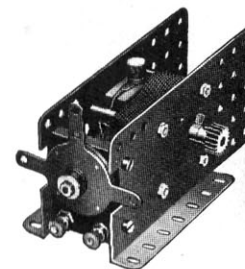
Resistance Controller



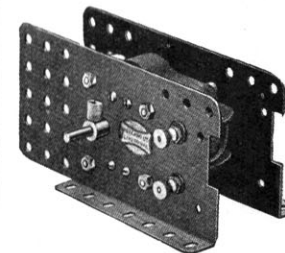
6-volt 20-amp. hr. Accumulator



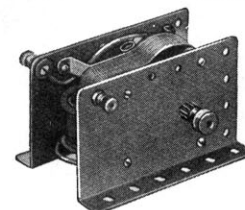
No. E1 Electric Motor (6-volt)



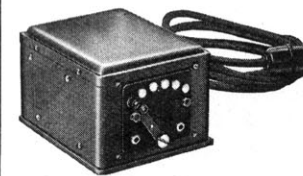
No. E6 Electric Motor (6-volt)



No. E20a Electric Motor (20-volt)



No. E1/20 Electric Motor (20-volt)



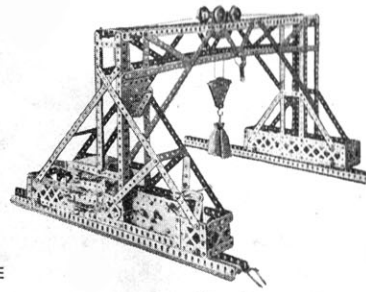
No. T20 Transformer

Ask your dealer for a complete price list

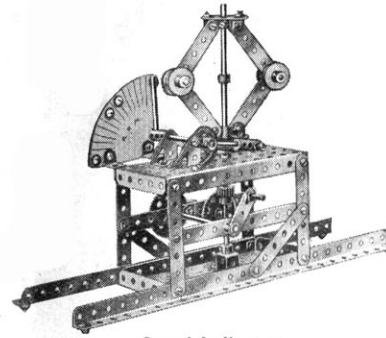
# Build Bigger and Better Models



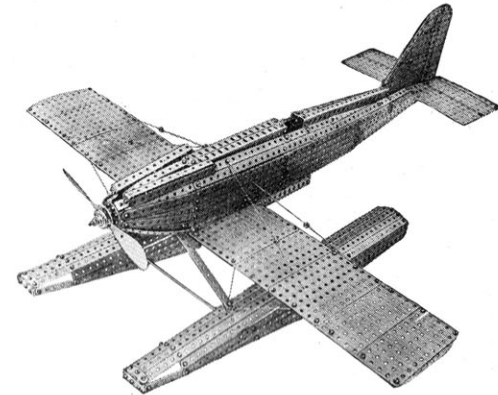
**Windmill,**  
built with Outfit E



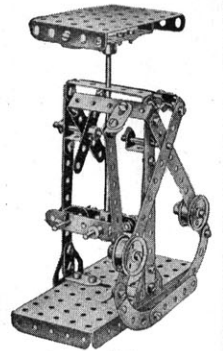
**Travelling Gantry Crane,**  
built with Outfit L



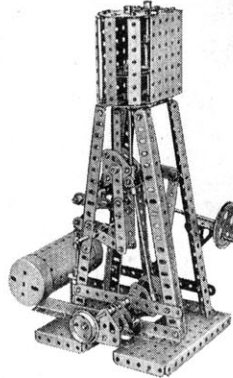
**Speed Indicator,**  
built with Outfit G



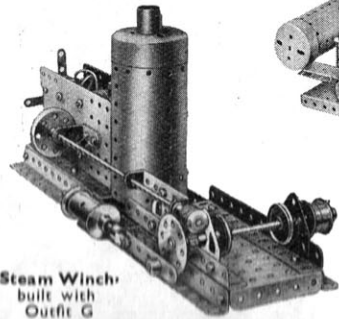
**Racing Seaplane,**  
built with Outfit L



**Letter Balance,**  
built with Outfit E



**Vertical Marine Engine,**  
built with Outfit H



**Steam Winch,**  
built with Outfit G

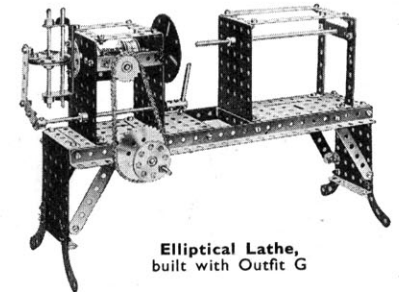
**Keep Adding to your Outfit**

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 fine models shown in the Meccano Manuals.

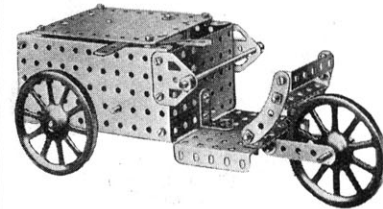
The model-building possibilities of the Meccano System are limitless. All the fine models illustrated on this and the opposite page are examples of the types you will be able to build as your Outfit develops.

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.

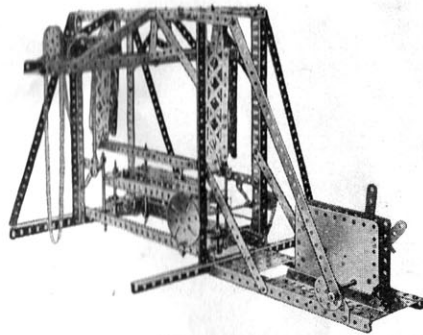
**Make friends with your Dealer — he can help you**



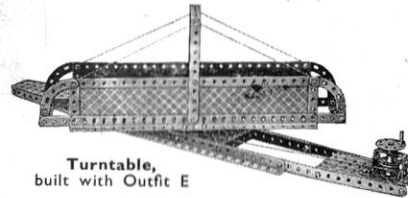
**Elliptical Lathe,**  
built with Outfit G



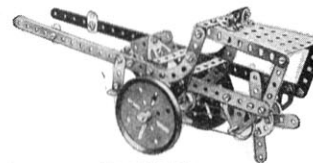
**Delivery Van,**  
built with Outfit H



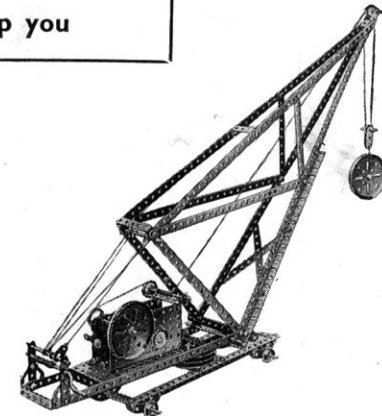
**Stone Sawing Machine,**  
built with Outfit K



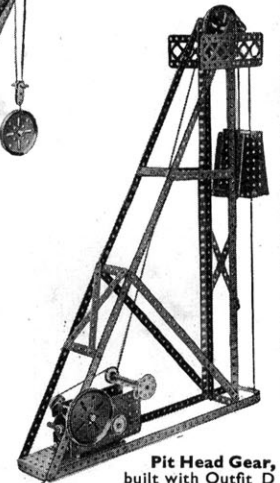
**Turntable,**  
built with Outfit E



**Hay Tedder,**  
built with Outfit

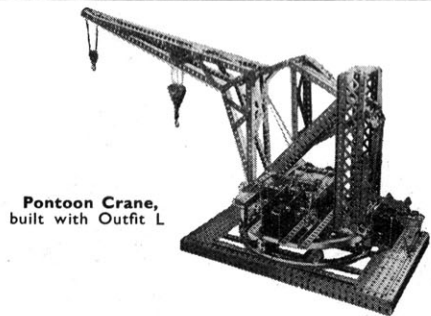


**Travelling Jib Crane,**  
built with Outfit E

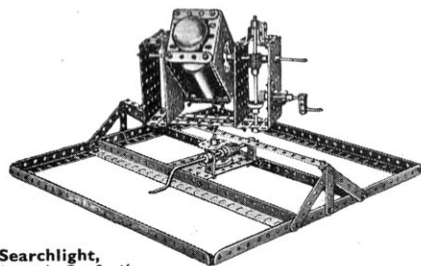


**Pit Head Gear,**  
built with Outfit D

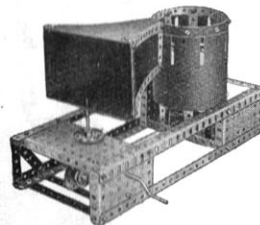
# The Possibilities of Meccano are unlimited



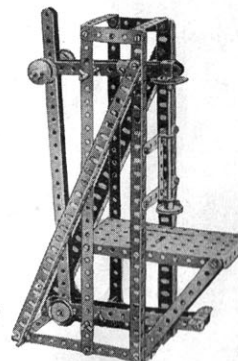
Pontoon Crane,  
built with Outfit L



Searchlight,  
built with Outfit K



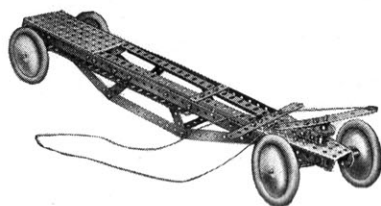
Kinetograph,  
built with Outfit F



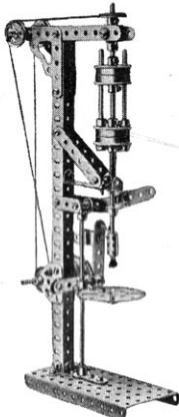
Embossing Machine,  
built with Outfit E



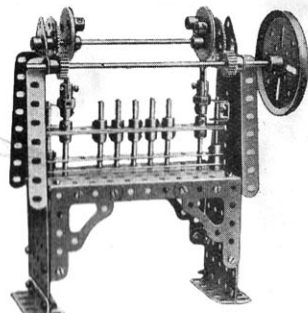
Girder Crane,  
built with Outfit G



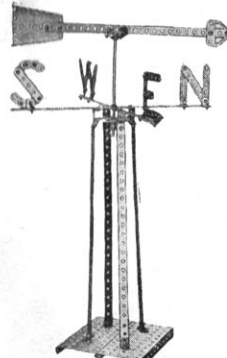
Coaster,  
built with Outfit D



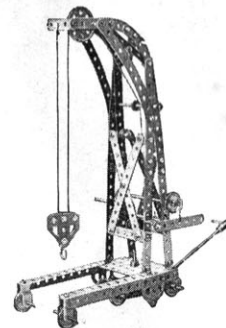
Vertical Drill,  
built with Outfit H



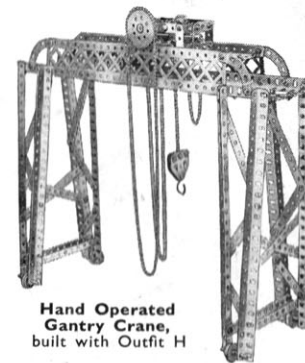
Punching Press,  
built with Outfit K



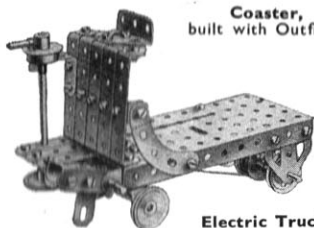
Weather Vane,  
built with Outfit G



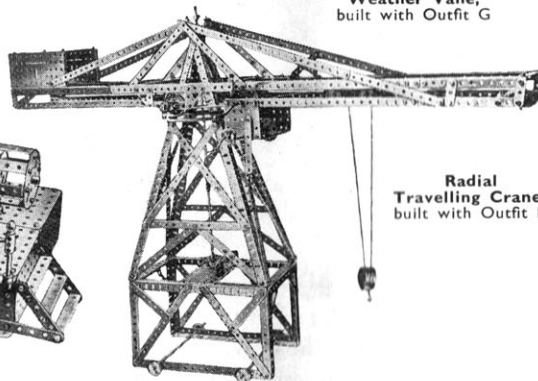
Portable Crane,  
built with Outfit K



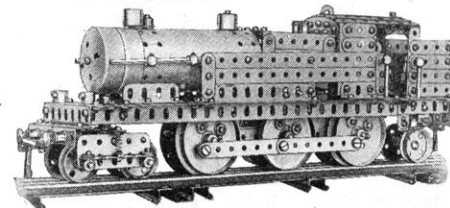
Hand Operated  
Gantry Crane,  
built with Outfit H



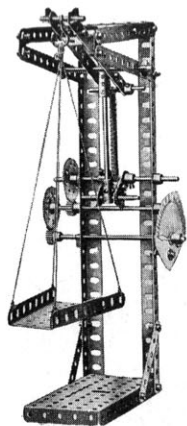
Electric Truck,  
built with Outfit E



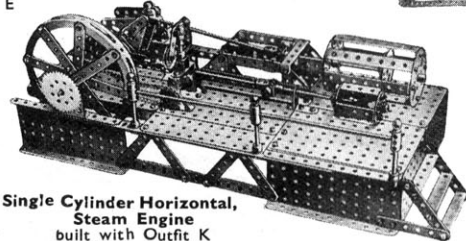
Radial  
Travelling Crane,  
built with Outfit K



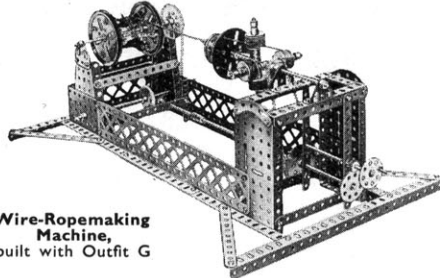
Clockwork Pacific  
Tank Locomotive,  
built with Outfit L



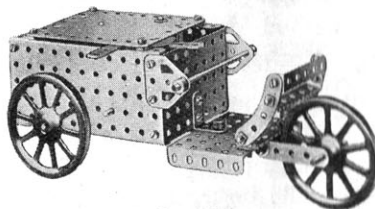
Spring Scales,  
built with Outfit H



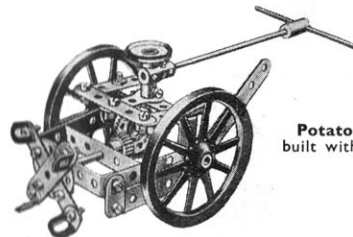
Single Cylinder Horizontal,  
Steam Engine  
built with Outfit K



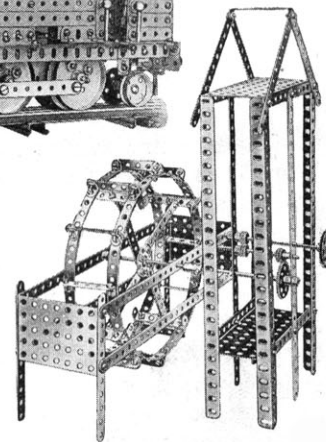
Wire-Ropemaking  
Machine,  
built with Outfit G



Delivery Van,  
built with Outfit H



Potato Reaper,  
built with Outfit H



Belgian Water Wheel,  
built with Outfit H

## A Selection of Meccano Standard Mechanisms

Here are a few simple and interesting movements showing how easily real mechanisms can be reproduced with Meccano.

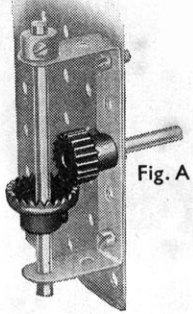


Fig. A

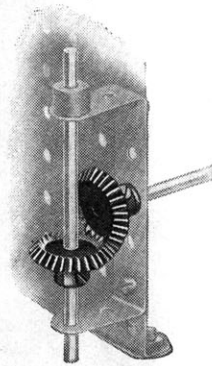


Fig. C

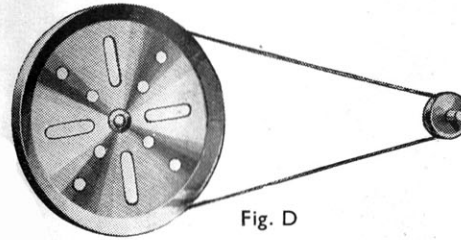


Fig. D

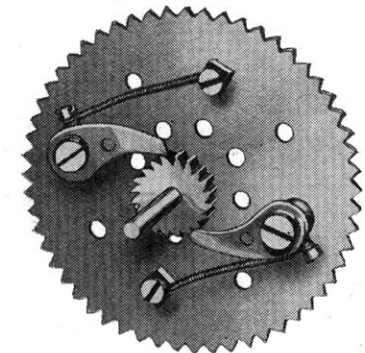


Fig. J

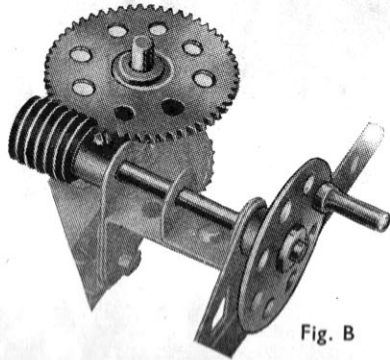


Fig. B

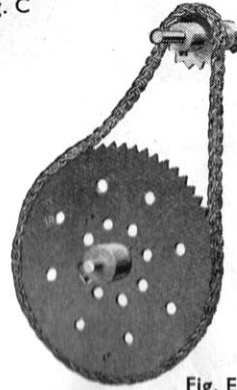


Fig. E

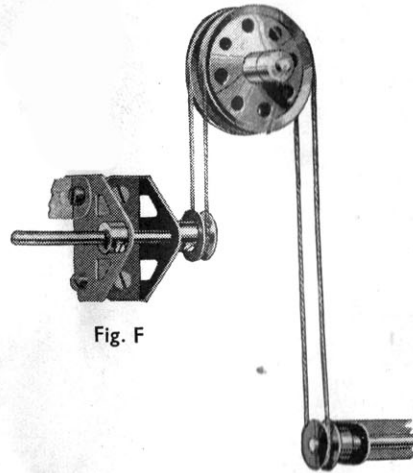


Fig. F

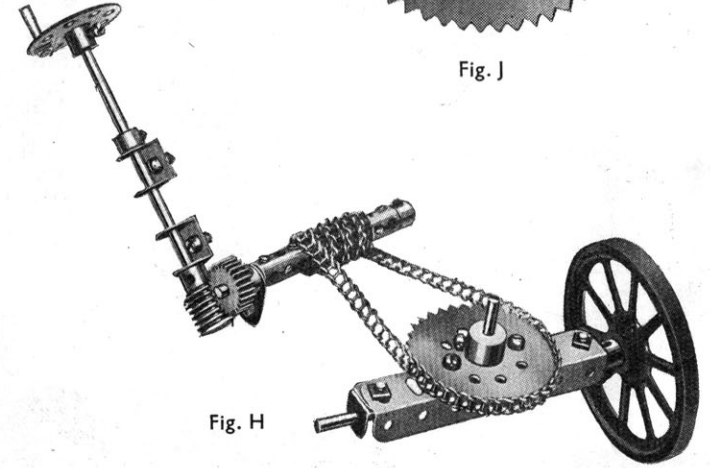


Fig. H

### Gears

The Meccano system includes a wide range of Gear Wheels, Bevel Gears, Pinion Wheels, Contrate Wheels and Worm Wheels in various sizes. All manner of interesting movements can be obtained by the use of these gears.

Fig. A shows how a drive can be transmitted from a vertical to a horizontal shaft or vice versa. Fig. B shows a Worm engaged with a Gear Wheel, giving a very great reduction in shaft speed. Fig. C illustrates another right angle drive, obtained by using Meccano Bevel Gears.

### Belt and Chain Drives

In Figs. D, E and F we show examples of belt and chain drives. The movements illustrated require no explanation excepting, perhaps, Fig. F, which shows a simple method for transmitting the drive from one shaft to another when they are out of line.

Cords usually take the place of belts in Meccano models but miniature belting can be made from strips of canvas, indiarubber, etc., in which case Flanged Wheels should be used instead of grooved Pulleys.

### Steering Gears

The various types of steering mechanism commonly in use on vehicles of all descriptions can readily be reproduced with Meccano.

Fig. H. In this case the road wheels are controlled by an endless belt of Sprocket Chain operated by a worm and pinion mechanism.

### Pawl & Ratchet Movement

By means of this type of gear it is possible to construct certain types of automatic brakes and free wheels.

Fig. J. This model illustrates the method of building up a free-wheel unit.

(continued)

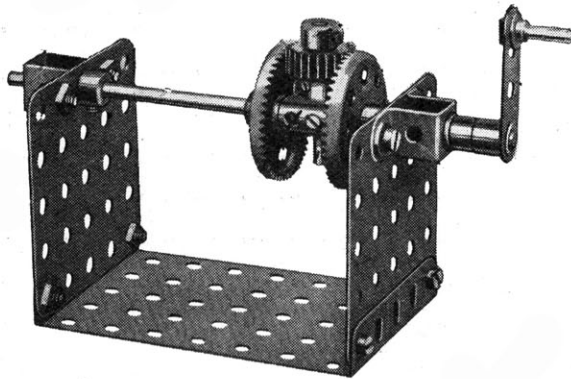


Fig. K

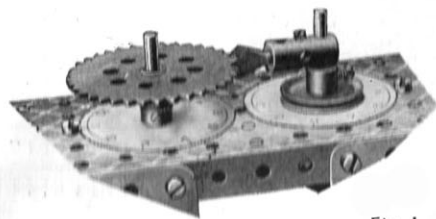


Fig. L

## Epicyclic Transmission Gear

This device, Fig. K is designed to provide a gear ratio between two shafts mounted in direct line with one another. Its chief merit lies in the compactness of its construction and lack of external bearings.

## Intermittent Rotary Motion

Fig. L shows one device by means of which intermittent rotary motion can be obtained. Such an arrangement is useful in revolution counters, measuring machines, etc. In addition to mechanisms that give true intermittent motion, different types of cams, converting a regular rotary motion into a constant or intermittent reciprocating motion, are described in the S.M. Manual.

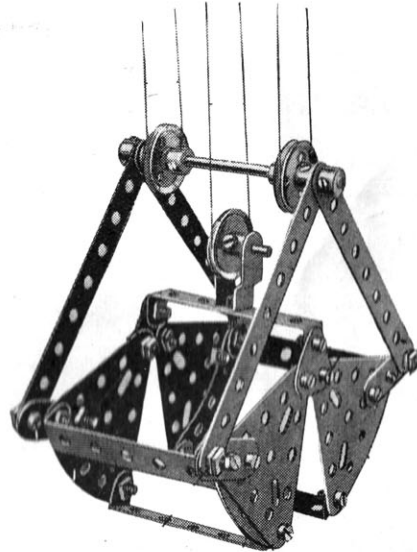


Fig. M

## Grabs

A typical example of the many kinds of grab that can be constructed from Meccano is shown in Fig. M. If the grab is fitted to a model crane or ship-coaler, all the movements can be controlled from an operating box built into the frame of the model. The outer sides of the jaws may be filled in with cardboard and the grab can then be used to pick up loads of sand, grain, marbles, etc.

## Screw Traverse

Fig. N shows how a Threaded Rod can be applied to a model in order to give a slow, powerful traversing movement. The model illustrated is the slide-rest of a model lathe. The rotary movement of the 1" fast Pulley is transmitted to the tool holder via a short Threaded Rod and a Threaded Boss.

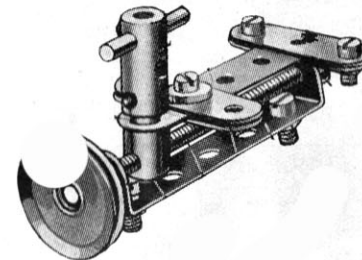


Fig. N

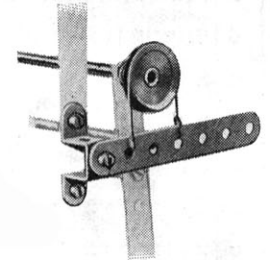


Fig. O

## Strap and Lever Brake

This device, Fig. O, will be found very useful as a quick emergency hand-brake. Although it is the most simple of such devices, it is also one of the most valuable.

## Strap and Screw Brake

The type of brake shown in Fig. P is used to apply a constant retarding effect to a rotating shaft. It can thus be utilised in a crane to prevent the load from falling back when the winding spindle is released. An advantage of the brake is that the speed of the shaft to which it is applied can be varied as required; the action of the brake cannot vary when once set unless the hand wheel is turned.

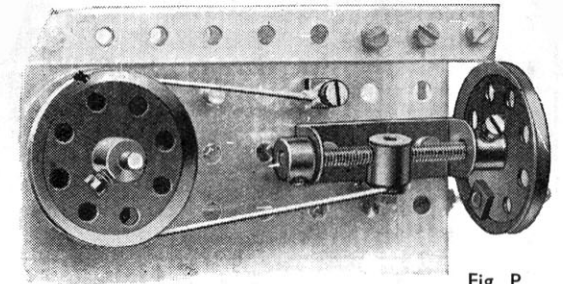


Fig. P





No.	Description.	A	Aa	B	Ba	C	Ca	D	Da	E	Ea	F	Fa	G	Ga	H	Ha	K	Ka	L	
61	Windmill Sails																				
62	Cranks																				14
62a	Cranks, Threaded																				2
62b	Double Arm Cranks																				2
63	Couplings																				6
63a	" Octagonal																				13
63b	" Strip																				2
63c	" Threaded																				4
64	Threaded Bosses																				6
65	Centre Forks																				4
66	Weights, 50-gramme																				2
67	Weights, 25																				4
68	Woodscrews, 3"																				6
69	Set Screws																				2
69a	Set Screws, 5/32"																				4
69b	Grub Screws, 7/32"																				2
70	Perforated Flat Plates, 5 1/2" X 2 3/8"																				7
72	" " " 2 3/8" X 1 3/8"																				4
73	" " " 3 3/8" X 1 3/8"																				2
76	" " " Triangular Plates, 2 3/8"																				8
77	" " " " 1"																				10
78	Screwed Rods, 1 1/2"																				2
79	" " " 8"																				6
79a	" " " 6"																				2
80	" " " 5"																				2
80a	" " " 3 3/8"																				2
80b	" " " 4 3/8"																				2
81	" " " 2"																				2
82	" " " 1"																				2
82	" " " 1 1/2"																				2
89	Curved Strips, 5 3/8"																				8
89a	" " " 3"																				2
89b	" " " 4"																				2
90	" " " 2 3/8"																				2
90a	" " " Cranked																				8
94	Sprocket Chain																				6
95	Sprocket Wheels, 2"																				2
95a	" " " 1 1/2"																				2
95b	" " " 3"																				2
96	" " " 1"																				2
96a	" " " 3 3/8" long																				6
97	Braced Girders, 3"																				2
97a	" " " 2 3/8"																				16
98	" " " 12 3/8"																				10
99	" " " 9 3/8"																				4
99a	" " " 7 3/8"																				8
99b	" " " 5 3/8"																				4
100	" " " 4 3/8"																				20
100a	" " " 4"																				3
101	Heads for Looms																				4
102	Single Bent Strips																				2
103	Flat Girders, 5"																				12
103a	" " " 12"																				4
103b	" " " 4"																				5
103c	" " " 3"																				6
103d	" " " 2 3/8"																				7
103e	" " " 2"																				1
103f	" " " 1 3/8"																				3
103g	" " " 7 3/8"																				4
103h	" " " 1 1/2"																				2
103k	" " " 3 3/8"																				1
104	Shuttles for Looms																				60
105	Reed Hooks																				4
106	Rollers for Looms, Wood																				7
106a	Tables for Designing Machines																				4
107	Architraves																				2
108	Face Plates, 2 1/2" diam.																				7
109	Rack Strips, 3 1/2"																				4
110	Bolts, 3/4"																				2
110a	" " " 6 1/2"																				2
111	" " " 3"																				2
111a	" " " 3 1/2"																				2
111c	" " " 3"																				2
113	Girder Frames																				9
114	Hinges																				17
115	Threaded Pins																				24
116	Fork Pieces, Large																				12
117	" " " Small																				6
117a	Steel Balls, 3/8" diam.																				2
118	Hub Discs, 5 1/2" diam.																				9
119	Channel Segments (8 to circle) 1 1/2" diam.																				7
120	Buffers																				6
120a	Spring Buffers																				2
120b	Compression Springs																				4
121	Train Couplings																				4
121-	Miniature Loaded Sacks																				2
122	Cone Pulleys																				6
123	Reversed Angle Brackets, 1"																				4
124	Trunnions																				9
125	Flat Trunnions																				4
126	Simple Bell Cranks																				4
127	Boss Bell Cranks																				4
128	Rack Segments, 3" diam.																				5
129	Triple Throw Eccentrics																				3
130	Dredger Buckets																				4
131	Flywheels, 2 3/8" diam.																				4
132	Corner Brackets, 1 1/2"																				2
133	Crank Shafts, 1" stroke																				4
134	Theodolite Protractors																				4
135	Handrail Supports																				5
136	Wheel Flanges																				4
136a	" " " Raked																				4
137	Ship's Funnels																				4
138	Flanged Brackets, Right																				4
138a-z	" " " Left																				4
139	Universal Couplings																				8
139a	Wire Lines (for clock-weights)																				1
141	Rubber Rings, 3"																				4
142	Motor Tyres, 2"																				4
142a	" " " 3"																				6
142b	" " " 4"																				10

FOR ILLUSTRATIONS OF MECCANO PARTS REFER TO BACK PAGE OF COVER

## CONTENTS OF OUTFITS AND COMPLETE LIST OF MECCANO PARTS (CONTINUED)

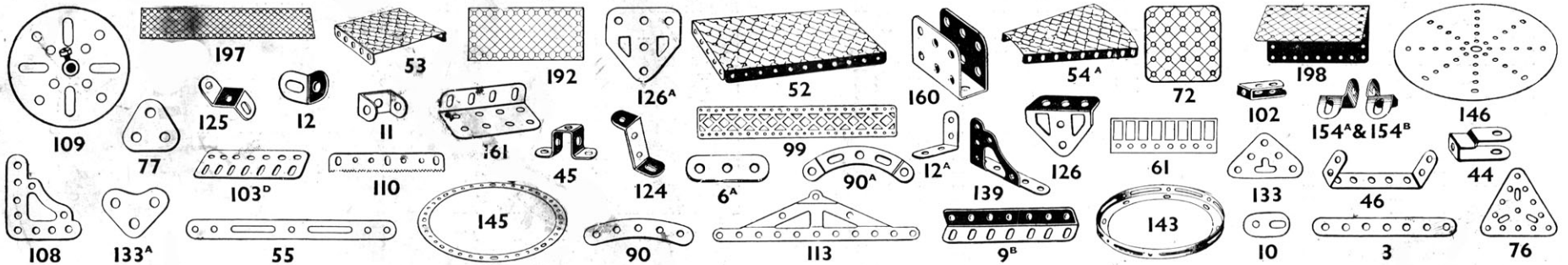
No.	Description.	A	Aa	B	Ba	C	Ca	D	Da	E	Ea	F	Fa	G	Ga	H	Ha	K	Ka	L
142c	Motor Tyres, 1"																			1
142d	"																			2
143	Circular Girders, 5½" diam.																			2
144	Dog Clutches																			2
145	Circular Strips, 7" diam.																			2
146	" Plates, 6" diam.																			2
147a	" with pivot bolt and nuts																			4
147b	"																			8
147c	Pivot Bolt with 2 Nuts																			2
148	Pawl, without Boss																			1
149	Ratchet Wheels																			1
150	Collector Shoes for Locos																			2
151	Crane Grabs																			
152	Pulley Blocks, 1 Sheave																			
153	" 2 Sheaves																			
154	" 3																			
155	Corner Angle Brackets, 1" R.H.																			
156	" L.H.																			
157	Rubber Rings, 3"																			
158	Pointers, 2½" with boss																			2
159	Fans 2" diam.																			1
160	Signal Arms, Home																			1
161	Signal Arms, Distant																			2
162	Chamfer Bearings, 1½" X 1½"																			1
163	Grinder Brackets, 2" X 1½"																			2
164	Boiler with end, complete																			1
165	Boiler without end																			1
166	Steam Pipes																			1
167	Chimney Adaptors																			2
168	Small Bearings																			1
169	End Bearings																			2
170	Gear Roller Bearings																			1
171	Roller Races, Gears, 192 teeth																			2
172	Ring Frames for Rollers																			2
173	Pinions																			3
174	Ball Bearings, 4" diam.																			1
175	Ball Races, Flanged Disc																			1
176	Ball Casings complete with Balls																			1
177	Digger Buckets																			2
178	Eccentrics ¾" throw																			1
179	Socket Couplings																			1
180	Pendulum Connections																			1
181	Rail Adaptors																			1
182	Grease Cups																			1
183	Flexible Coupling Units																			1
184	Anchoring Springs for Cord																			1
185	Shafting Standard, Large																			1
186	" Small																			1
187	Rod Socket																			1
188	Gear Ring 3½"																			2
189	Bobbins																			8
190	Insulating Bushes																			8
191	Lamp Holders																			1
192	Lamps, 2½ volt																			1
193	" 3½																			1
194	" 6																			1
195	" 10																			1
196	" 20																			1
197	Steering Wheel 1½" diam.																			1
198	Driving Bands																			4
199	Road Wheels																			4
200	Flexible Plates, 2½" X 1½"																			1
201	" 2½" X 2"																			4
202	" 5" X 2½"																			2
203	" 5" X 2"																			4
204	" 5" X 2½"																			4
205	" 5" X 2"																			8
206	" 12½" X 2½"																			16
207	Hinged Flat Plates, 4½" X 2½"																			18
208	Terminals																			3
209	Washers, Insulating																			3
210	6 B.A. Screws																			8
211	6 B.A. Nuts																			10
212	Clockwork Motor No. 2																			1
213	Electric Motor No. E6 (6 volt)																			1
<b>Special Instruction Leaflets</b>																				
No. 1	Motor Chassis																			1
2	High-speed Ship-Coaler																			1
3	Dredger																			1
4	Stiff Leg Derrick																			1
5	Platform Scales																			1
6	Bagatelle Table																			1
7	Log Saw																			1
8	Stone-sawing Machine																			1
9	Meccanograph																			1
10	New Grandfather Clock																			1
11	New Loom																			1
12	Revolving Crane																			1
13	Electric Mobile Crane																			1
14	Transporrer Bridge																			1
15	Traction Engine																			1
16	Vertical Log Saw																			1
17	Travelling Gantry Crane																			1
18	Hydraulic Crane																			1
19	Twin-elliptic Harmonograph																			1
20	Pontoon Crane																			1
21	Hammerhead Crane																			1
22	Breakdown Crane																			1
23	Automatic Grabbing Crane																			1
24	Electric Derrick Crane																			1
25	Howitzer Limber and Tractor																			1

Full instructions for building a fine range of models are included with each Outfit.

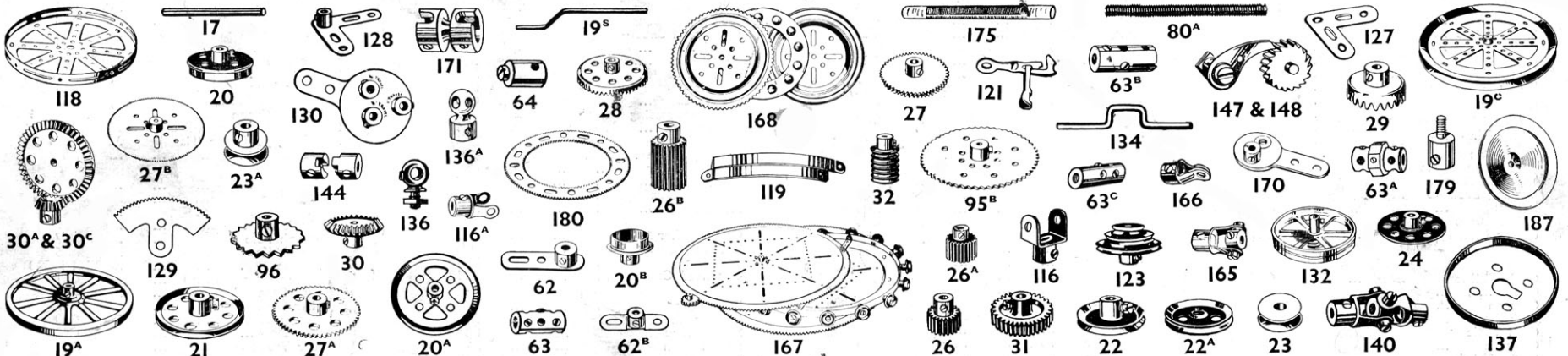


# MECCANO PARTS & ACCESSORIES

## PLATES, STRIPS, GIRDERS & BRACKETS



## WHEELS, PULLEYS, GEARS, ETC.



## MISCELLANEOUS

