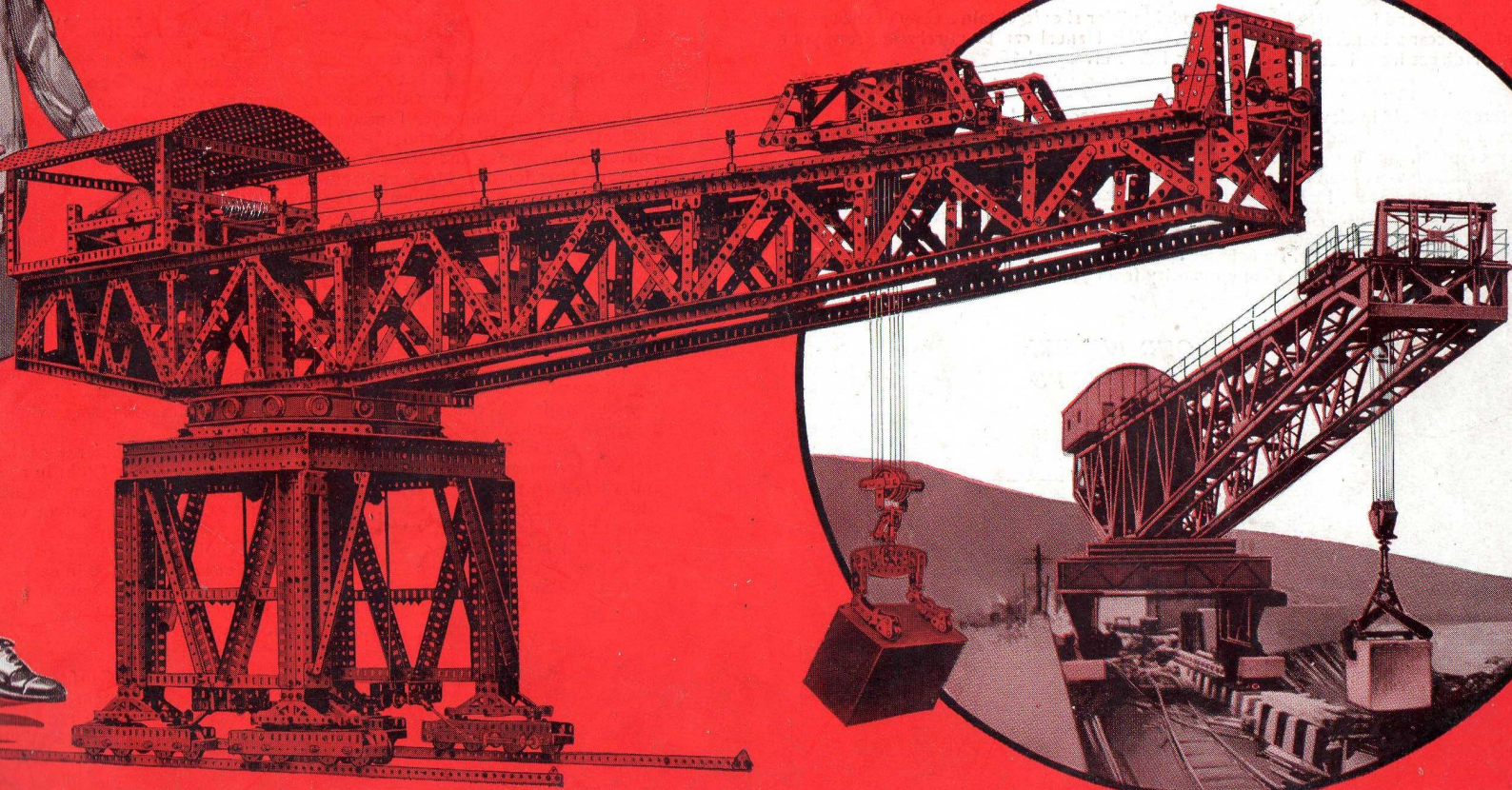


MECCANO

HORNBY'S ORIGINAL SYSTEM — FIRST PATENTED 1901

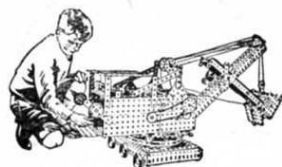
INSTRUCTIONS FOR OUTFITS O to D



360-D

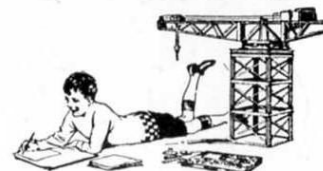
COPYRIGHT BY MECCANO LTD., BINNS ROAD, LIVERPOOL 13

13/636/.5 (Aus).



MECCANO

REAL ENGINEERING IN MINIATURE



MODEL-BUILDING WITH MECCANO

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

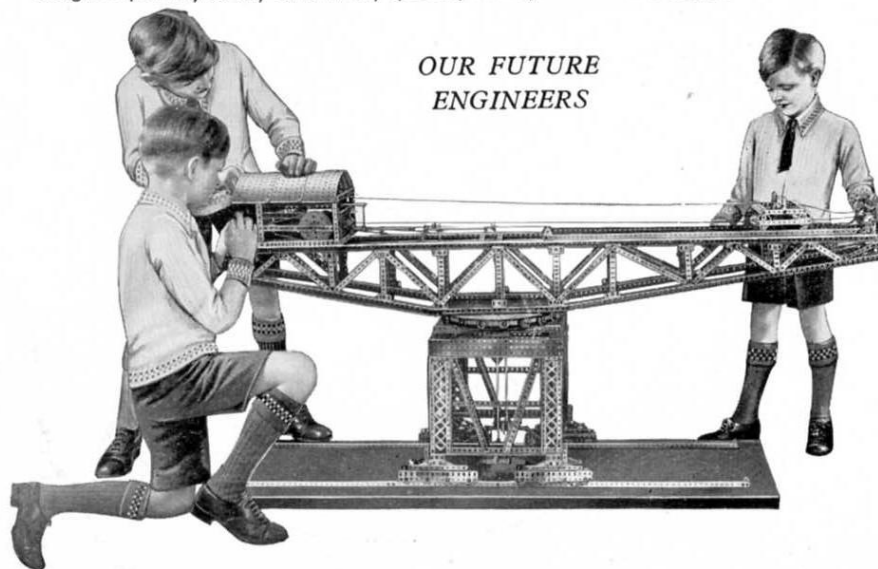
Make the simple models first—they will provide hours of fun—and then try to improve them. Every model can be made in a dozen different ways. It is important to screw up all the nuts and bolts tightly to ensure that your models will be strong and firm when they are completed.

Every keen and inventive Meccano model builder should obtain a copy of the special Manual "Meccano Standard Mechanisms." This Manual can be purchased from your dealer, or direct from Meccano Ltd., Binns Road, Liverpool 13.

HOW TO BUILD UP YOUR OUTFIT

Meccano is sold in eleven different Outfits, lettered O 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 O upwards can be converted into the one next higher by the purchase of an Accessory Outfit. Thus, Meccano Outfit O can be converted into an A by adding to it an Oa Accessory Outfit. An Aa would then convert it into a B Outfit, and so on. In this way, no matter with which Outfit you commence, you can build it up by degrees until you possess an L Outfit. It is important to remember that Meccano Parts can be bought separately at any time in any quantity from your Meccano dealer.

OUR FUTURE ENGINEERS



ELECTRIC LIGHTING OF MECCANO MODELS

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

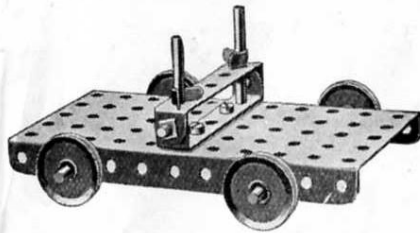
Meccano Clubs are founded and established under the guidance of the Guild Secretary at Headquarters, and at the present time there are active Clubs in nearly 250 towns and villages in the United Kingdom, and more than 100 in countries overseas. Each Club has its Leader, Secretary, Treasurer, and other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

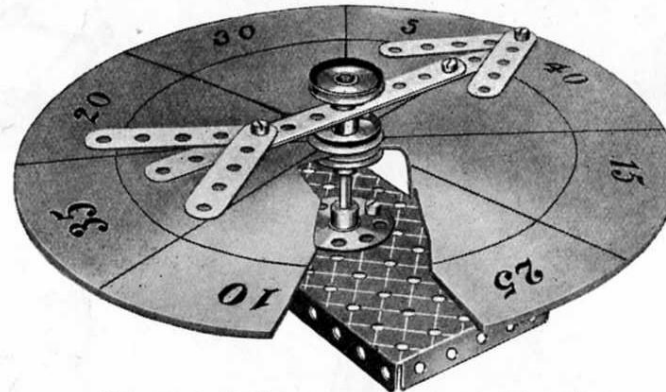
MECCANO SERVICE

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 hundreds of 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.

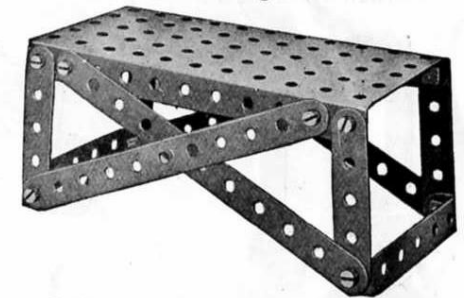
O1. Lumber Truck



O8. Roulette Wheel



O17. Planing Bench



O2. Spade



O3. Flower Pot Stand



O4. Fork



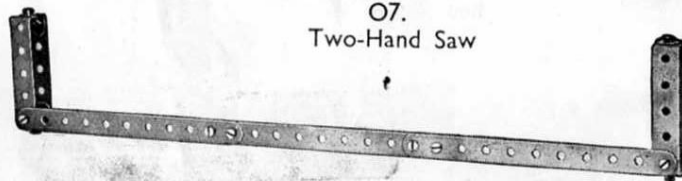
O5. Dividers



O6. Motor Boat

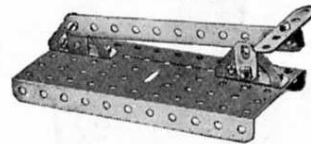


O7. Two-Hand Saw

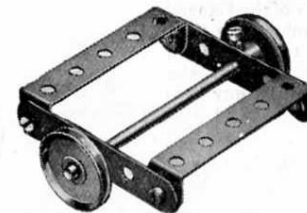


Cut out a circular piece of cardboard and mark as shown to form the scoring board, which is clamped between two 1" Pulleys. The pointer revolves freely on the upright spindle.

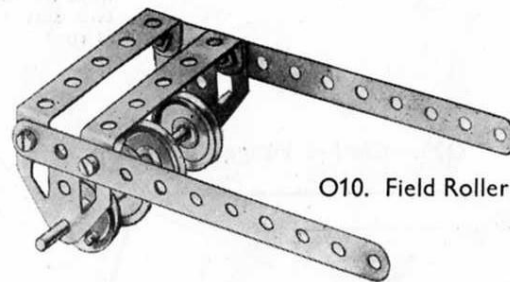
O9. Switch



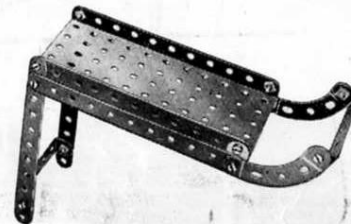
O13. Trolley



O10. Field Roller



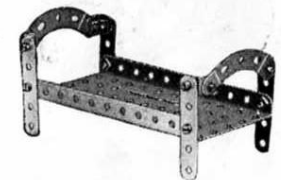
O11. Chute



O12. Mason's Trowel



O18. Crib



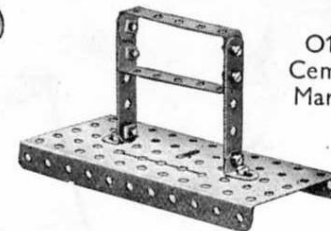
O14. Hoe



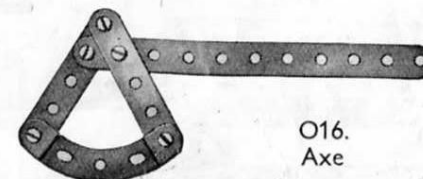
O19. Potato Chopper

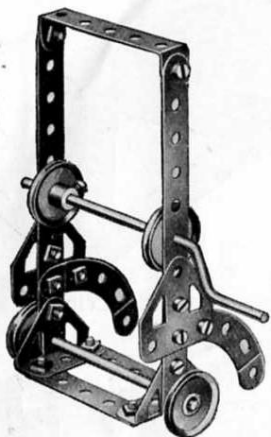


O15. Cement Marker



O16. Axe



O20.
Garden Hose Reel

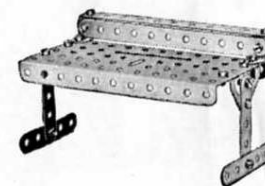
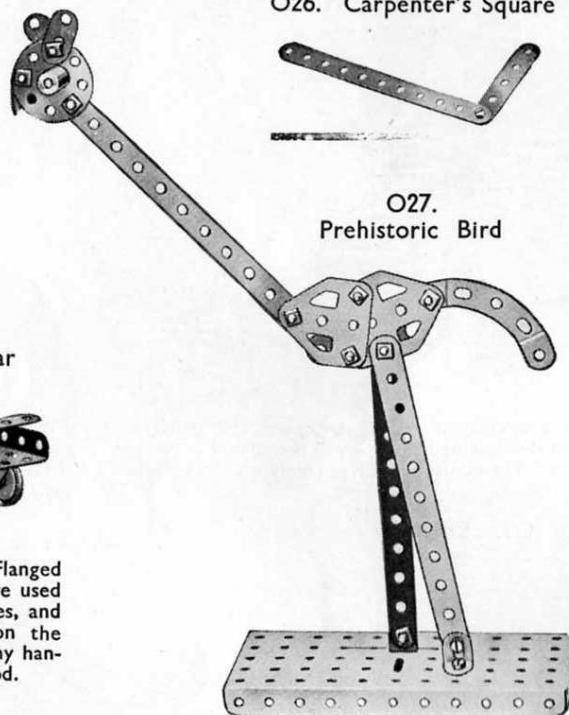
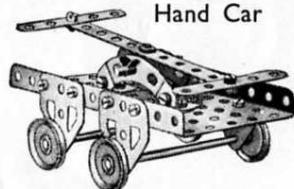
O23. Violin



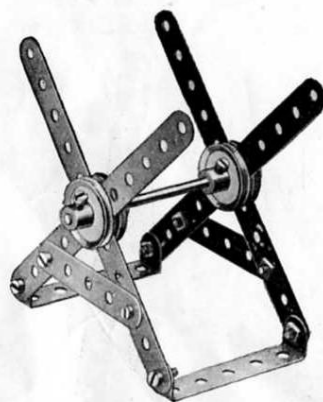
O26. Carpenter's Square

O29.
Hand Cart

O30. Desk

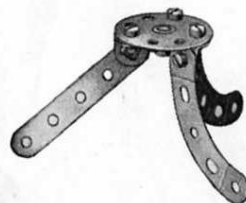
O27.
Prehistoric BirdO24.
Hand Car

O21. Sawing Horse

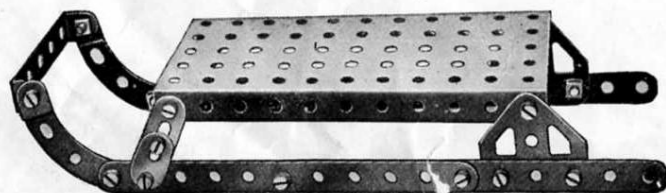


On one side of the Flanged Plate, Flat Trunnions are used for supporting the axles, and Trunnions are used on the other side. The dummy handles pivot on a 2" Rod.

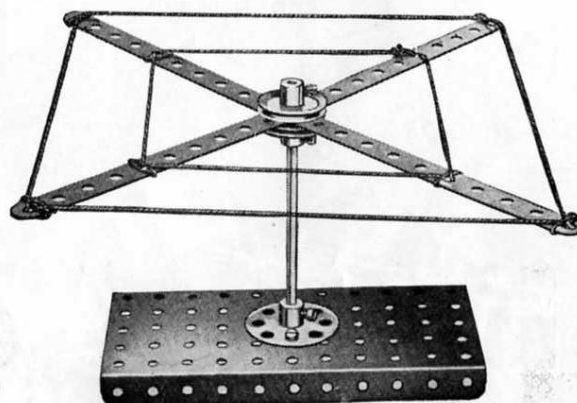
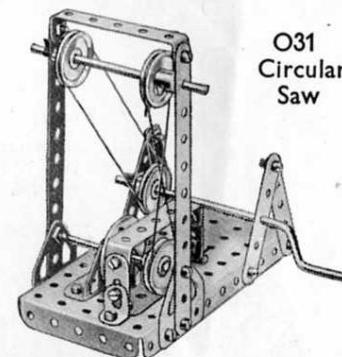
O25. Piano Stool



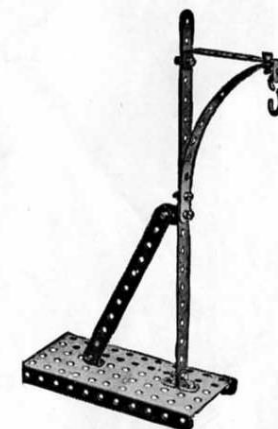
O22. Sledge



O28. Clothes Hanger

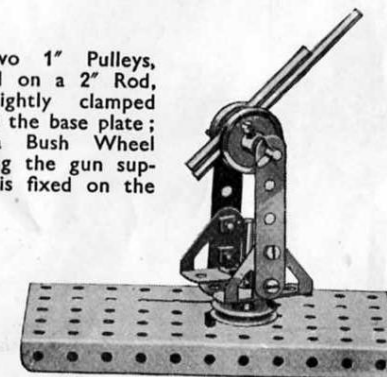
O31
Circular
Saw

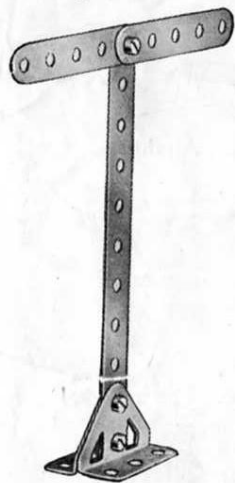
A Bush Wheel represents the circular saw and is driven from the Crank Handle through two sets of Pulleys and belts of cord.

O32.
Mail Bag Hanger

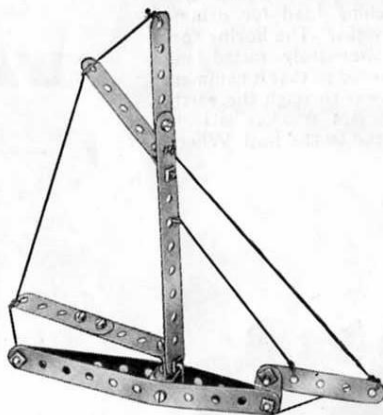
O33. Anti-Aircraft Gun

Two 1" Pulleys, carried on a 2" Rod, are lightly clamped against the base plate; and a Bush Wheel carrying the gun supports is fixed on the Rod.

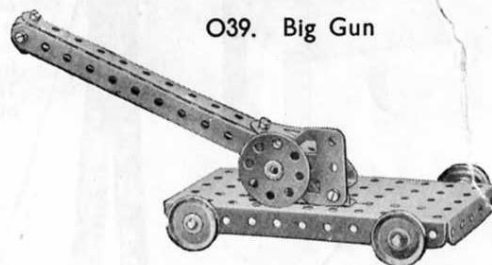


O34. 2-Way
Sign Post

O38. Yacht

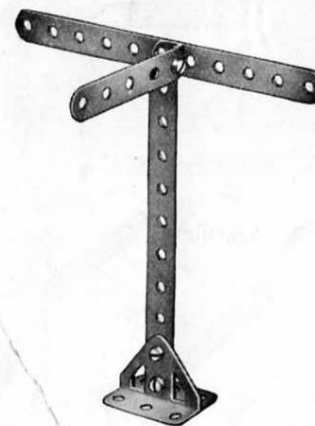


O39. Big Gun

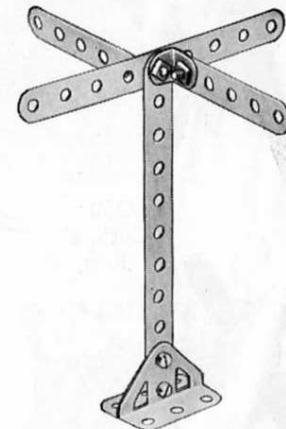


The gun barrel is made of $5\frac{1}{2}$ " Strips, and at its lower end is bolted to a Flat Trunnion that is fixed by Angle Brackets between two Trunnions bolted to the base. A Bush Wheel forms a dummy handwheel.

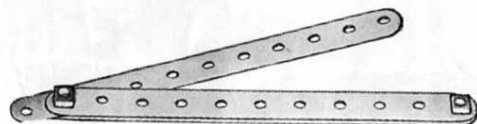
O44. 3-Way Sign Post



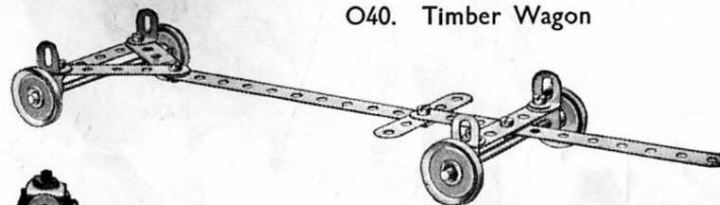
O47. 4-Way Sign Post



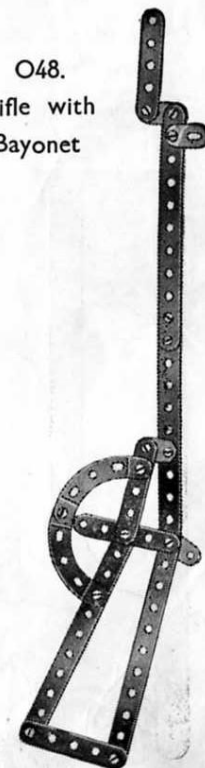
O35. Razor



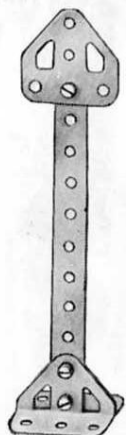
O40. Timber Wagon



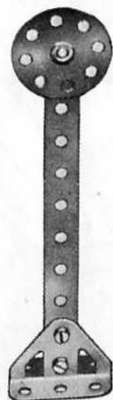
O45. Velocipede

O48. Rifle with
Bayonet

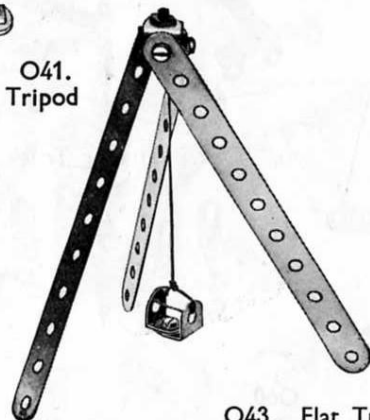
O36. Road Sign



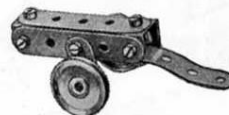
O37. Road Sign



O41. Tripod

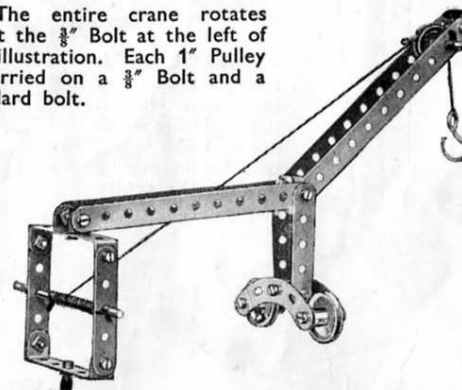


O42. Cannon

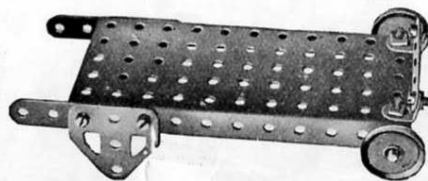


O46. Radial Travelling Crane

The entire crane rotates about the $\frac{3}{8}$ " Bolt at the left of the illustration. Each 1" Pulley is carried on a $\frac{3}{8}$ " Bolt and a standard bolt.



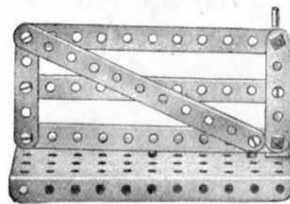
O43. Flat Truck



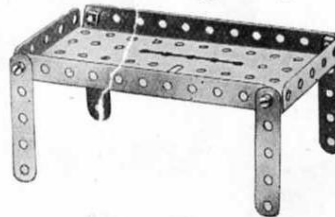
O49. Farm Sight



O52. Gate

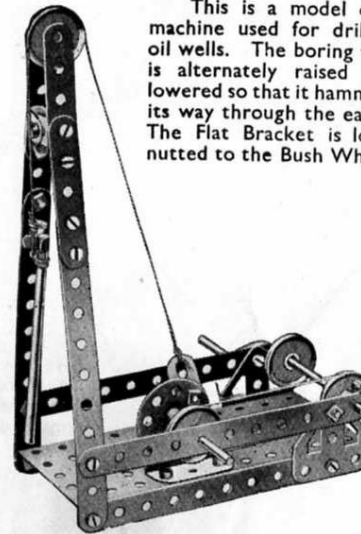


O55. Drinking Trough

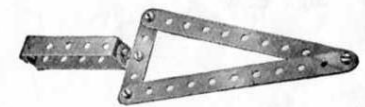


O58. Well Driller

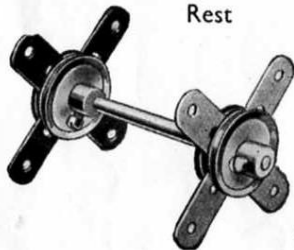
This is a model of a machine used for drilling oil wells. The boring tool is alternately raised and lowered so that it hammers its way through the earth. The Flat Bracket is lock-nutted to the Bush Wheel.



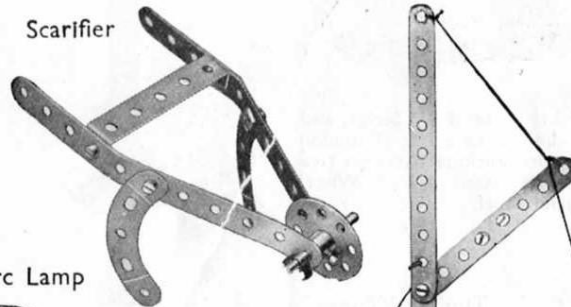
O63. Trowel



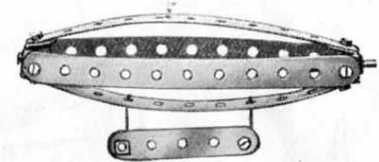
O50. Cutlers' Rest



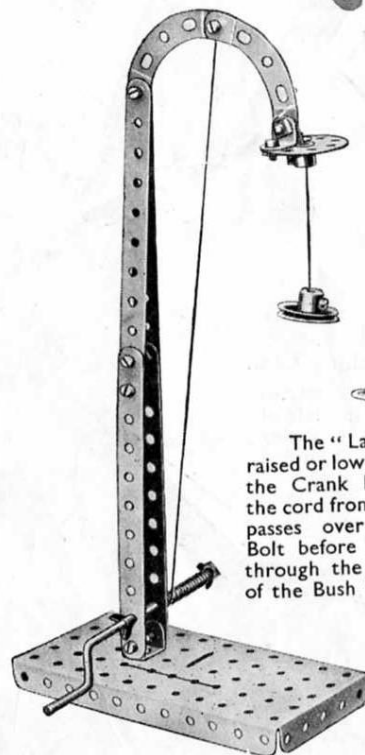
O53. Scarifier



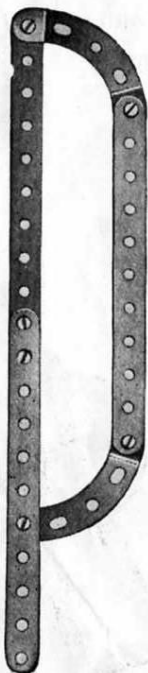
O64. Airship



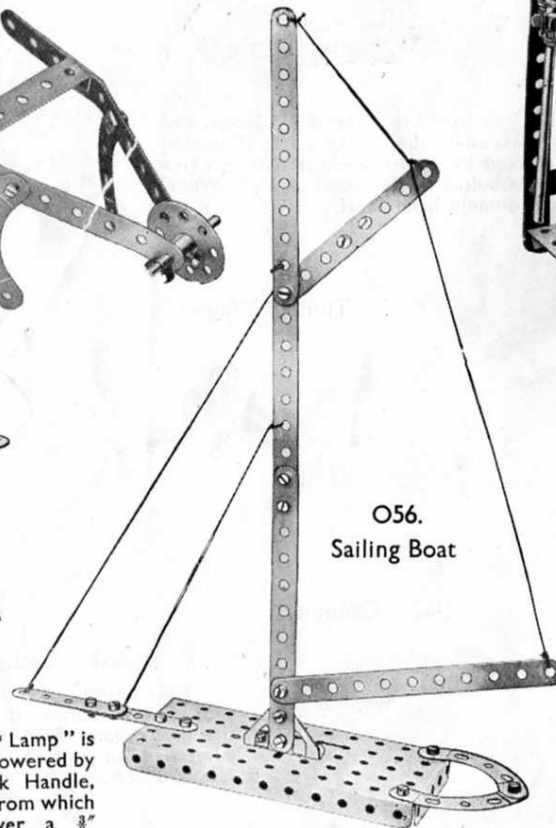
O54. Arc Lamp



O51. Meat Saw



O56. Sailing Boat



The "Lamp" is raised or lowered by the Crank Handle, the cord from which passes over a Bolt before passing through the centre of the Bush Wheel.

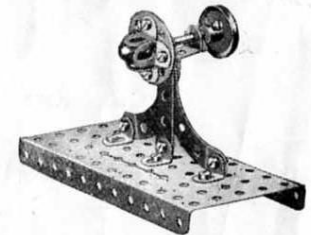
O59. Rake



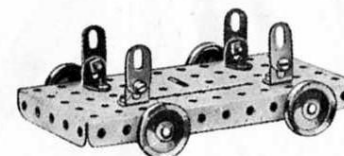
O61. Bed



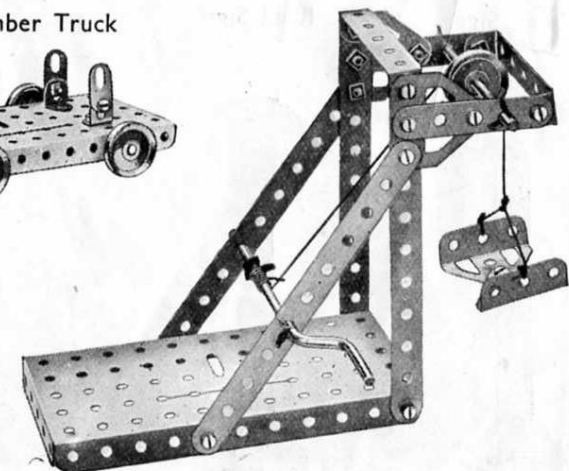
O65. Scrap Rec.



O62. Lumber Truck



O66. Pit-Head Gear



O57. Track Gauge



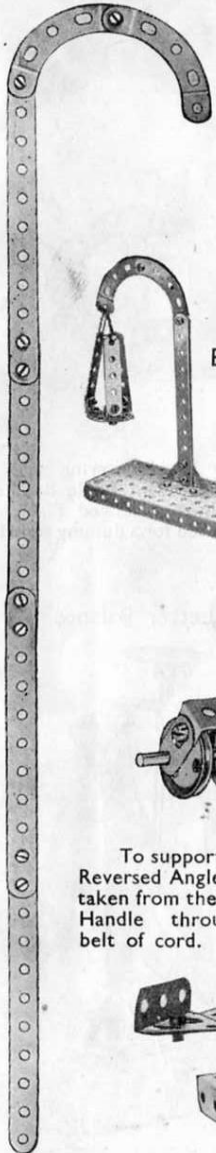
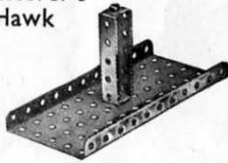
O60. Book End



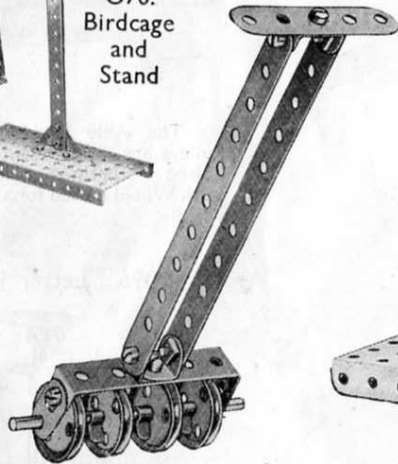
O67. Tin Opener



O68. Walking Stick

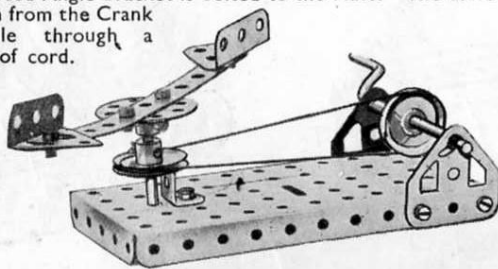
O69.
Plasterer's
HawkO70.
Birdcage
and
Stand

O71. Garden Roller

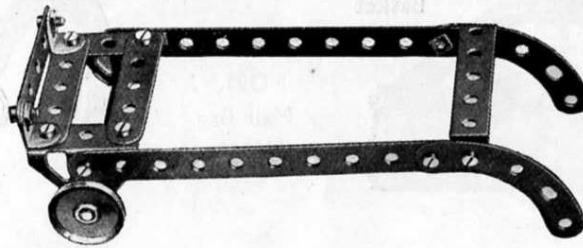
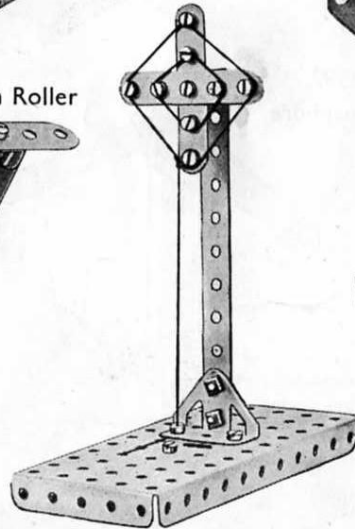
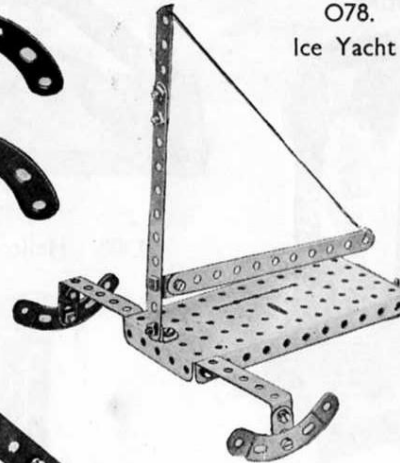
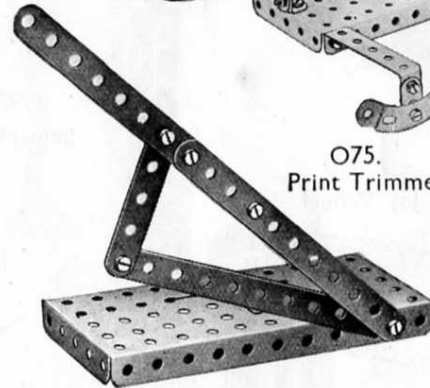
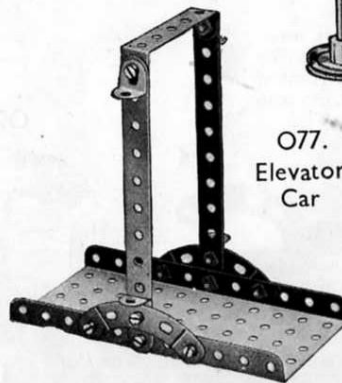


O72. Roundabout

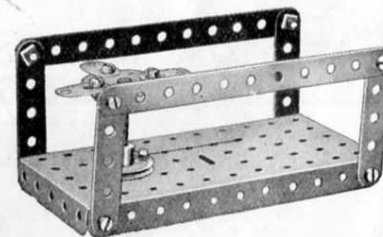
To support the vertical Rod carrying the roundabout a Reversed Angle Bracket is bolted to the Plate. The drive is taken from the Crank Handle through a belt of cord.



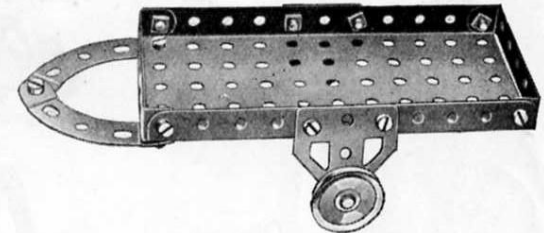
O73. Porter's Trolley

O74.
Frame AerialO78.
Ice YachtO75.
Print TrimmerO76.
StoolO77.
Elevator
Car

O80. Turnstile

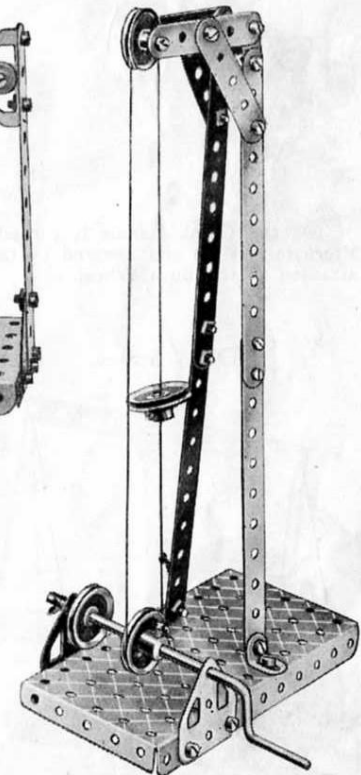
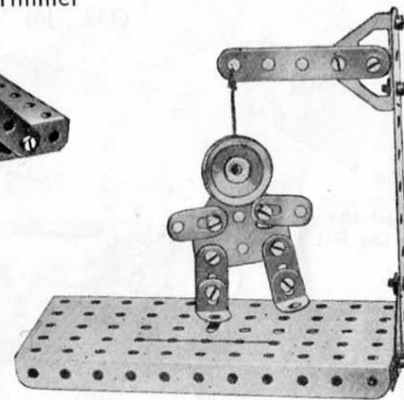


O81. Hand Truck

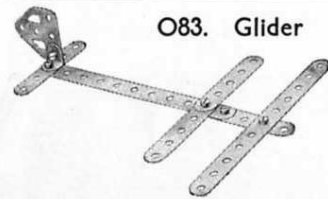
O82.
Airship
Mooring Mast

The 1" Pulley attached to the cord can be raised or lowered, and represents the lift for conveying passengers to and from the airship.

O79. Gallows



These Models can be built with MECCANO Outfit O



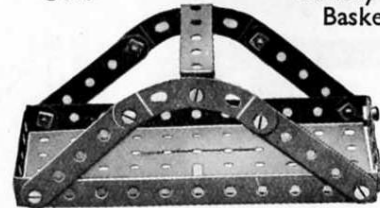
O83. Glider

O86. Pulley Shafting



O87.

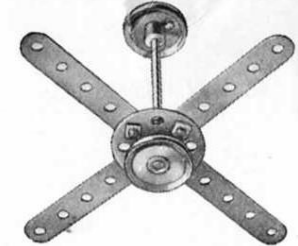
Cutlery Basket



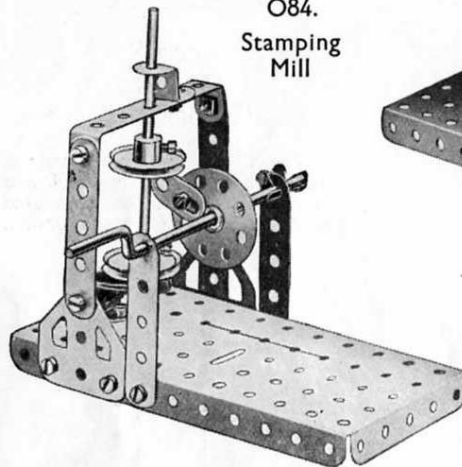
O91. Mail Bag Hanger



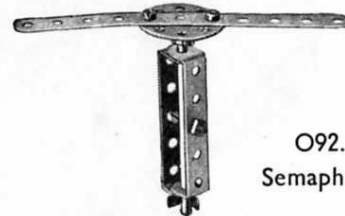
O94. Ceiling Fan



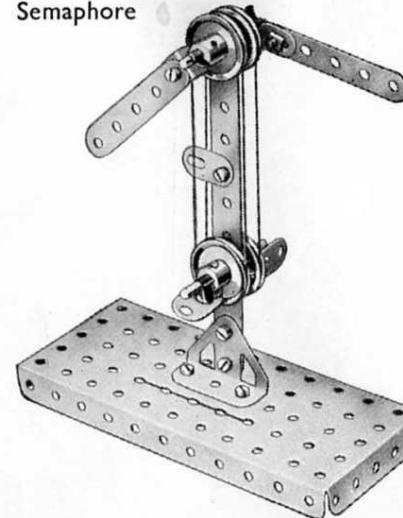
O84. Stamping Mill



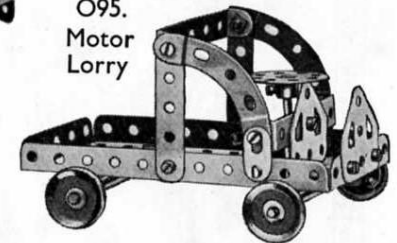
O88. Helicopter Toy



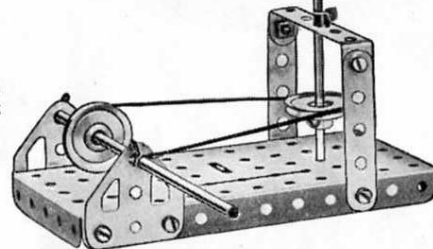
O92. Semaphore



O95. Motor Lorry



O89. Joy Wheel

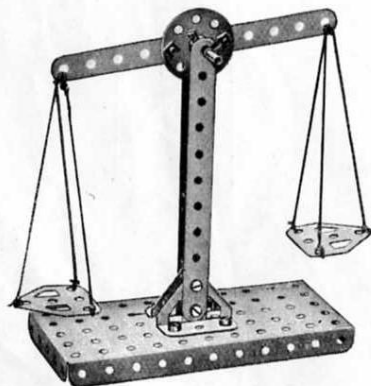


Stiff Cardboard is used for the disc and is bolted to a Bush Wheel. It is rotated by a belt of cord from the Crank Handle.

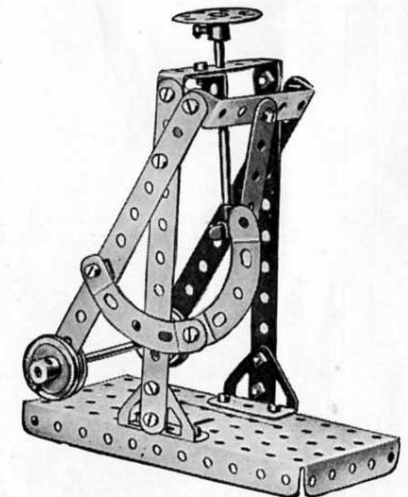
The Axle Rods carrying the 1" Pulleys are mounted in Angle Brackets bolted beneath the Flanged Plate. A Bush Wheel is used for a dummy steering wheel.

As the Crank Handle is turned the stamp is alternately raised and lowered by the Flat Bracket attached to the Bush Wheel.

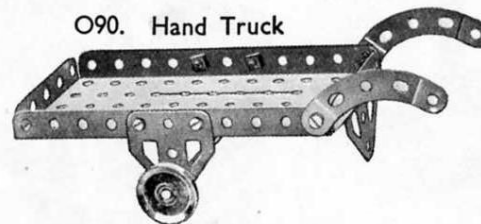
O85. Scales



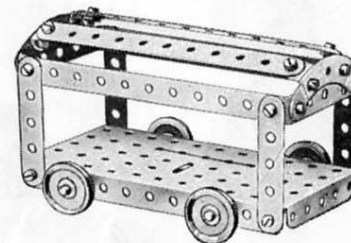
O96. Letter Balance



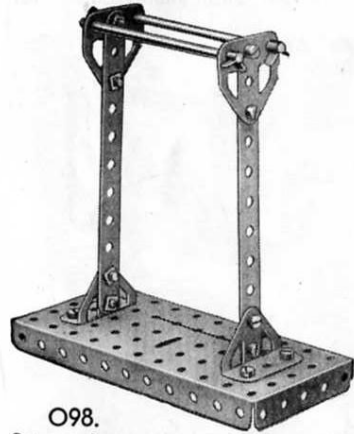
O90. Hand Truck



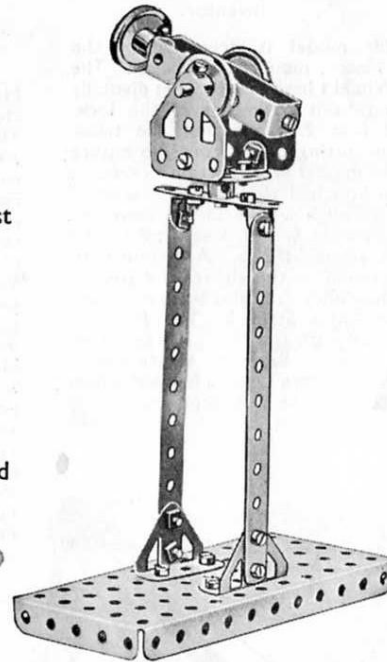
O93. Pullman Car



O97. Towel Horse



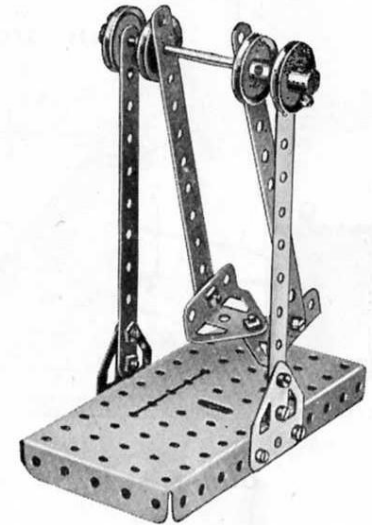
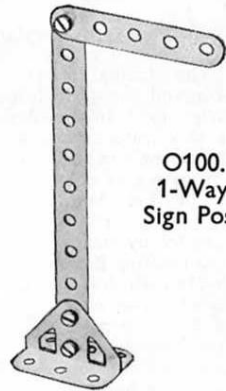
O102. Searchlight



O103. Table



O106. Swing

O100.
1-Way
Sign PostO98.
Street LampO99.
DividersO101.
Umbrella Stand

O104. Cheese Cutter

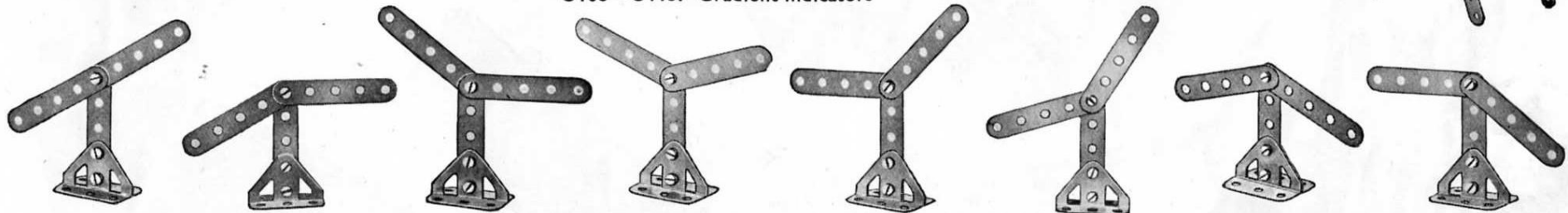
O107.
Step Ladder

O105. Tweezers



The searchlight can be rocked up or down on a 2" Rod carried in Flat Trunnions, and the upper framework swivels on the $\frac{3}{4}$ " Bolt fixing the Bush Wheel.

O108—O115. Gradient Indicators



HOW TO CONTINUE

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

This page features a selection of Meccano Outfit O working models of a type rather more advanced than the 115 examples shown in the following pages. In four instances the models

are fitted with the Meccano Magic Motor, which makes them work just like the real thing. Try your hand at building bigger and better models with the parts in your Outfit and become a real inventor.

O116. STEAM SHOVEL

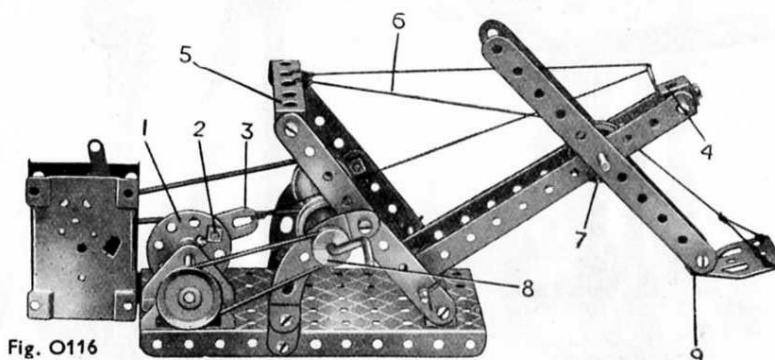


Fig. O116

This model is driven from the Magic Motor, mounted as shown. The Bush Wheel 1 has a Flat Bracket pivotally attached to it by means of the lock-nutted Bolt 2. Care must be taken with the fitting of the cords to ensure that the model will function correctly. A cord attached to the Flat Bracket 3 passes through a hole in the Reversed Angle Bracket 4, and is also secured to the Double Angle Strip 5. A second cord 6 is fastened to the shovel and passing over the Pulley 7, is also secured to the Double Angle Strip 5. The Pulley 8 is supplied with the Magic Motor. Two $\frac{1}{2} \times \frac{1}{2}$ Angle Brackets 9 are bolted together to form a Double Bracket which is bolted to the flat trunnion.

O117. FORGING HAMMER

The hammer, two $2\frac{1}{2}$ Strips overlapping two holes, is pivotally mounted on a 2" Axle Rod, by means of two $\frac{1}{2} \times \frac{1}{2}$ Angle Brackets bolted together forming a double bracket 1. It is actuated by a $2\frac{1}{2}$ Strip 2 bolted to a Bush Wheel that is rotated by a Driving Band 3 (crossed), passing round Pulleys 4 and 5, the latter of which is provided with the Magic Motor. The Pulley 6 is rotated by a second Driving Band that is fitted to the Pulley on the motor driving shaft.

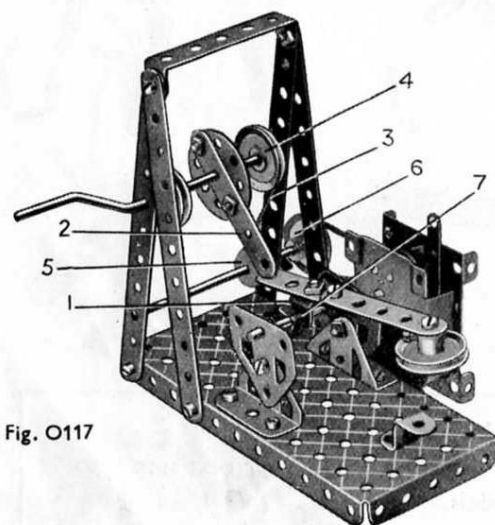


Fig. O117

O118. DERRICK CRANE (HAND OPERATED)

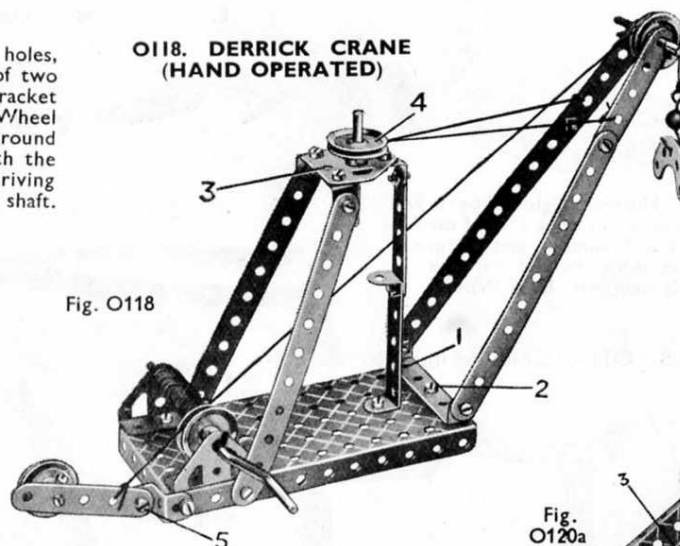


Fig. O118

The side members of the jib are bolted at their lower end to a $2\frac{1}{2} \times \frac{1}{2}$ Double Angle Strip 1, which is pivotally secured to the base by a lock-nutted Bolt 2. The Flat Trunnion 3 carries in its centre hole a 2" Axle Rod to which is fitted a Pulley 4. The length of cord supporting the jib is passed round this Pulley and attached to the jib head, as shown. The band brake is lock-nutted at 5 to a Reversed Angle Bracket.

O119. POWER HACK SAW

The fitting of the Magic Motor and the Driving Bands is clearly shown in the illustration. The saw frame slides on a $3\frac{1}{2}$ " Axle Rod held in position by means of a Flat Bracket bent over. It is driven to and fro by means of the rotating Bush Wheel to which it is pivoted. The Axle Rod 3 is journaled in the bottom hole of a $2\frac{1}{2} \times \frac{1}{2}$ Double Angle Strip, and one hole of a Reversed Angle Bracket 2. The saw is pivotally attached to the Bush Wheel by a lock-nutted Bolt 1. The Pulley 4 is provided with the Motor.

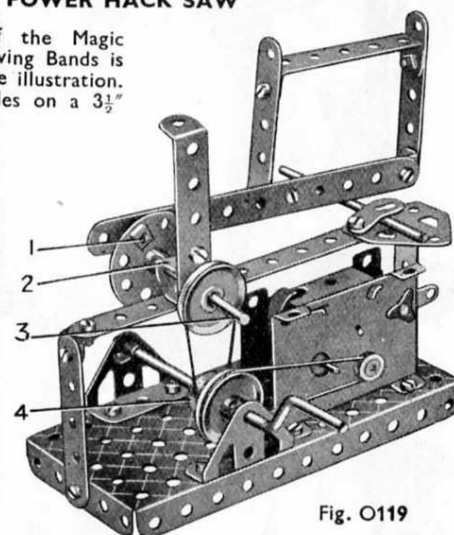


Fig. O119

O120. ELECTRIC TRUCK

The steering wheel, a Bush Wheel, is secured to the Reversed Angle Bracket 1 by means of a $\frac{3}{8}$ " Bolt. Fig. O120a shows how the Magic Motor is mounted to drive the front wheels. The Pulley supplied with the Motor is mounted on the front axle, and the rubber band is fitted as shown. The axle carrying the two front wheels is journaled in two Flat Brackets, which are secured to the $5\frac{1}{2}$ Strips 2 and 3, forming the frame of the truck.

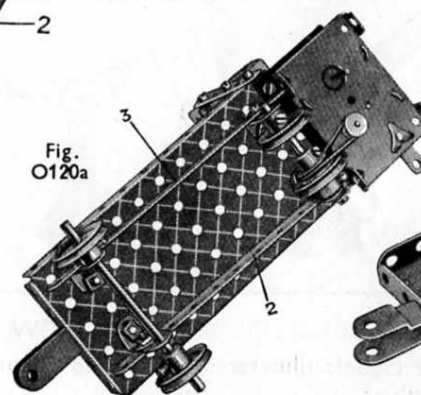


Fig. O120a

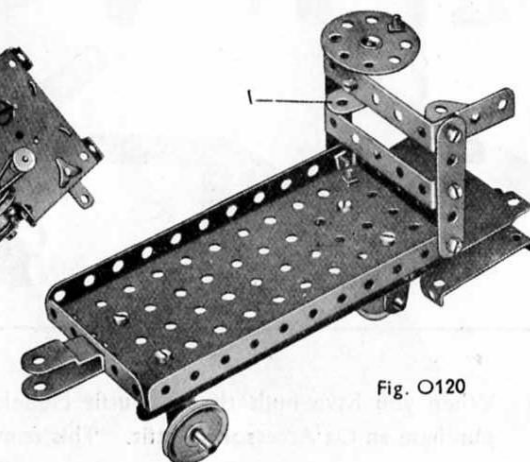
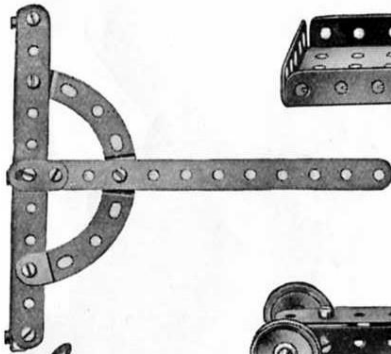
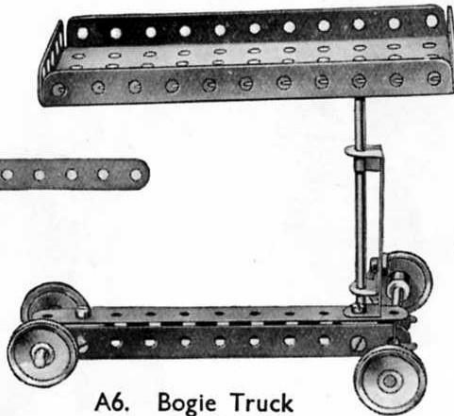


Fig. O120

A1. Rake

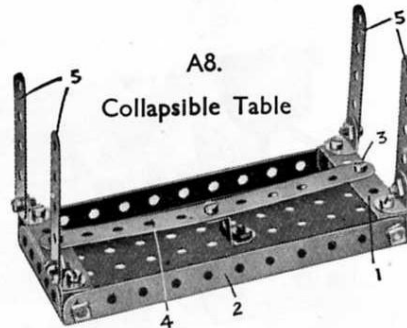


A5. Bed Table



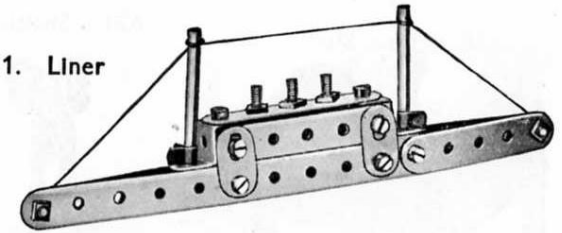
A8.

Collapsible Table

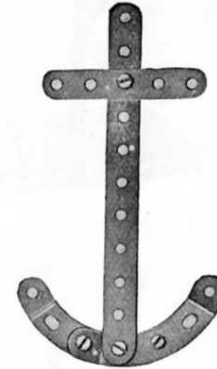


The $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strips 1 are attached to the $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flanged Plate 2 by lock-nutted Bolts as in Standard Mechanism No. 1A. The Bolts 3 are secured to the $5\frac{1}{2}''$ Strip 4 and their shanks engage with the centre holes in the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

A11. Liner



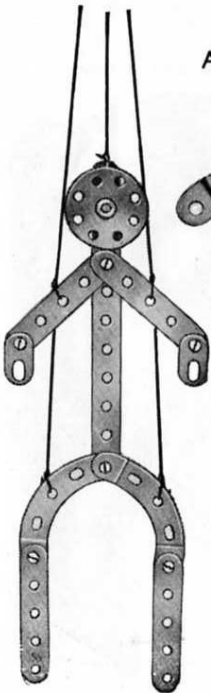
A12. Anchor



A16. Go-chair



A2. Jumping Jack



A6. Bogie Truck

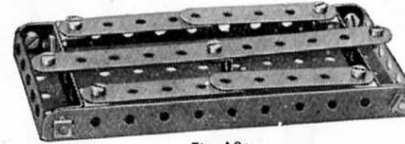
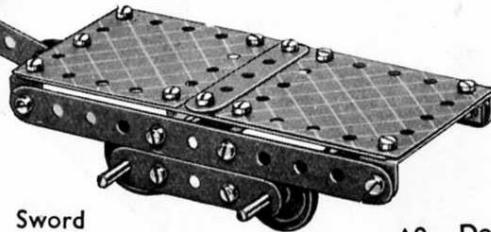
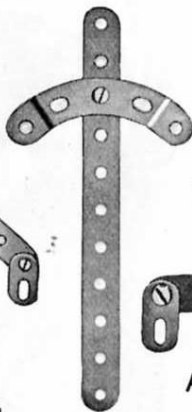


Fig. A8a

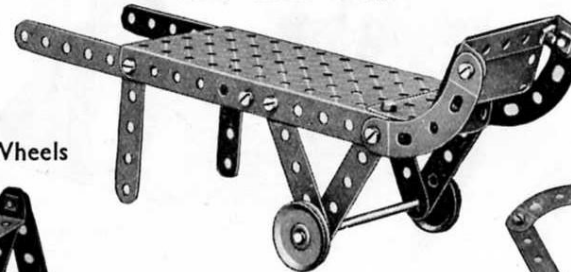
A3. Sword



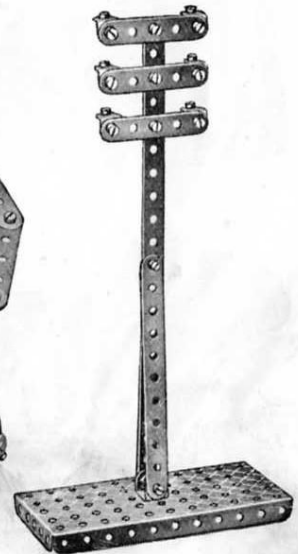
A9. Dog



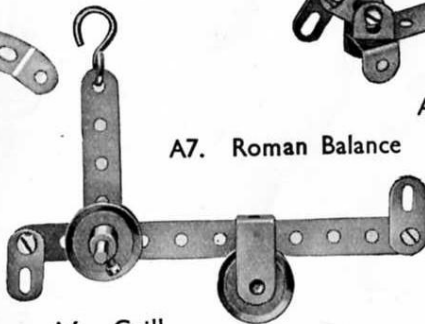
A13. Hand Truck



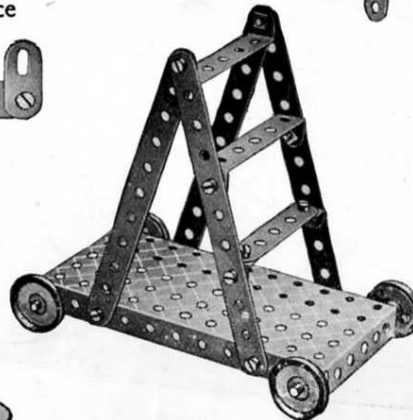
A17. Telegraph Pole



A7. Roman Balance



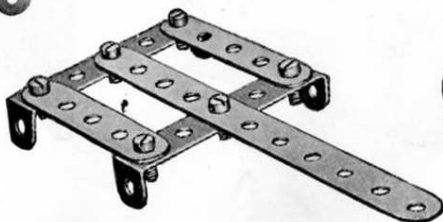
A10. Ladder on Wheels



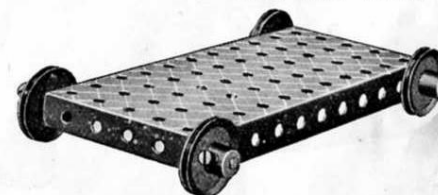
A14. Fire Axe



A4. Grill



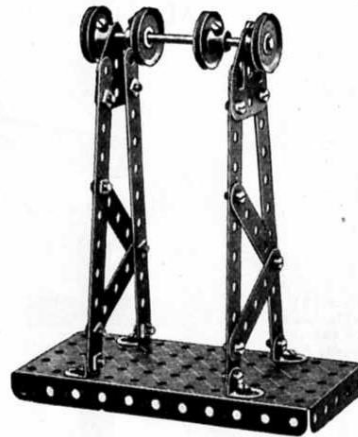
A15. Flat Truck



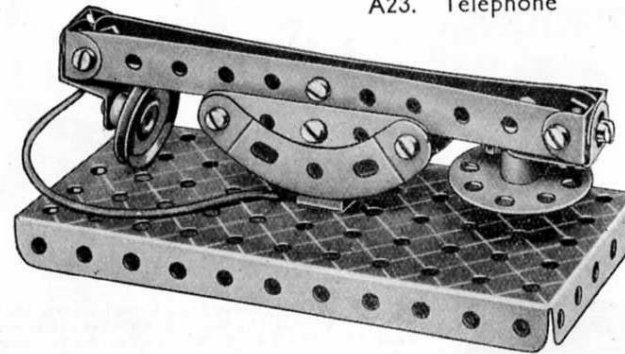
A18. Music Stool



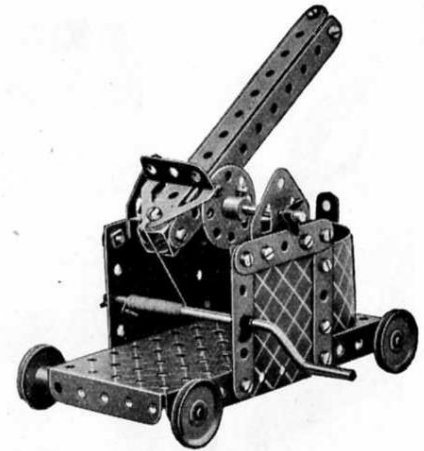
A21. Shafting Standard



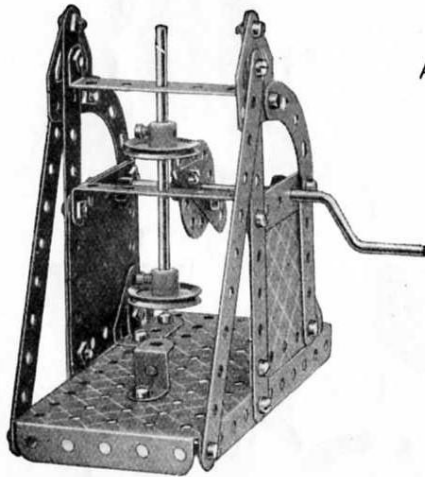
A23. Telephone



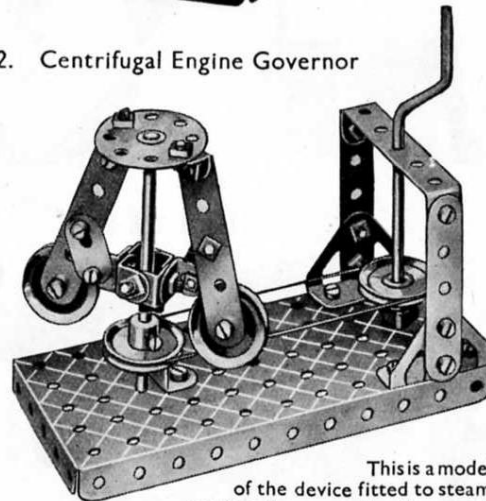
A26. Anti-aircraft Gun



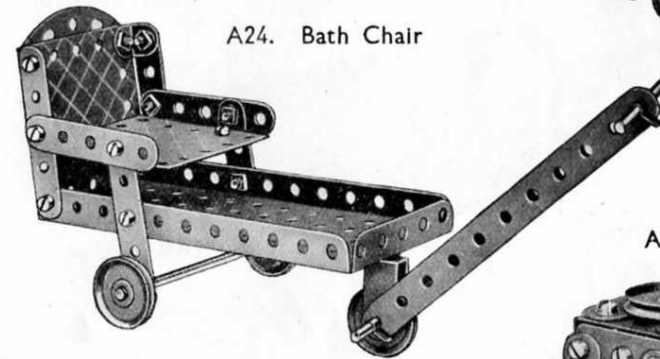
A19. Ore Crusher



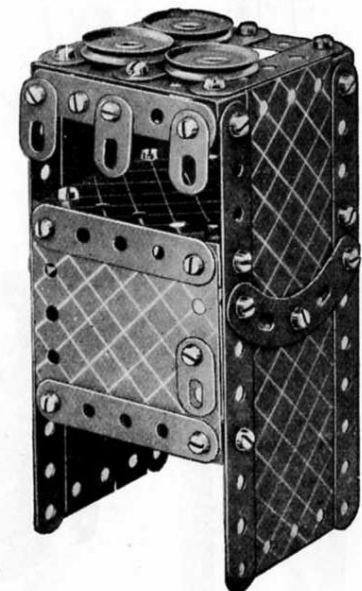
A22. Centrifugal Engine Governor



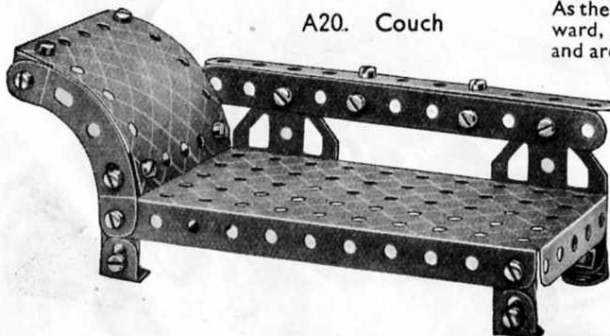
A24. Bath Chair



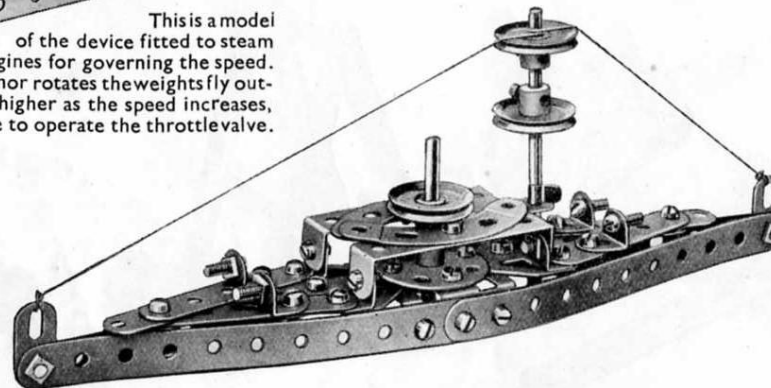
A27. Gas Stove



A20. Couch

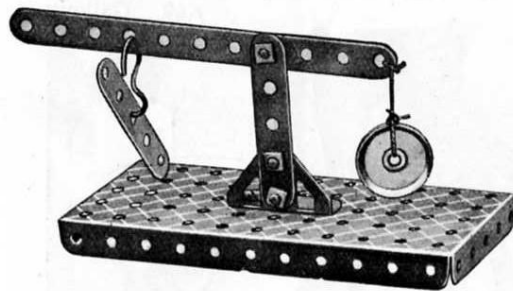


A25. Battleship

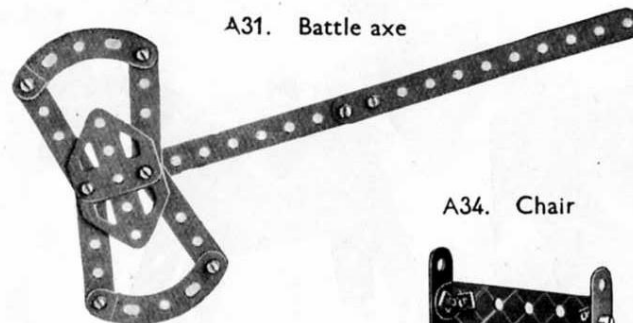


This is a model of the device fitted to steam engines for governing the speed. As the governor rotates the weights fly outward, rising higher as the speed increases, and are made to operate the throttle valve.

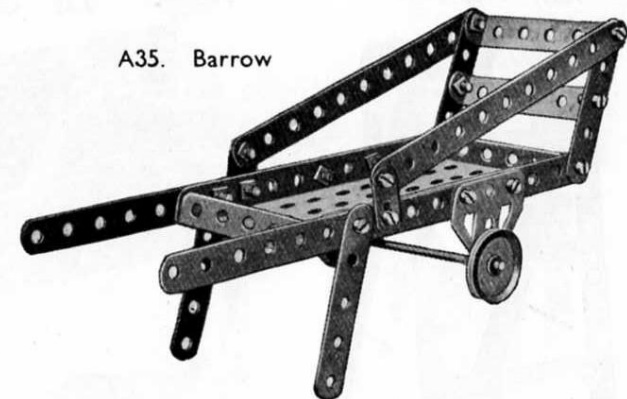
A28. Lever of the First Order



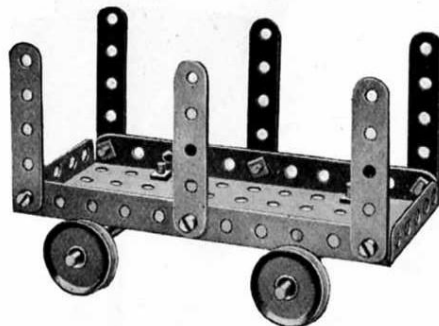
A31. Battle axe



A35. Barrow



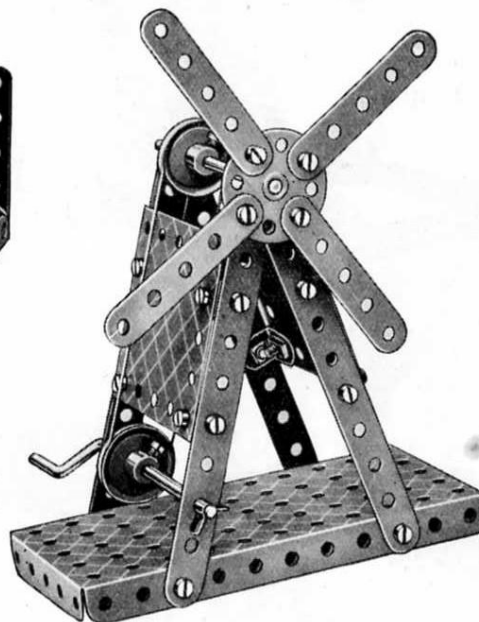
A29. Timber Truck



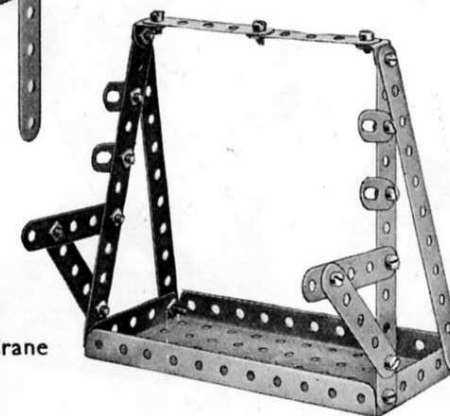
A34. Chair



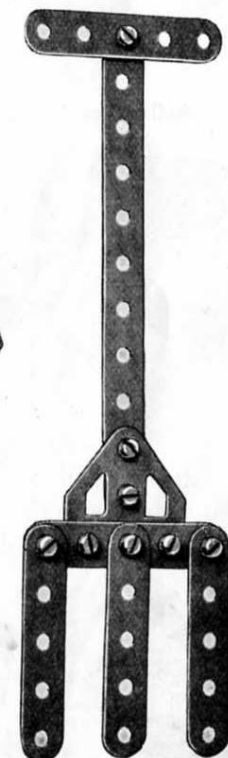
A32. Windmill



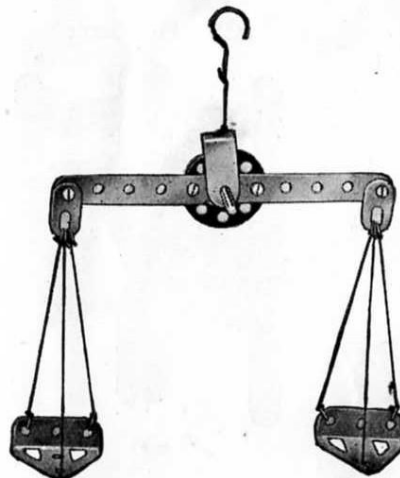
A36. Pen Rack



A38. Fork

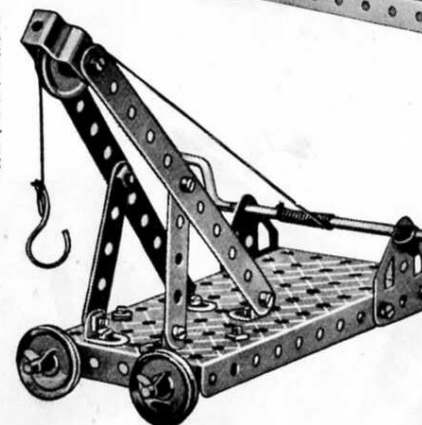


A30. Hanging Scales

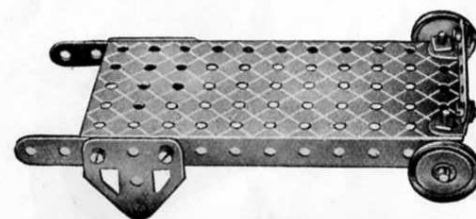


A37.

Revolving Crane

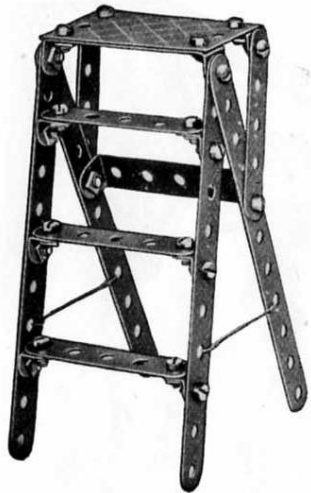


A33. Flat Truck

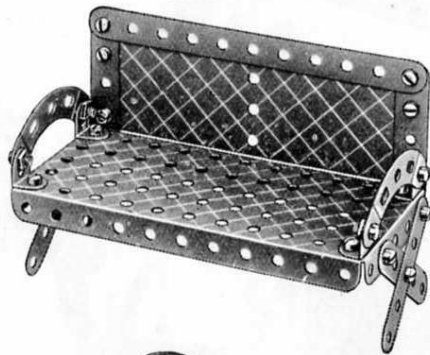


The back of the crane rests on a Flat Bracket bolted to the end flange. An Anchoring Spring is slipped on to the Crank Handle for securing the hoisting cord.

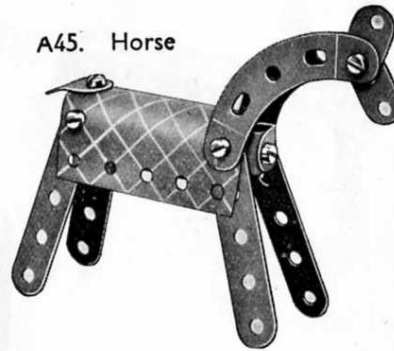
A39. Step Ladder



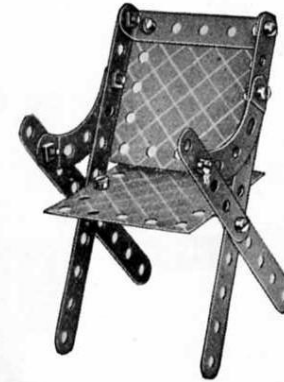
A42. Garden Seat



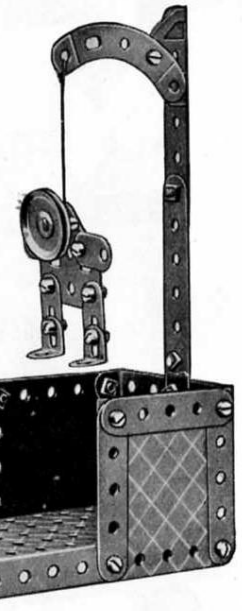
A45. Horse



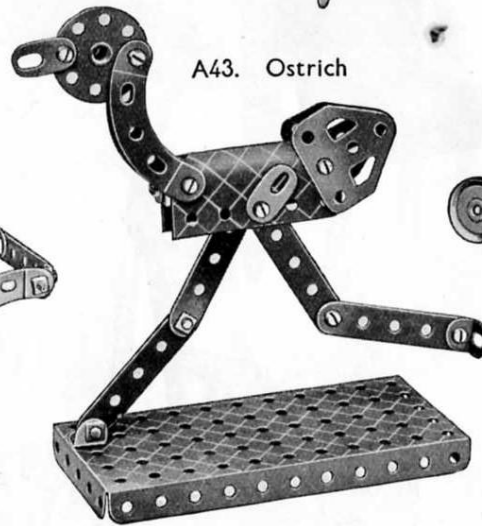
A48. Arm Chair



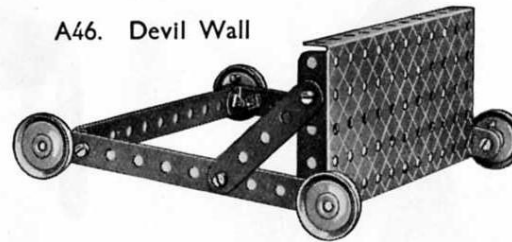
A49. Gallows



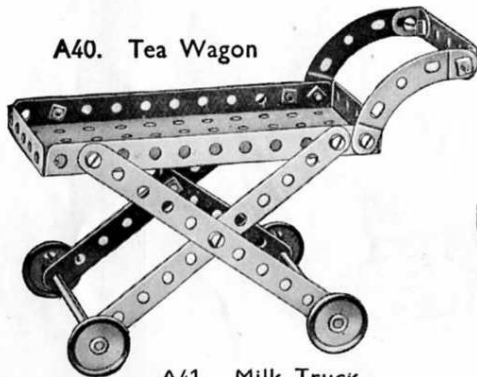
A43. Ostrich



A46. Devil Wall

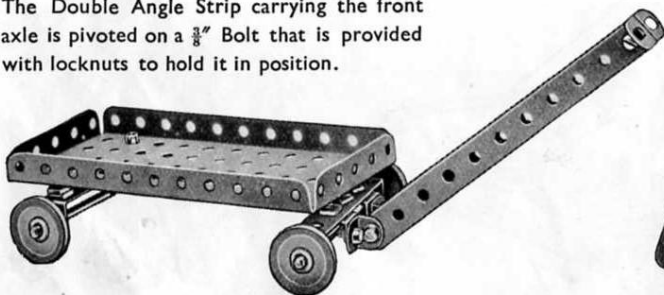


A40. Tea Wagon

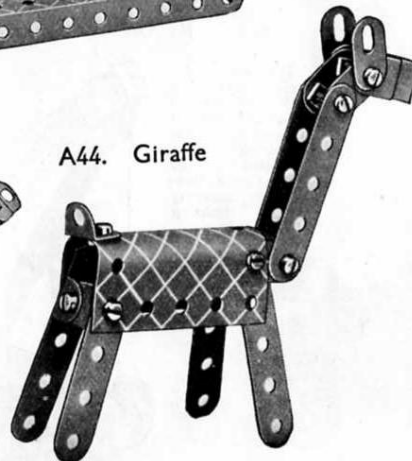


A41. Milk Truck

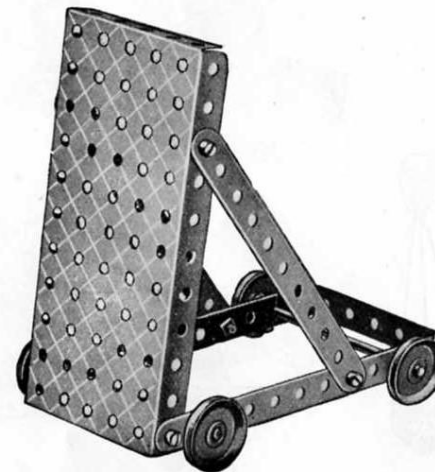
The Double Angle Strip carrying the front axle is pivoted on a $\frac{3}{8}$ " Bolt that is provided with locknuts to hold it in position.



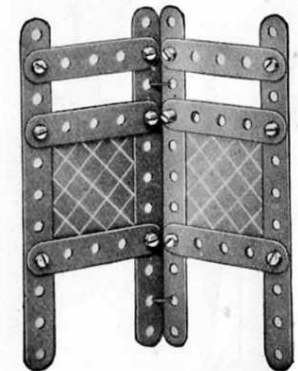
A44. Giraffe



A47. Gravel Sifter



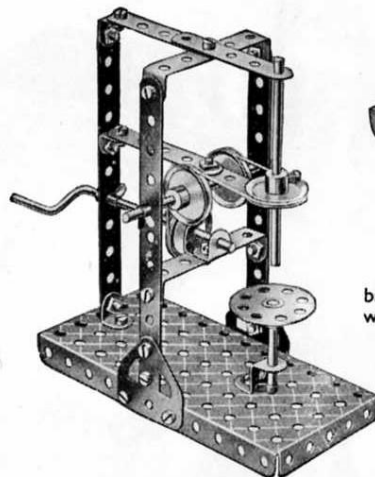
A50. Fire Screen



A51. Umpire's Seat

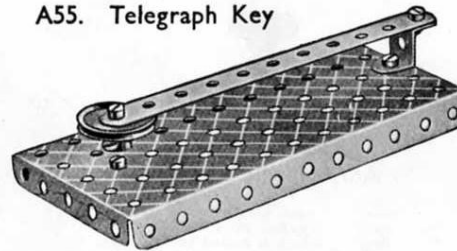


A52. Drilling Machine



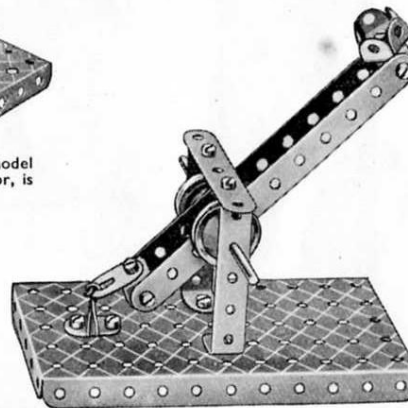
An alternative design of this model (A52M), fitted with the *Magic Motor*, is shown at the end of this section.

A55. Telegraph Key

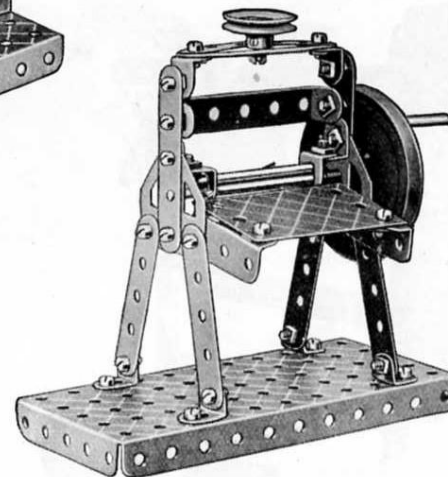


A56. Catapult

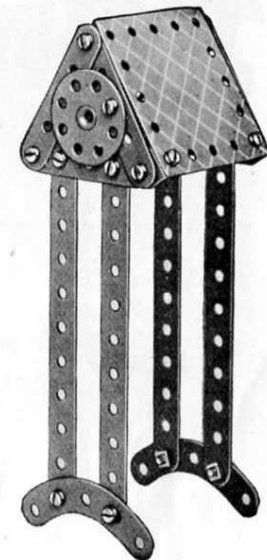
The pivoted arm is connected to the base by means of a short piece of elastic which is not provided in the Outfit.



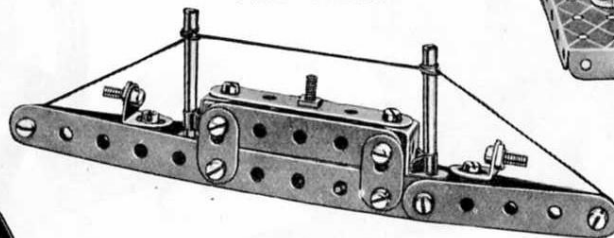
A58. Wringing Machine



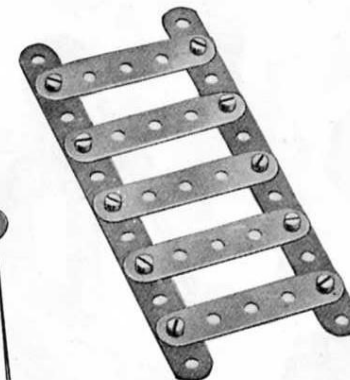
A60. Grandfather Clock



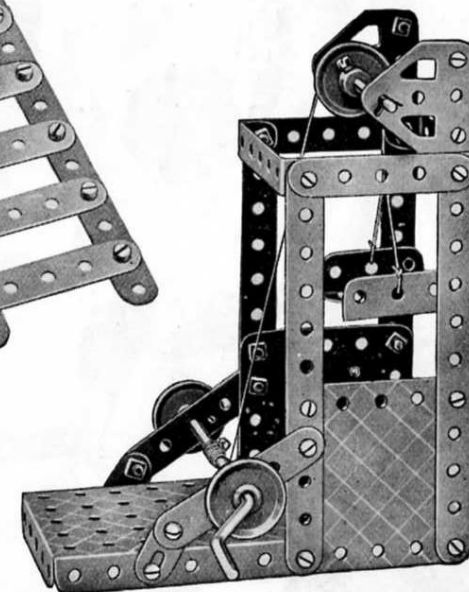
A53. Cruiser



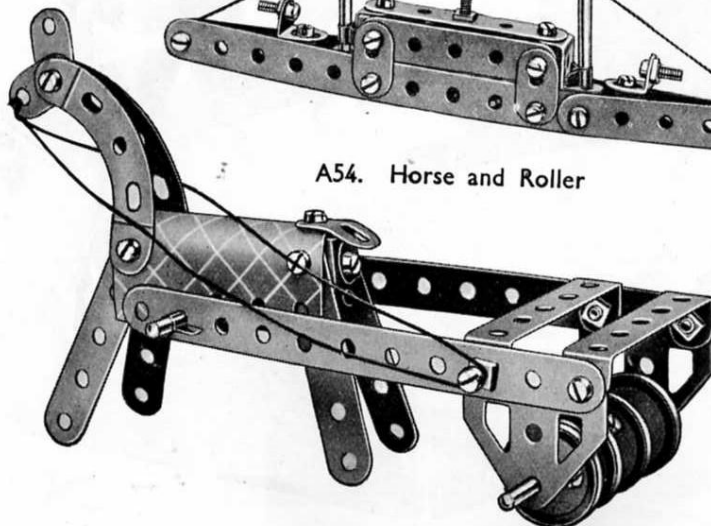
A59. Ladder



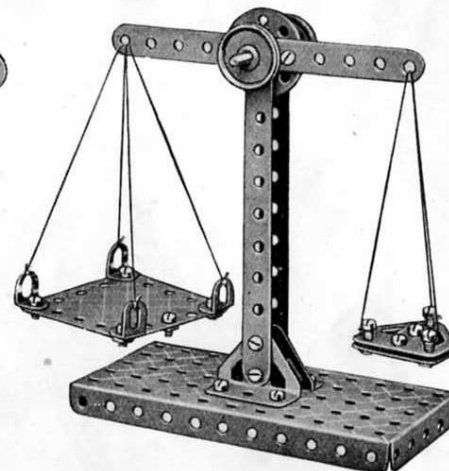
A61. Pit-head Gear



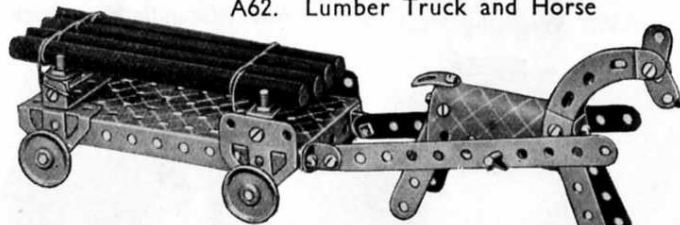
A54. Horse and Roller



A57. Scales

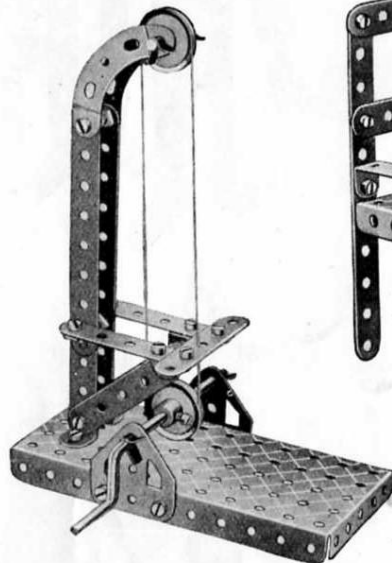


A62. Lumber Truck and Horse

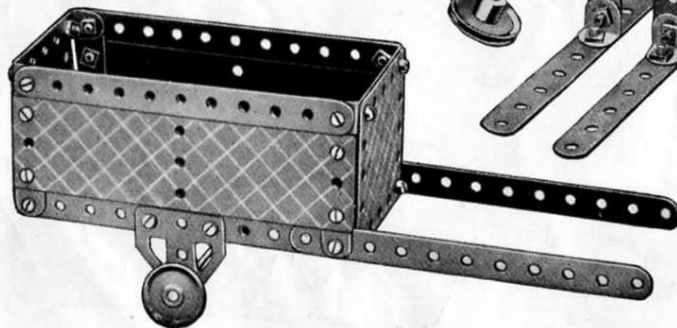


An alternative design of this model (A62M), fitted with the Magic Motor, is shown at the end of this section.

A63. Band Saw



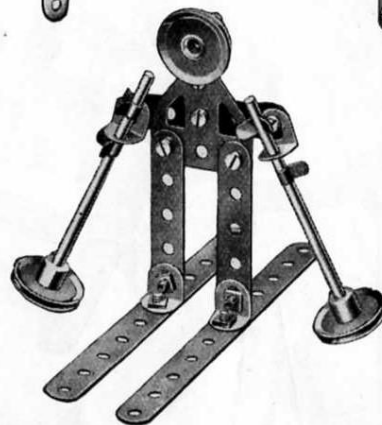
A64. Cart



A65. Bench



A66. Skier

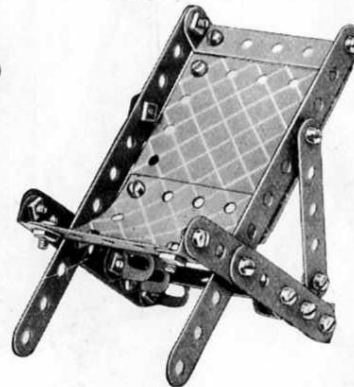


A67. Magic Plate

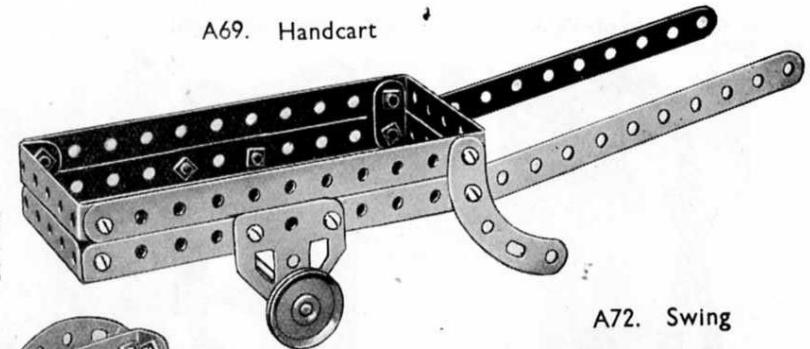
The cord is wound once round a 2" Axle Rod that is journaled in a $\frac{1}{2}$ " Reversed Angle Bracket, which is bolted to the Plate. If the cord is held loosely the Plate will drop, but as soon as the cord is tightened the Plate becomes immovable.



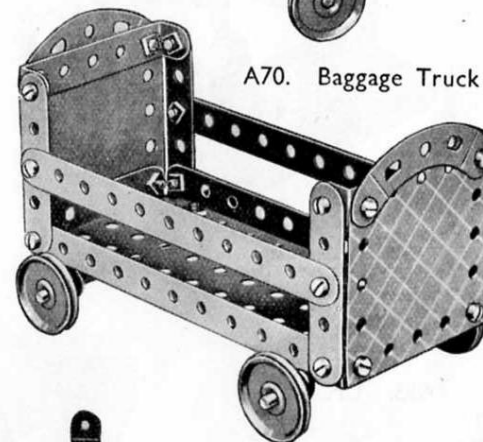
A68. Deck Chair



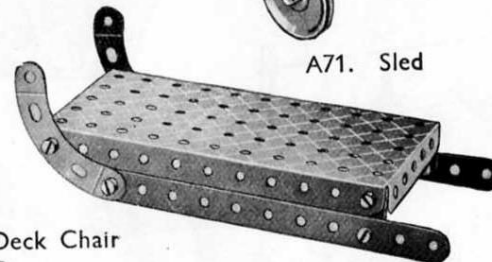
A69. Handcart



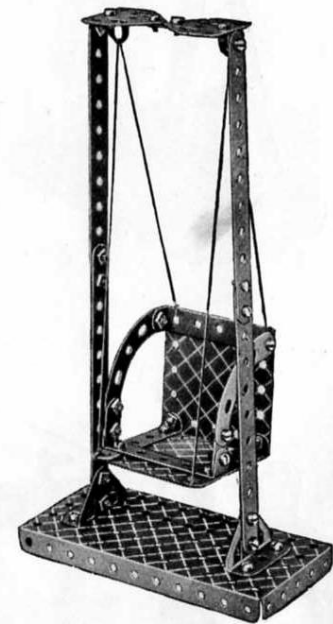
A70. Baggage Truck



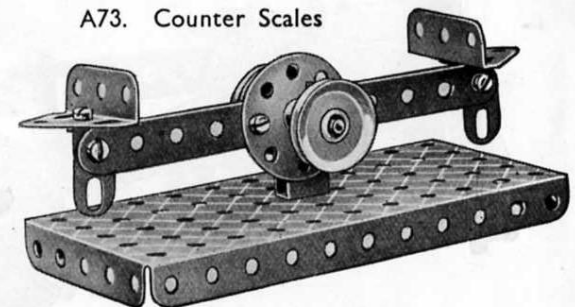
A71. Sled



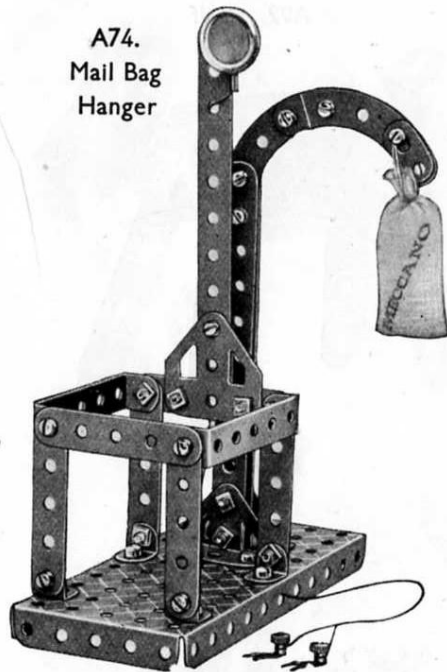
A72. Swing



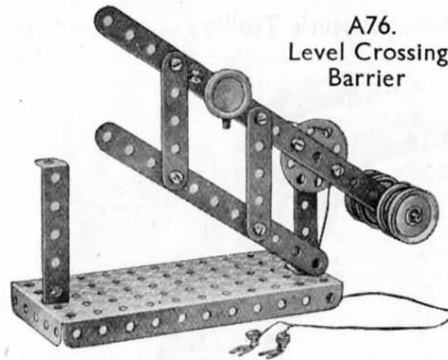
A73. Counter Scales



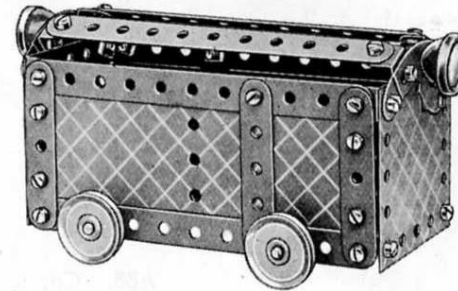
A74.
Mail Bag
Hanger



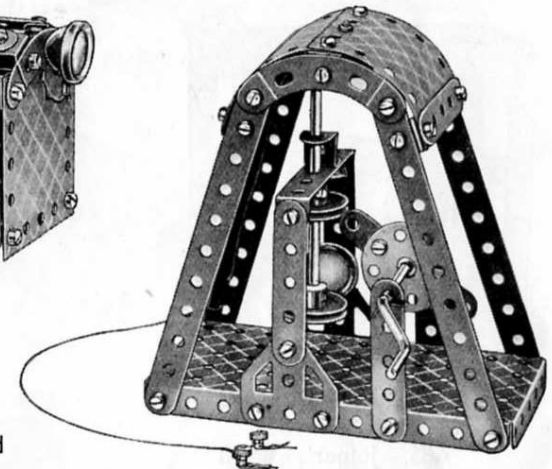
A76.
Level Crossing
Barrier



A79. Pullman Car

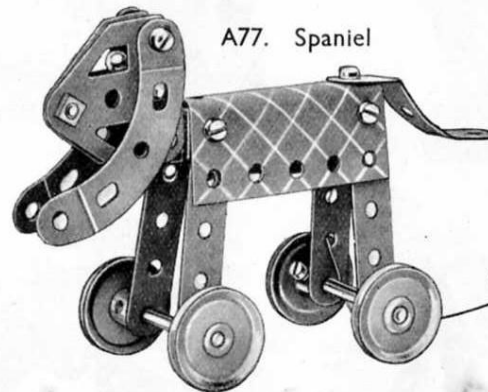


A82.
Stamping Mill

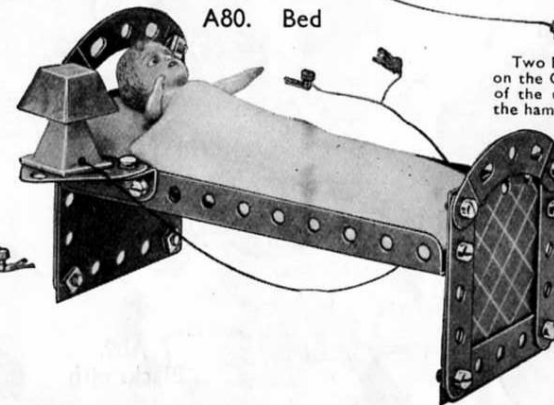


Two Flat Brackets are bolted to the Bush Wheel on the Crank Handle. They strike the underside of the upper Pulley on the vertical Rod, to raise the hammer.

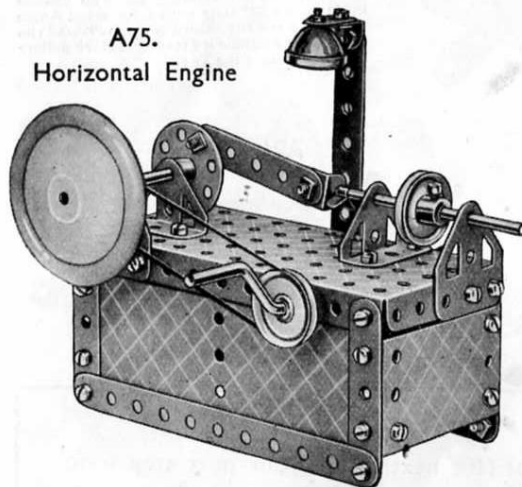
A77. Spaniel



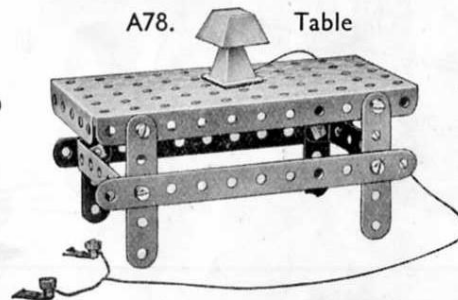
A80. Bed



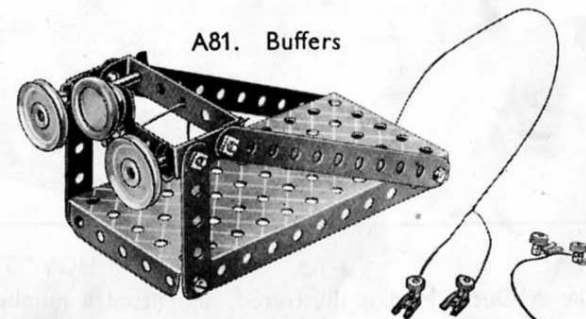
A75.
Horizontal Engine



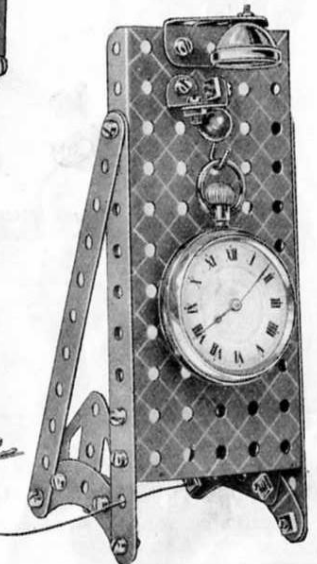
A78. Table



A81. Buffers



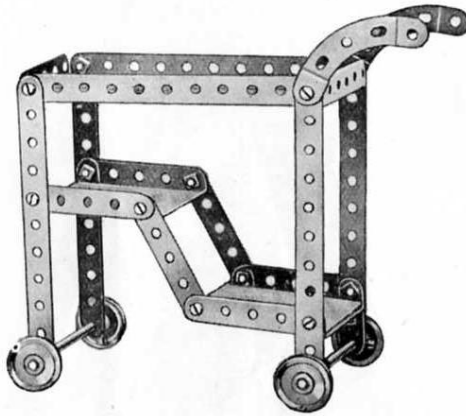
A83.
Watch Stand



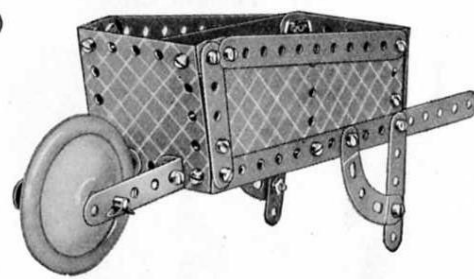
An alternative design of this model (A75M), fitted with the *Magic Motor*, is shown at the end of this section.

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

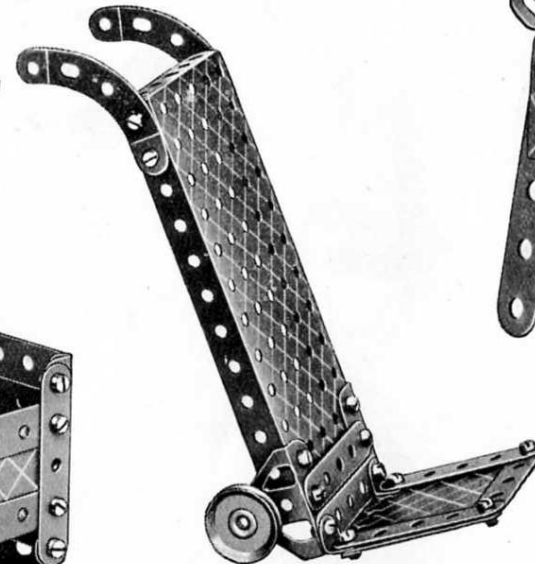
A84. Dinner Wagon



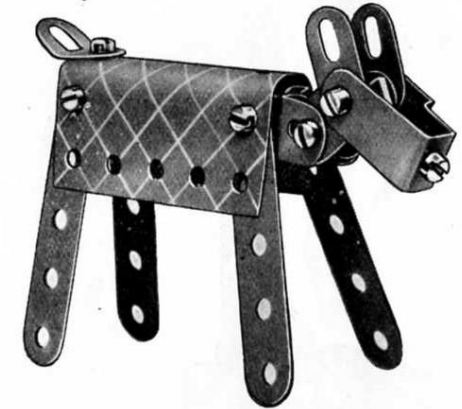
A87. Wheelbarrow



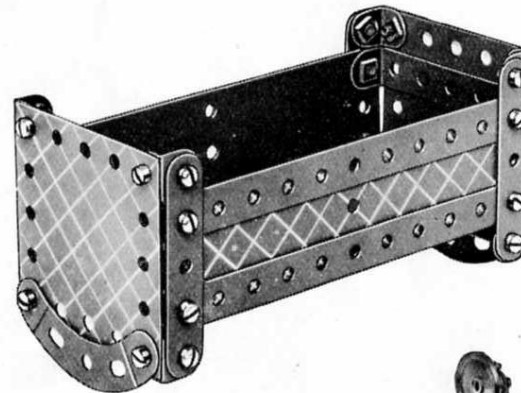
A90. Porter's Trolley



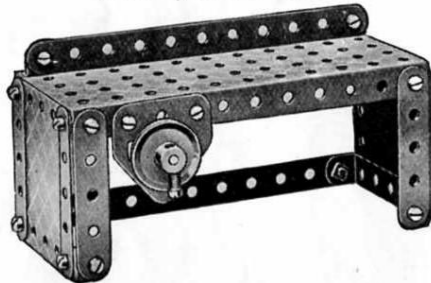
A92. Calf



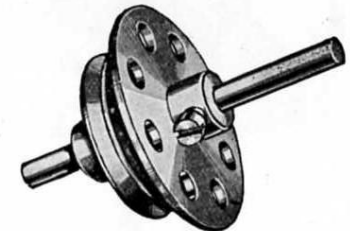
A88. Cot



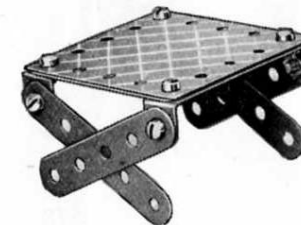
A85. Joiner's Bench



A93. Top

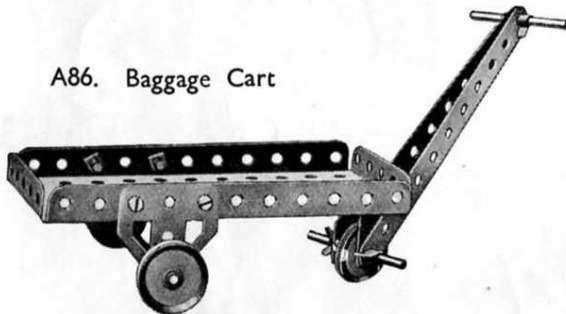


A91. Coffee Table

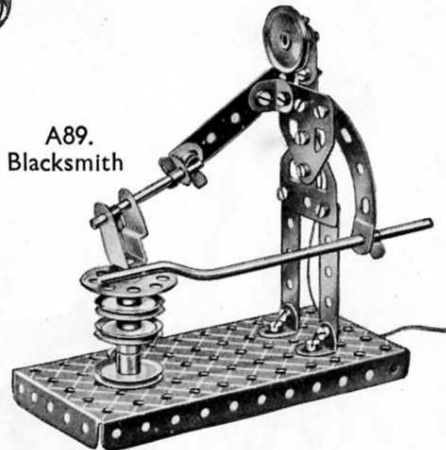


A handle for spinning the Top can be made from a $5\frac{1}{2}$ " strip with a Reversed Angle Bracket at the end. Cord is wound round the Rod and the handle is fitted on before pulling the cord to spin the Top.

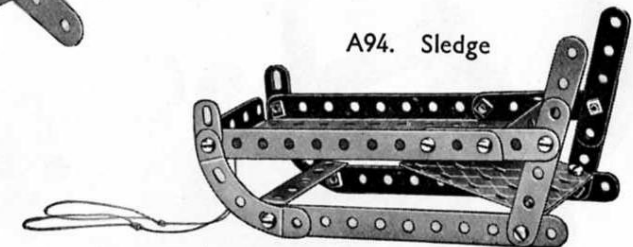
A86. Baggage Cart



A89. Blacksmith



A94. Sledge



HOW TO CONTINUE

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

The greatest thrill in Meccano model-building is experienced when a model is set to work by means of a Meccano Motor. The illustrations below show how the Meccano *Magic Motor* can be fitted without any difficulty to Outfit A Models of various types. Fit the model you have just built with one of these wonderful Motors, and enjoy the fun of watching it work just like the real thing. Models A52M, A62M and A75M are more elaborate variations of Manual models A52, A62 and A75. Try your hand at re-designing other models in a similar manner and become a real inventor.

A95. BREAKDOWN CRANE

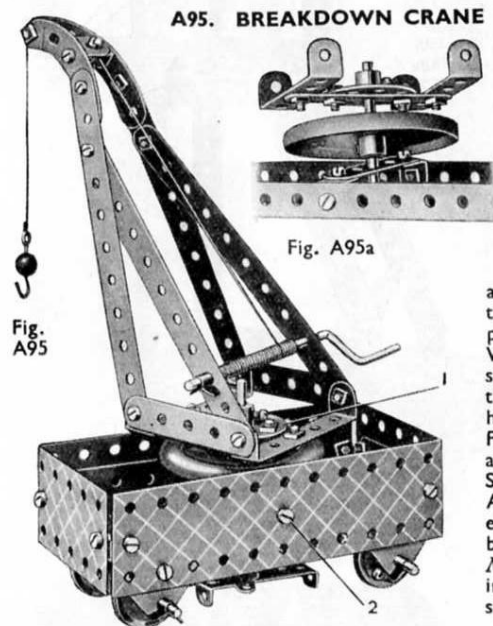


Fig. A95a

Fig. A95b

The crane swivels on an Axle Rod secured in the Bush Wheel 1 and passed through a Road Wheel before being inserted in a $2\frac{1}{2}$ " Strip and through the centre hole of a $5\frac{1}{2} \times 2\frac{1}{2}$ " Flanged Plate. The arrangement of the $2\frac{1}{2}$ " Strip can be seen in Fig. A95b, the Angle Brackets being fixed by the bolts 2 (Fig. A95). The *Magic Motor* is mounted in the same manner as shown in Fig. A62Ma.

A96. TRIP HAMMER

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

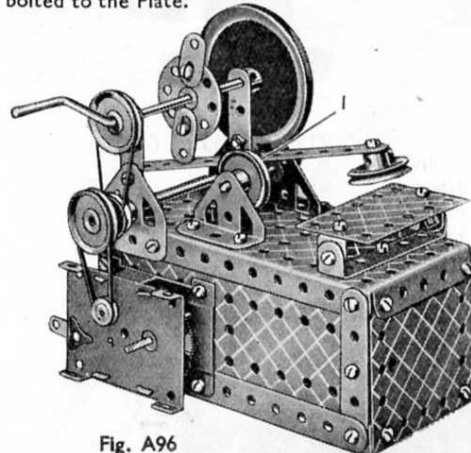


Fig. A96

A52M. DRILLING MACHINE

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

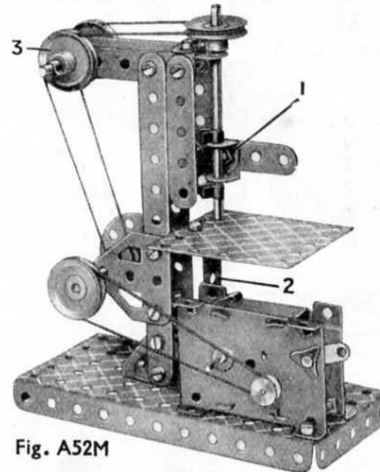


Fig. A52M

A75M. HORIZONTAL ENGINE

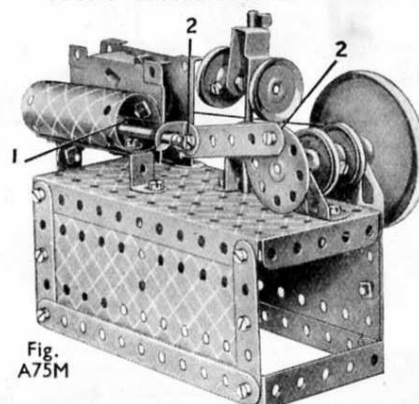


Fig. A75M

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

A62M. LUMBER TRUCK AND HORSE

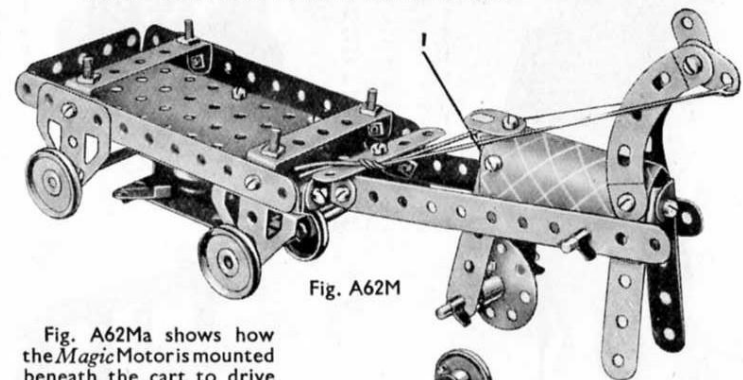


Fig. A62M

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

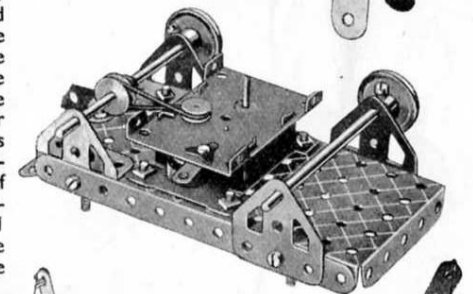


Fig. A62Ma

A97. ROUNDABOUT

Fig. A97a shows how the bearing for the vertical Rod is formed. The Rod is driven from the *Magic Motor* by means of a rubber band passed round the 1" Pulley and round the Motor Pulley as can be seen in Fig. A97.

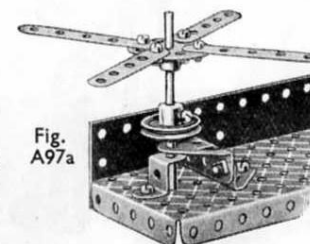


Fig. A97a

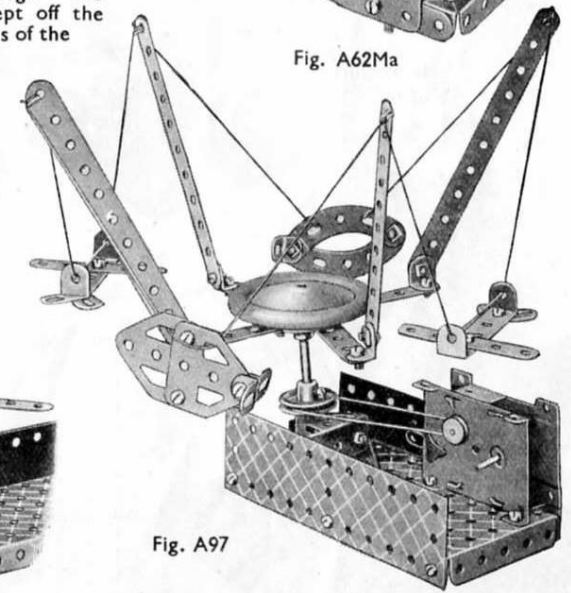


Fig. A97

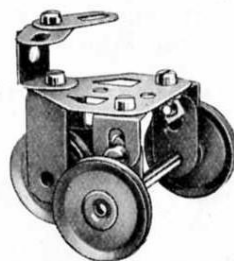
B1. Man and Boy



Parts required

4 of No.	2
2 "	5
5 "	10
1 "	11
8 "	12
1 "	22
1 "	24
25 "	37
1 "	52
2 "	54a
1 "	90a
2 "	111c
2 "	125
1 "	126a

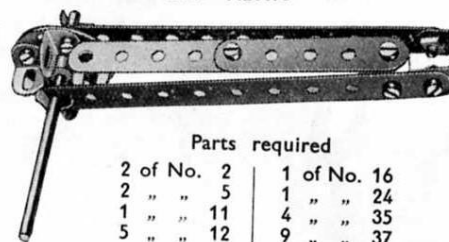
B4. Tricycle



Parts required

4 of No.	10
1 "	11
2 "	12
1 "	17
3 "	22
6 "	37
1 "	44
1 "	111c
1 "	126a

B7. Rattle



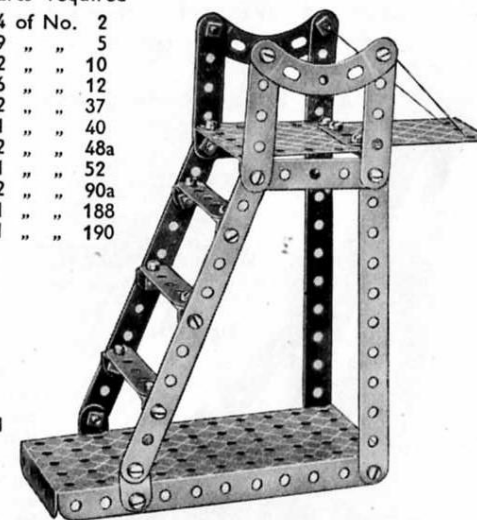
Parts required

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

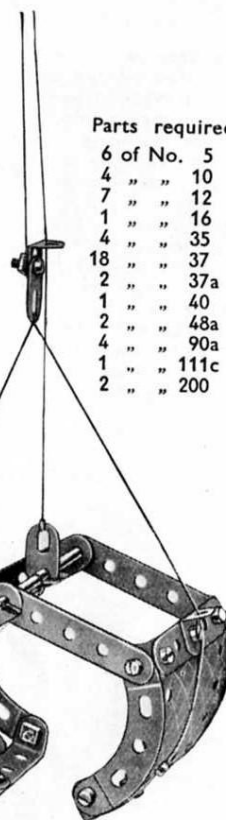
Parts required

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



B8. Crane Grab

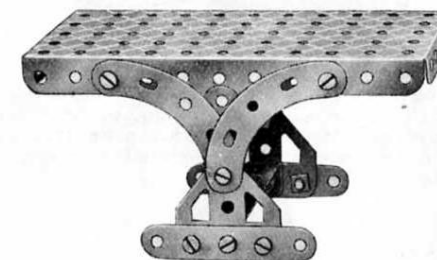


Parts required

6 of No.	5
4 "	10
7 "	12
1 "	16
4 "	35
18 "	37
2 "	37a
1 "	40
2 "	48a
4 "	90a
1 "	111c
2 "	200

B10. Drafting Table

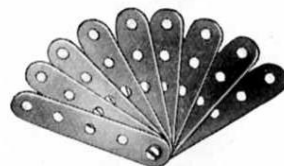
Parts required	
4 of No.	5
12 "	37
1 "	48a
1 of No.	52
4 "	90a
2 "	126a



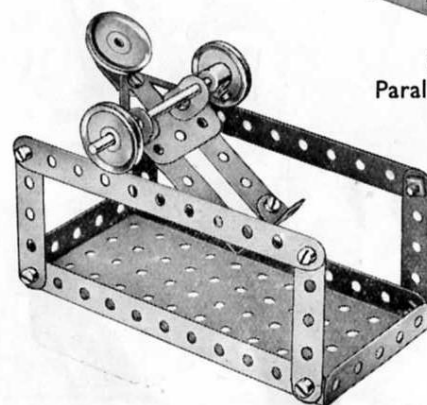
B2. Fan

Parts required

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



B3. Parallel Bars



Parts required

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

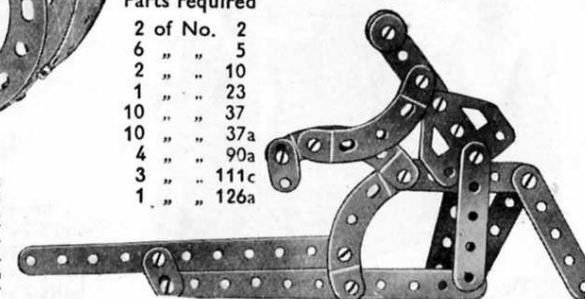
B6. Walking Man



Parts required

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

B11. Bucking Broncho



Parts required

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

The $\frac{3}{4}$ " Bolts used for connecting the $\frac{5}{16}$ " Strips, the horse's legs, and the rider's legs and arms, are all locknutted. The lower $\frac{5}{16}$ " Strip should be held rigidly and the upper one jerked forward; the horse will then throw its rider completely over its head.

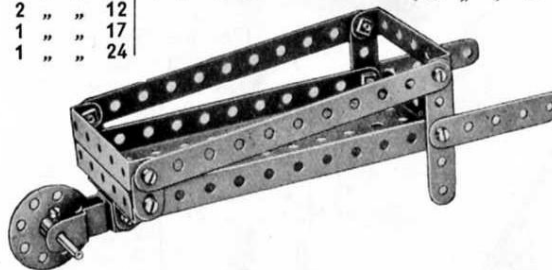
B12. Catapult



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

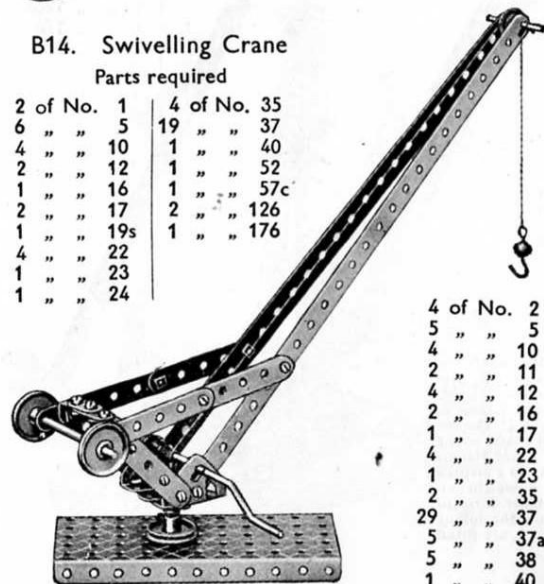
B13. Coster's Barrow

Parts required	
2 of No. 2	13 of No. 37
4 " " 5	1 " " 44
2 " " 10	2 " " 48a
1 " " 11	1 " " 52
2 " " 12	
1 " " 17	
1 " " 24	

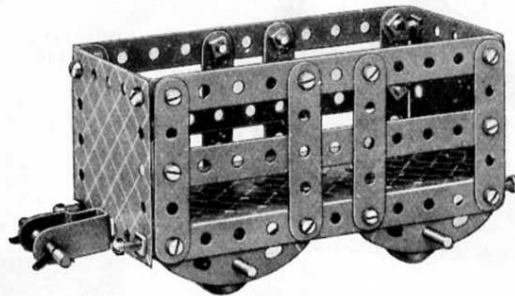


B14. Swivelling Crane

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



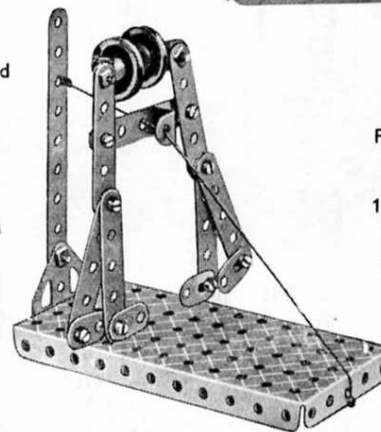
B15. Cattle Truck



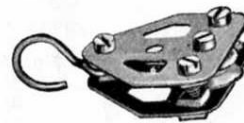
Parts required	
4 of No. 2	9 of No. 37a
8 " " 5	1 " " 44
2 " " 16	2 " " 48a
1 " " 18a	1 " " 52
4 " " 22	4 " " 90a
2 " " 35	4 " " 111c
25 " " 37	2 " " 190

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	



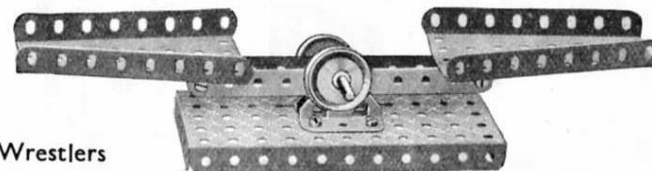
B18. Single Sheave Pulley Block



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

B19. Scales

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

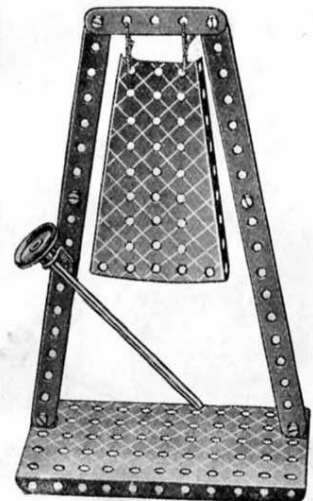


B20. Card Table

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



B22. Gong

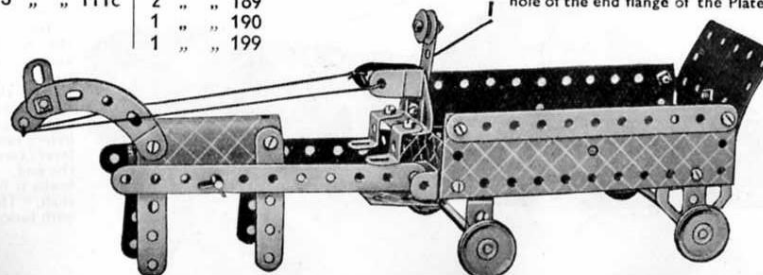


Parts required	
4 of No. 2	
1 " " 5	
3 " " 12	
1 " " 16	
1 " " 22	
9 " " 37	
1 " " 40	
1 " " 52	
1 " " 54a	

B17. Hay Cart

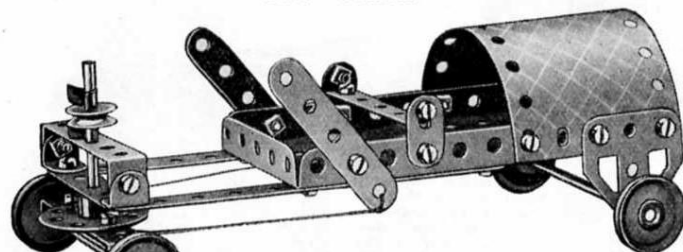
The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of the motor are shown at the end of this section. If the Motor is fitted, a Bush Wheel should be mounted on a 2" Rod between the hind legs of the horse. The 2½" Strip 1 forming the driver's body is bolted to the centre hole of the end flange of the Plate.

Parts required	
1 of No. 44	2 of No. 125
1 " " 48a	1 " " 126
1 " " 52	2 " " 126a
2 " " 90a	2 " " 188
3 " " 111c	2 " " 189
	1 " " 190
	1 " " 199



The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of the Motor are shown at the end of this section.

B23. Coaster



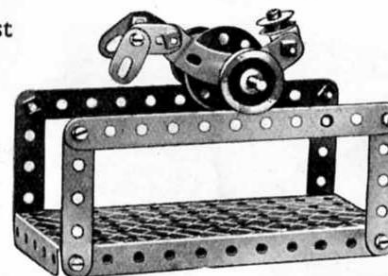
Parts required

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

B26. Gymnast

Parts required

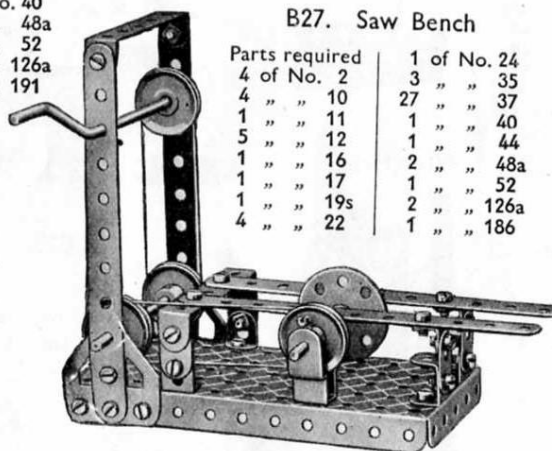
2 of No. 2	1 of No. 24
4 " " 5	13 " " 37
4 " " 10	1 " " 37a
1 " " 12	1 " " 52
1 " " 16	1 " " 90a
2 " " 22	1 " " 111c
1 " " 23	



B27. Saw Bench

Parts required

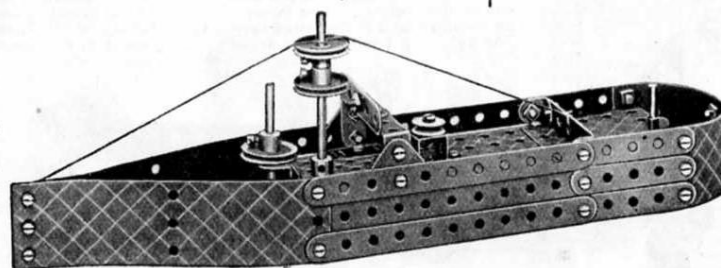
4 of No. 2	1 of No. 24
4 " " 10	3 " " 35
1 " " 11	27 " " 37
5 " " 12	1 " " 40
1 " " 16	1 " " 44
1 " " 17	2 " " 48a
1 " " 19s	1 " " 52
4 " " 22	2 " " 126a
	1 " " 186



B28. Battleship

Parts required

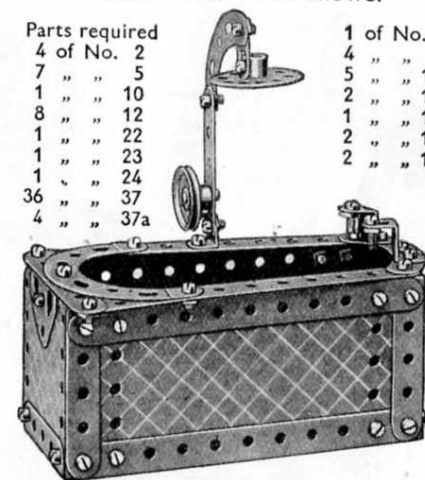
4 of No. 2	1 of No. 23	1 of No. 52
9 " " 5	1 " " 24	4 " " 111c
4 " " 10	5 " " 35	2 " " 125
1 " " 11	36 " " 37	2 " " 126
5 " " 12	4 " " 37a	2 " " 188
1 " " 16	1 " " 40	2 " " 189
2 " " 17	2 " " 48a	1 " " 190
3 " " 22		



B29. Bath with Shower

Parts required

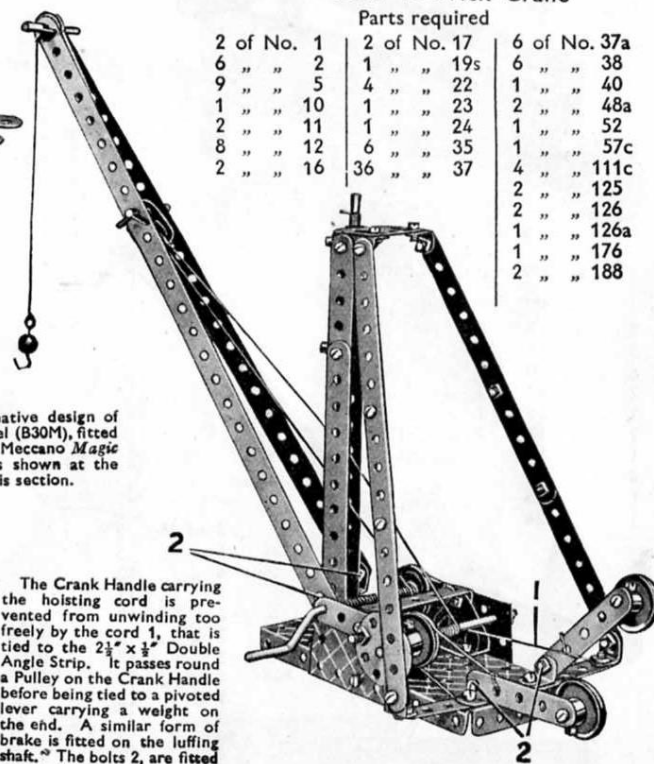
4 of No. 2	1 of No. 52
7 " " 5	4 " " 90a
1 " " 10	5 " " 111c
8 " " 12	2 " " 125
1 " " 22	1 " " 126
1 " " 23	2 " " 190
1 " " 24	2 " " 191
1 " " 37	
36 " " 37a	



B30. Derrick Crane

Parts required

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



An alternative design of this model (B30M), fitted with the Meccano Magic Motor, is shown at the end of this section.

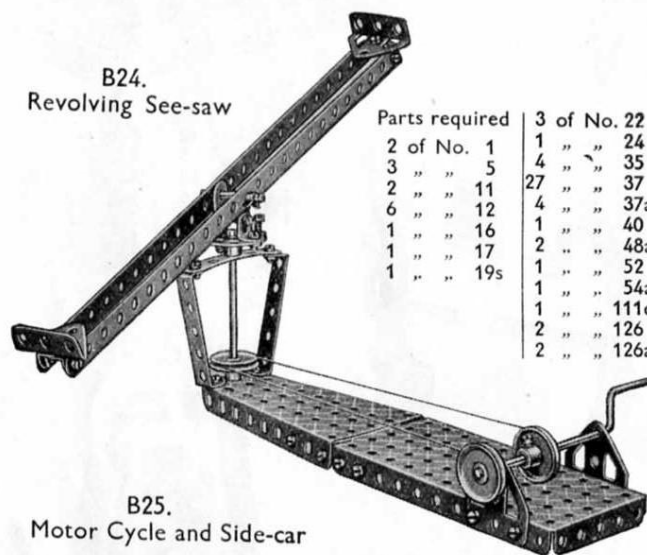
The Crank Handle carrying the hoisting cord is prevented from unwinding too freely by the cord 1, that is tied to the $2\frac{1}{2} \times \frac{1}{2}$ Double Angle Strip. It passes round a Pulley on the Crank Handle before being tied to a pivoted lever carrying a weight on the end. A similar form of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

2

B24. Revolving See-saw

Parts required

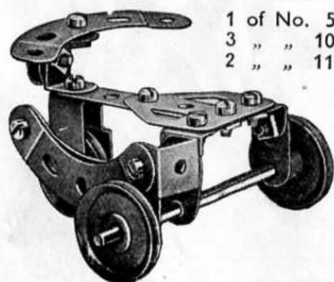
3 of No. 22
2 of No. 1
4 " " 5
3 " " 11
2 " " 12
6 " " 16
1 " " 17
1 " " 19s
1 " " 24
4 " " 35
27 " " 37
4 " " 37a
1 " " 40
2 " " 48a
1 " " 52
1 " " 54a
1 " " 111c
2 " " 126
2 " " 126a



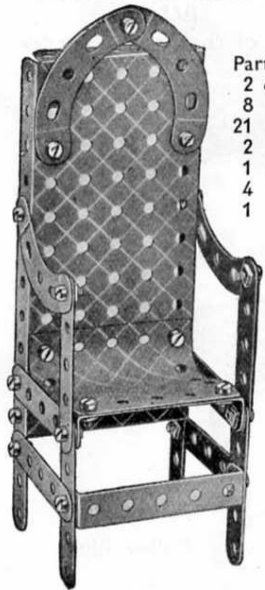
B25. Motor Cycle and Side-car

Parts required

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

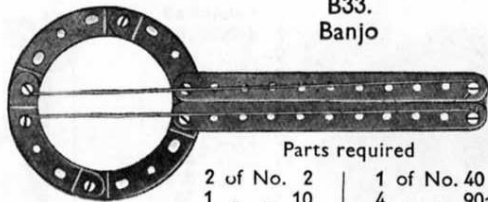


B31. Arm Chair



Parts required	
2 of No. 2	5
8 " " "	37
21 " " "	48a
2 " " "	52
1 " " "	90a
4 " " "	200

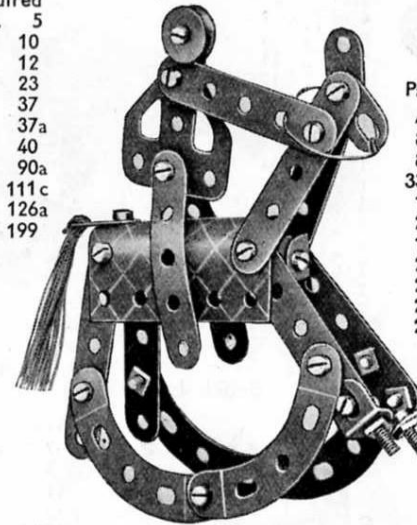
B33. Banjo



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

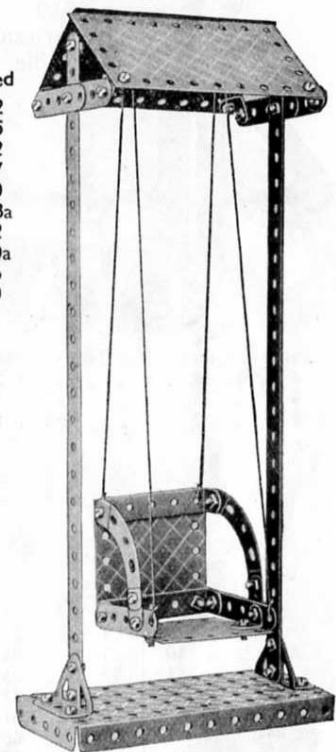
Parts required	
9 of No. 5	10
4 " " "	12
6 " " "	23
1 " " "	37
17 " " "	37a
8 " " "	40
1 " " "	90a
4 " " "	111c
5 " " "	126a
1 " " "	199

B36. Rocking Horse

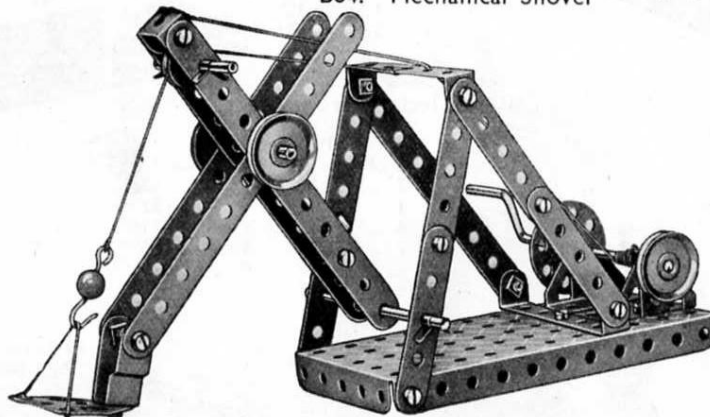


Parts required	
4 of No. 2	5
8 " " "	12
8 " " "	37
33 " " "	40
1 " " "	48a
2 " " "	52
1 " " "	90a
2 " " "	126
2 " " "	190
2 " " "	191

B38. Swing

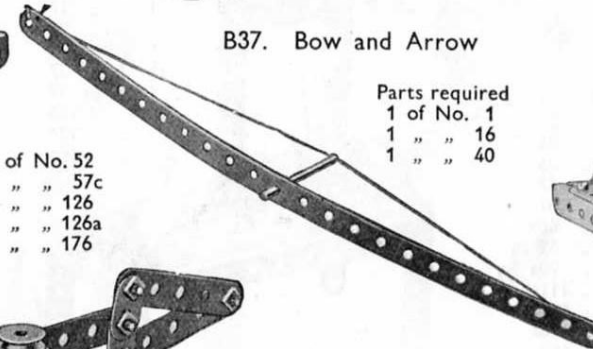


B34. Mechanical Shovel



Parts required		2 of No. 17		5 of No. 35		1 of No. 52	
2 of No. 2	19	1 " " "	19s	20 " " "	37	1 " " "	57c
4 of No. 2	8	1 " " "	22	1 " " "	40	2 " " "	126
8 " " "	5	3 " " "	23	1 " " "	44	1 " " "	126a
2 " " "	11	1 " " "	24	2 " " "	48a	1 " " "	176
1 " " "	16						

B37. Bow and Arrow

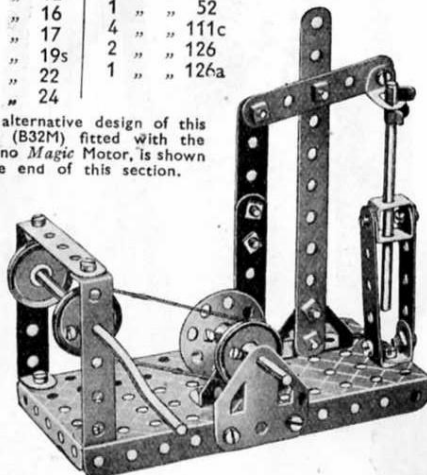


Parts required	
1 of No. 1	16
1 " " "	40

B32. Pump

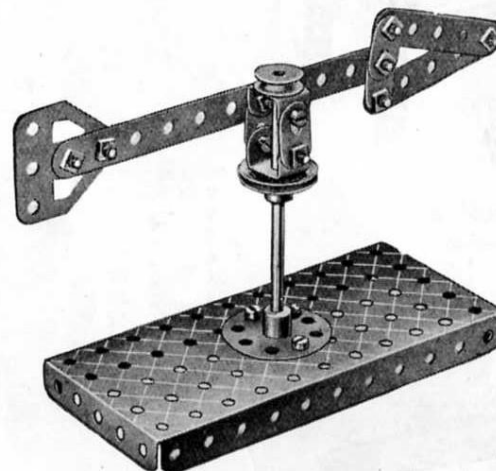
Parts required		2 of No. 35	
1 of No. 2	19	1 " " "	37
6 " " "	5	8 " " "	37a
2 " " "	11	1 " " "	40
3 " " "	12	2 " " "	48a
1 " " "	16	1 " " "	52
1 " " "	17	4 " " "	111c
1 " " "	17s	2 " " "	126
3 " " "	22	1 " " "	126a
1 " " "	24		

An alternative design of this model (B32M) fitted with the Meccano Magic Motor, is shown at the end of this section.



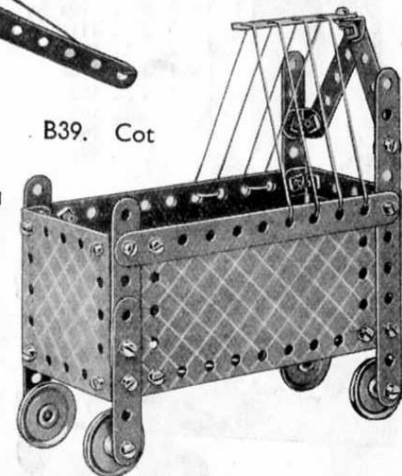
B35 Weather Vane

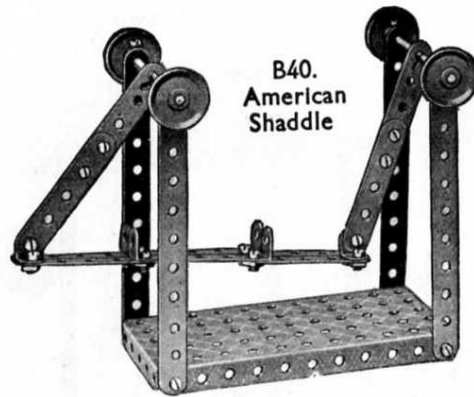
Parts required	
1 of No. 2	5
2 " " "	10
4 " " "	11
2 " " "	16
1 " " "	22
1 " " "	23
1 " " "	24
12 " " "	37
1 " " "	52
1 " " "	126a



B39. Cot

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





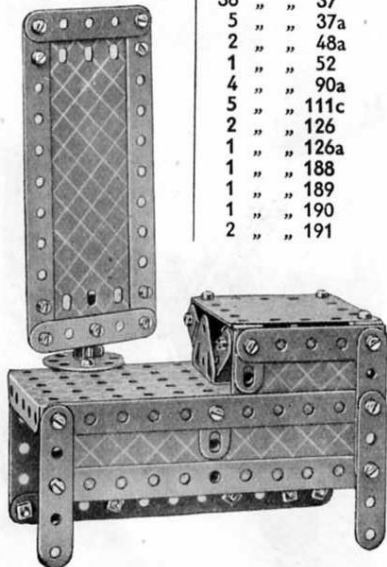
B40.
American
Shackle

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

B41.
Modern Dressing Table

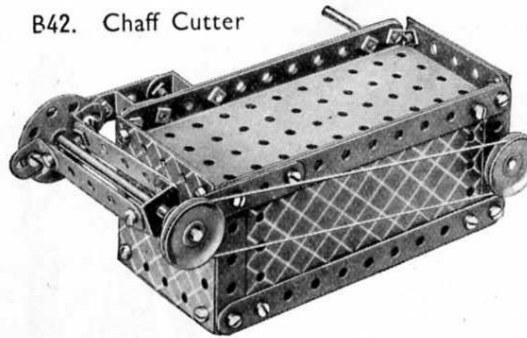
Parts required

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

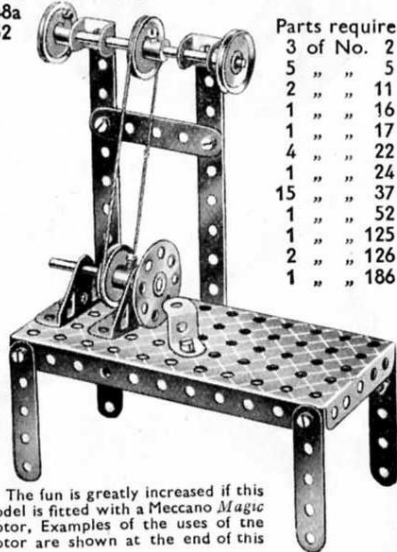


Parts required
4 of No. 2
8 " " 5
1 " " 11
6 " " 12
1 " " 16
1 " " 19s
2 " " 22
1 " " 24
2 " " 35
33 " " 37
1 " " 40
1 " " 52
2 " " 125
2 " " 190
2 " " 191

B42. Chaff Cutter



B43. Bench Lathe



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

The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of the Motor are shown at the end of this section.

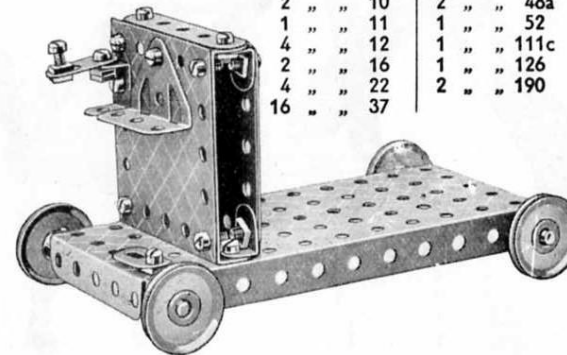
B44. Motor Boat

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



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

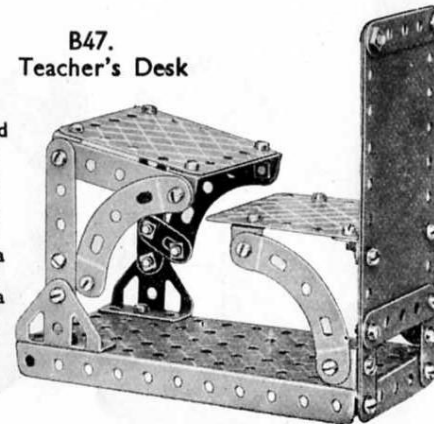
B46. Electric Trolley



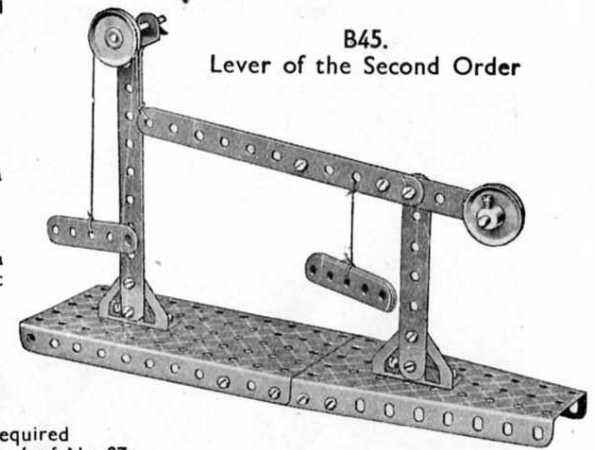
Parts required
3 of No. 5
2 " " 10
1 " " 11
4 " " 12
2 " " 16
4 " " 22
16 " " 37
4 of No. 37a
2 " " 48a
1 " " 52
1 " " 111c
1 " " 126
2 " " 190

B47.
Teacher's Desk

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

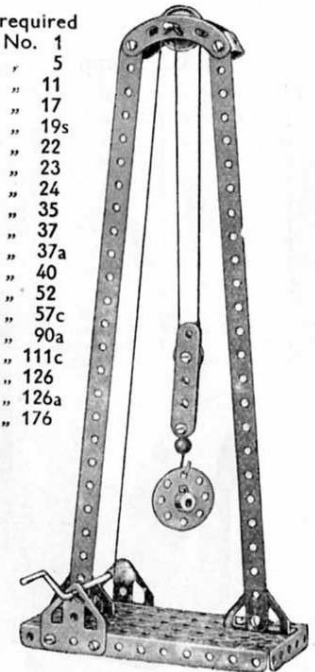


B45.
Lever of the Second Order

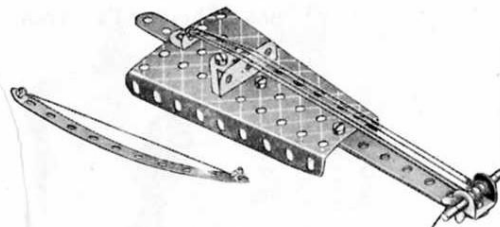


B48. Pulley Block

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



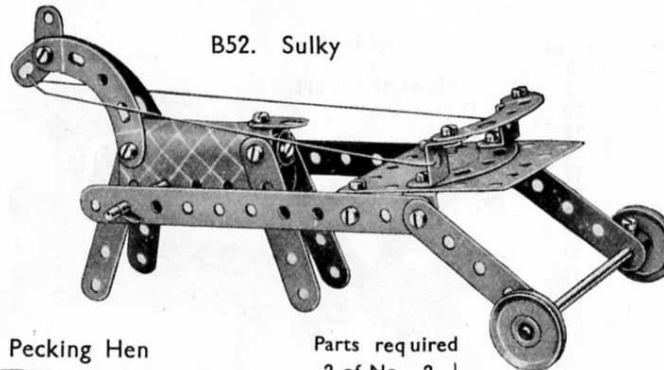
B49. Violin and Bow



Parts required

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

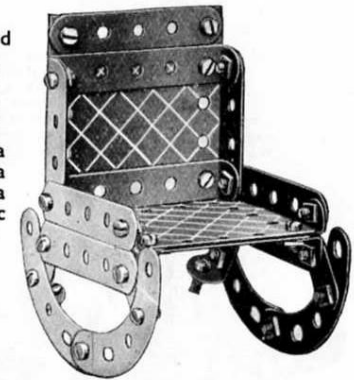
B52. Sulky



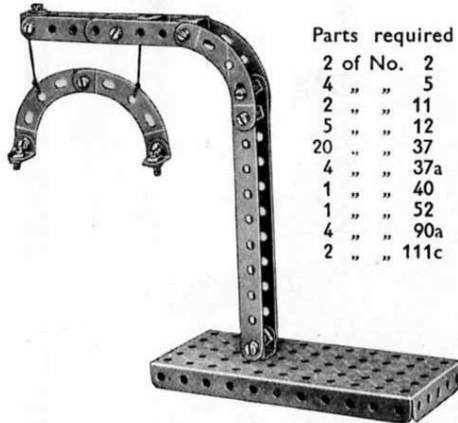
B56. Rocking Chair

Parts required

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



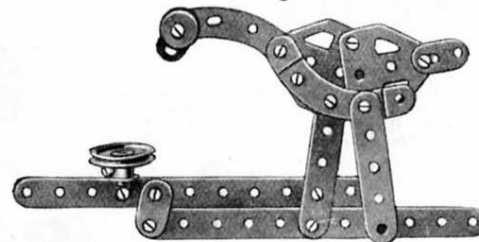
B50. Loading Gauge



Parts required

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

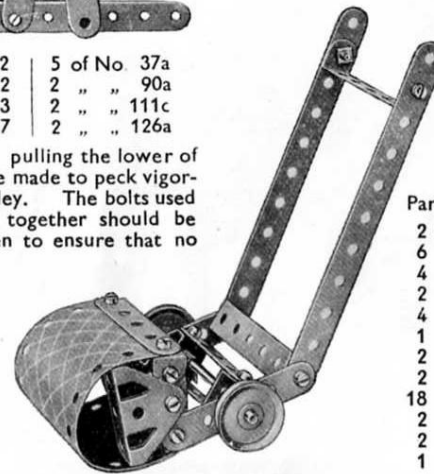
B53. Pecking Hen



Parts required

2	of No.	2	4	of No.	35	4	of No.	90a
6	"	5	17	"	37	1	"	111c
3	"	10	1	"	37a	2	"	125
6	"	12	1	"	40	1	"	190
2	"	16	1	"	48a	1	"	199
2	"	22	1	"				

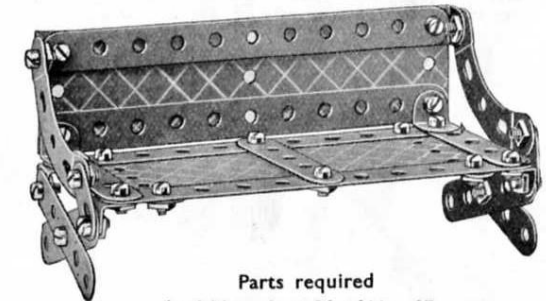
B54. Grass Cutter



Parts required

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

B57. Station Seat



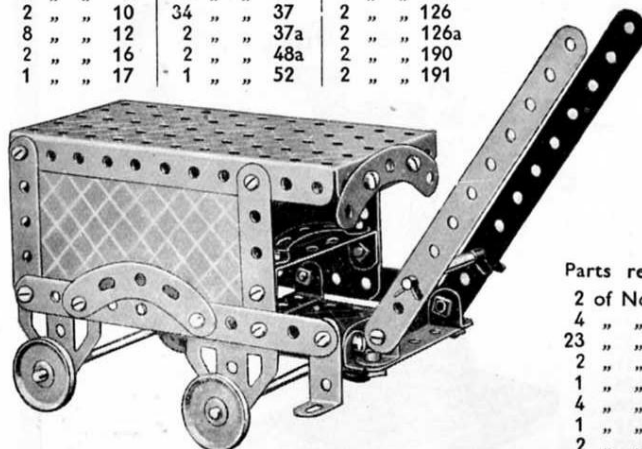
Parts required

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

B51. Bread Van

Parts required

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

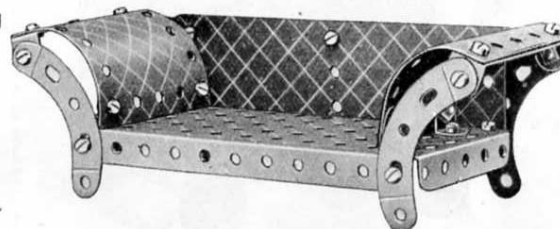


By alternately pushing and pulling the lower of the $5\frac{1}{2}$ " Strips, the hen can be made to peck vigorously at the "bowl," a 1" Pulley. The bolts used for securing the $5\frac{1}{2}$ " Strips together should be locknotted, care being taken to ensure that no "side play" is permitted.

B55. Couch

Parts required

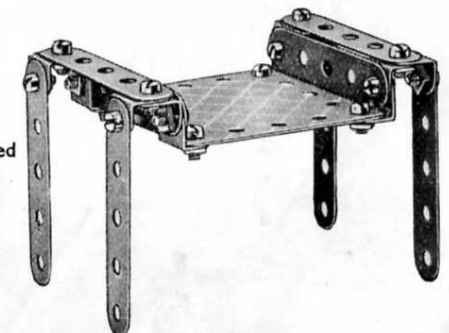
2	of No.	2
4	"	12
23	"	37
2	"	48a
1	"	52
4	"	90a
1	"	189
2	"	200



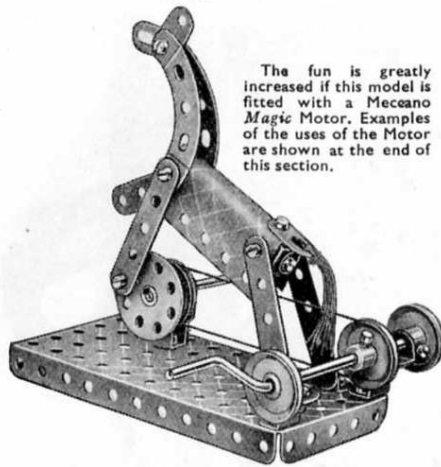
Parts required

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

B58. Stool for Dressing Table



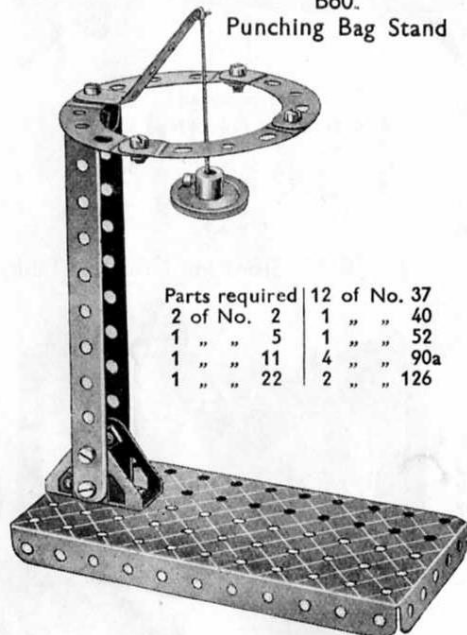
B59. Prancing Horse



The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of the Motor are shown at the end of this section.

Parts required		
4 of No. 5	4 of No. 22	1 of No. 52
3 " " 10	1 " " 24	2 " " 90a
8 " " 12	14 " " 37	4 " " 111c
1 " " 17	8 " " 37a	2 " " 125
1 " " 19s	1 " " 40	1 " " 186
	1 " " 44	1 " " 199

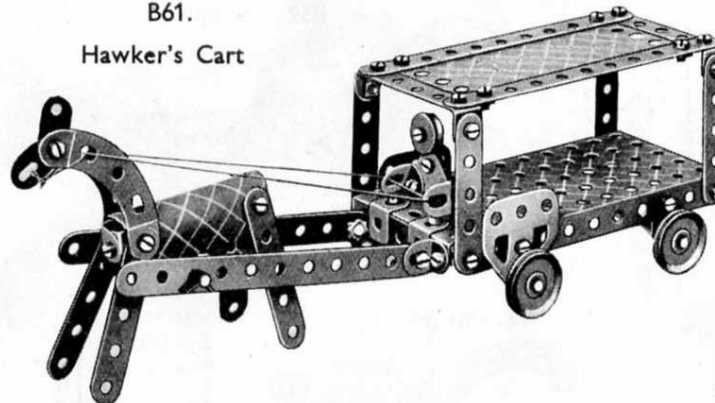
B60. Punching Bag Stand



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

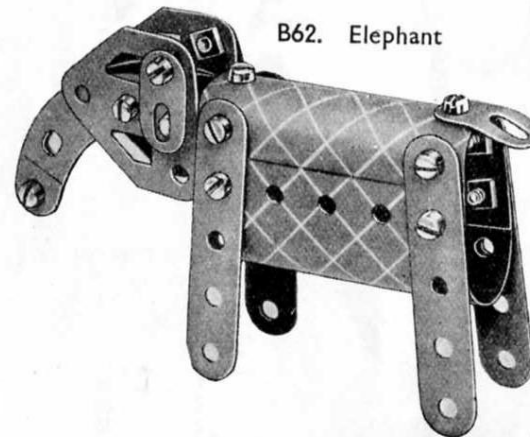
Parts required		
4 of No. 2		
8 " " 5		
4 " " 10		
8 " " 12		
2 " " 16		
1 " " 17		
4 " " 22		
1 " " 23		
4 " " 35		
35 " " 37		
4 " " 37a		
1 " " 40		
2 " " 48a		
1 " " 52		
2 " " 90a		
2 " " 111c		
2 " " 125		
2 " " 126		
2 " " 126a		
1 " " 191		
1 " " 199		

B61. Hawker's Cart



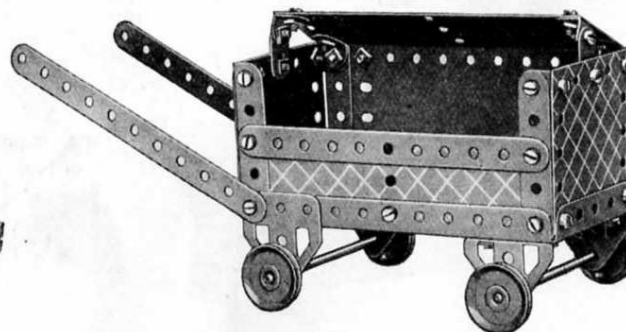
The fun is greatly increased if this model is fitted with a Meccano Magic Motor. For examples of the uses of the Motor see the Magic Motor pages at the end of this section. If the Motor is fitted, a Bush Wheel should be mounted on a 2" Rod fitted between the hind legs of the horse.

B62. Elephant



Parts required		
4 of No. 5		
3 " " 10		
15 " " 37		
2 " " 37a		
2 " " 90a		
2 " " 126a		
2 " " 199		

B63. Ash Cart



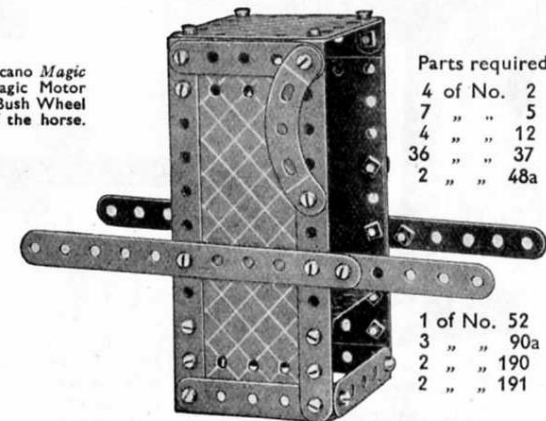
Parts required		
4 of No. 2		
4 " " 5		
2 " " 10		
4 " " 12		
2 " " 16		
4 " " 22		
34 " " 37		
2 " " 37a		
2 " " 48a		
1 " " 52		
2 " " 111c		
2 " " 126		
2 " " 126a		
2 " " 189		
2 " " 190		
1 " " 191		

B64. Shepherd's Crook

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

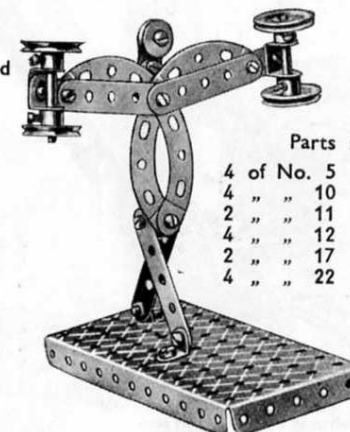


B65. Sedan Chair



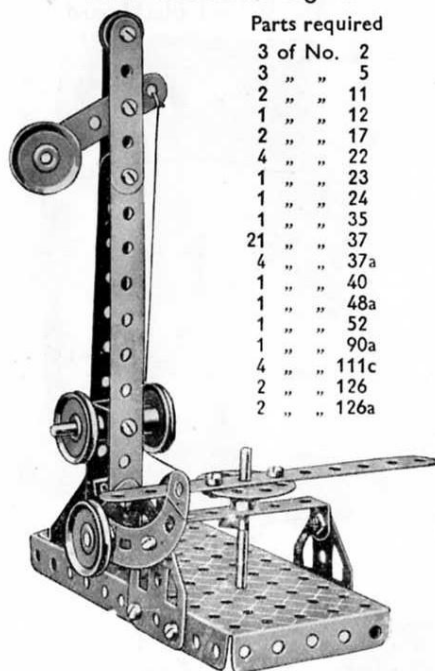
Parts required		
4 of No. 2		
7 " " 5		
4 " " 12		
36 " " 37		
2 " " 48a		
1 of No. 52		
3 " " 90a		
2 " " 190		
2 " " 191		

B66. Strong Man



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

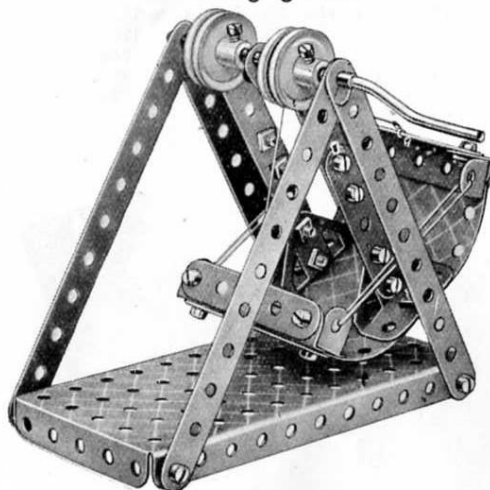
B67. Automatic Signals



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

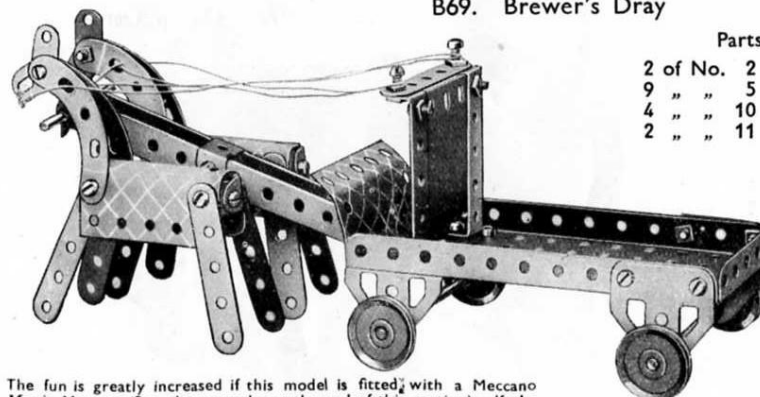
The weighted Curved Strip is locknuttet to the Flat Trunnion. When the horizontal $5\frac{1}{2}$ " Strip is tripped by the locomotive the signal is raised to "danger" until the mechanism is re-set.

B68. Swinging Boat



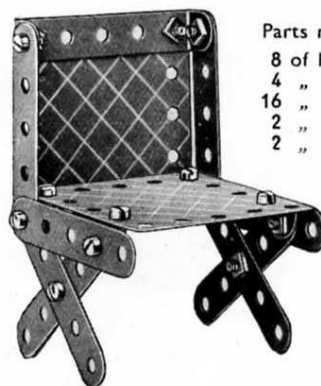
Parts required	
4 of No.	2
8 " "	5
1 " "	10
4 " "	12
1 " "	19s
4 " "	22
6 " "	35
22 " "	37
4 " "	37a
1 " "	40
2 " "	48a
1 " "	52
2 " "	126
1 " "	191

B69. Brewer's Dray



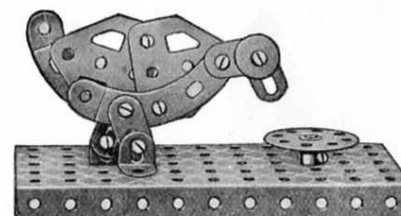
The fun is greatly increased if this model is fitted with a Meccano Magic Motor. (See the examples at the end of this section). If the Motor is fitted, a BushWheel should be mounted on a 2" Rod fitted between the inner hind legs of the two horses.

B70. Chair



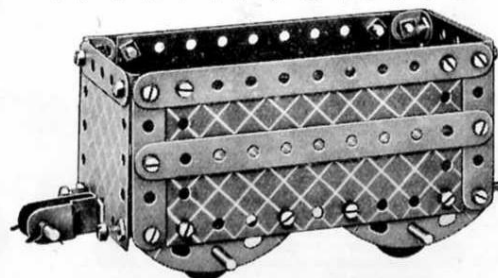
Parts required	
8 of No.	5
4 " "	12
16 " "	37
2 " "	48a
2 " "	190

B71. Goose



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

B72. Cattle Truck

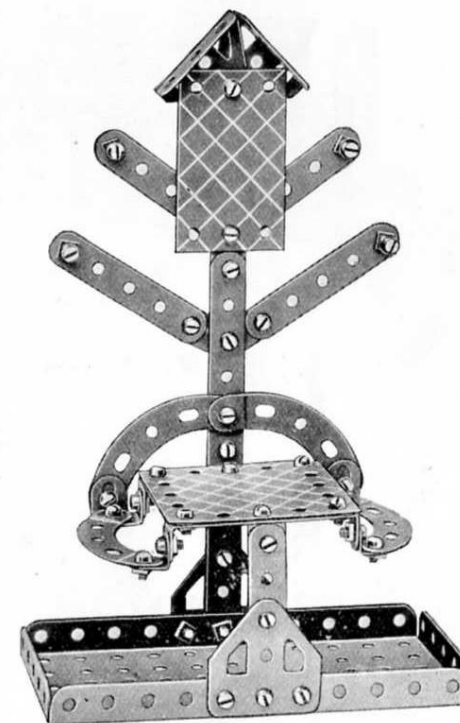


Parts required	
4 of No.	2
6 " "	5
4 " "	12
2 " "	16
1 " "	17
4 of No.	22
2 " "	35
29 " "	37
9 " "	37a
1 " "	44
1 of No.	52
4 " "	90a
4 " "	111c
2 " "	190
2 " "	191

Parts required

2 of No.	2
9 " "	5
4 " "	10
2 " "	11
8 of No.	12
2 " "	16
2 " "	17
4 " "	22
6 " "	35
29 " "	37
8 " "	37a
1 " "	40
2 " "	48a
1 " "	52
4 " "	90a
4 " "	111c
2 " "	126
2 " "	126a
1 " "	191
2 " "	199

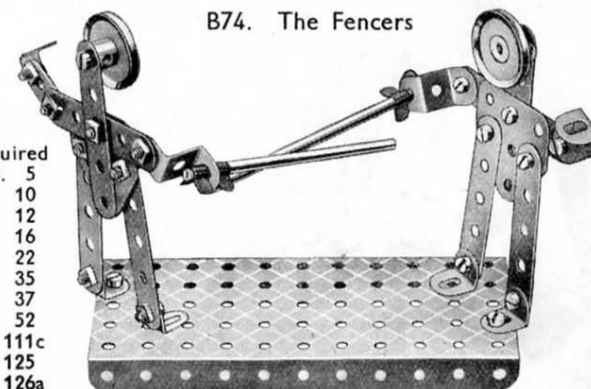
B73. Hat Rack



Parts required

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

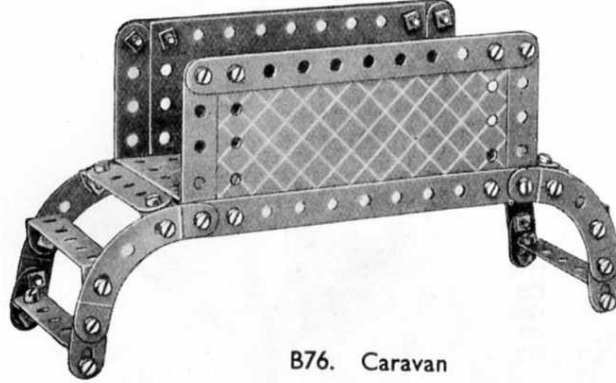
B74. The Fencers



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

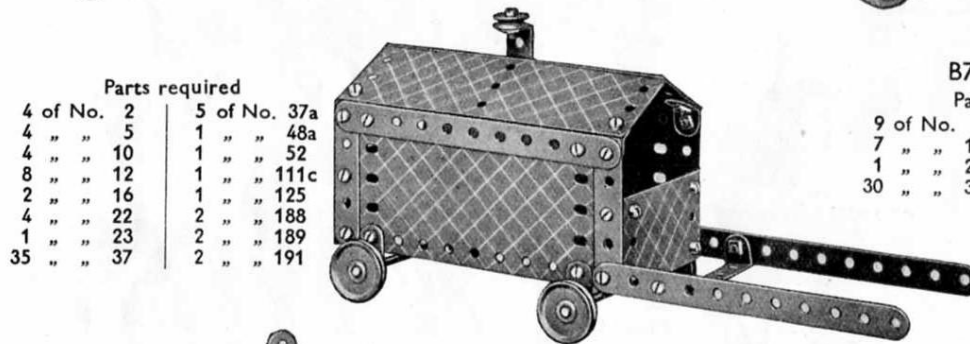
B75. Footbridge



Parts required

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

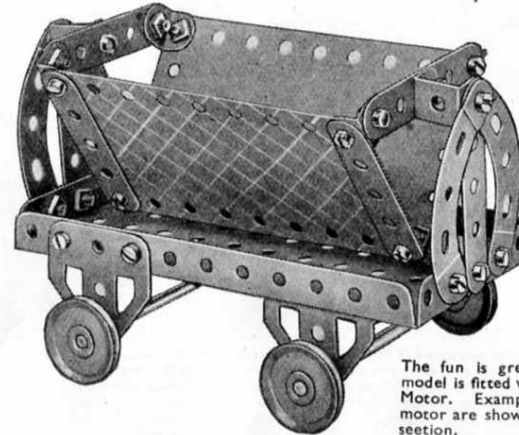
B76. Caravan



Parts required

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

B78. Dump Car



Parts required

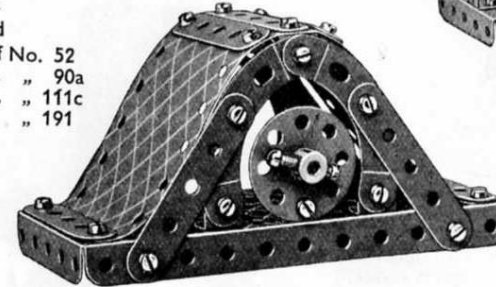
8 of No.	5
2 " "	11
6 " "	12
2 " "	16
4 " "	22
29 " "	37
4 " "	37a
1 " "	52
4 " "	90a
1 " "	111c
2 " "	126
2 " "	126a
2 " "	191

The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of this motor are shown at the end of this section.

B79. Clock

Parts required

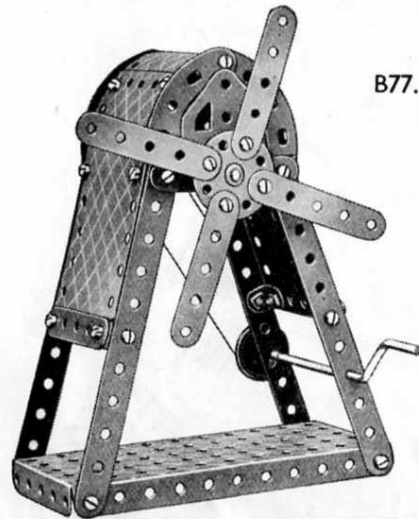
9 of No.	5	1 of No.	52
7 " "	12	4 " "	90a
1 " "	24	2 " "	111c
30 " "	37	2 " "	191



Parts required

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

B77. Windmill

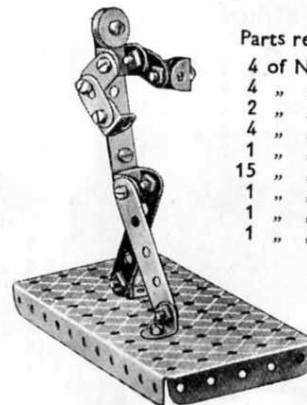


Parts required

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

An alternative design of this model (B77M), fitted with the Meccano Magic Motor, is shown at the end of this section.

B80. Boxer



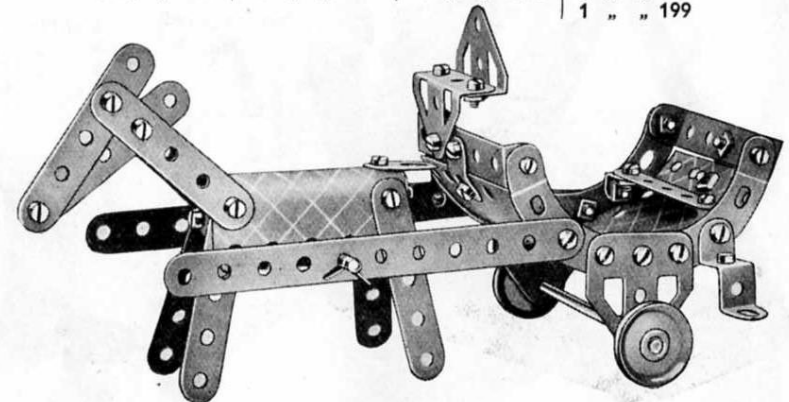
Parts required

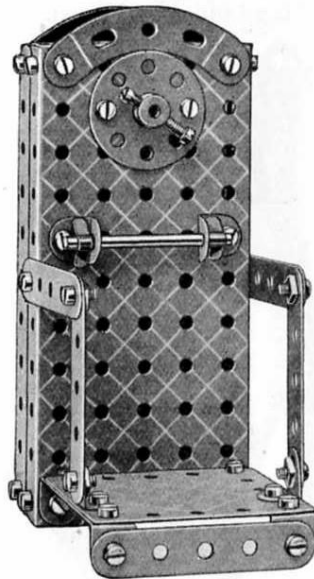
4 of No.	5
4 " "	10
2 " "	11
4 " "	12
1 " "	23
15 " "	37
1 " "	37a
1 " "	52
1 " "	111c

B82. Two-wheeled Trap

Parts required

2 of No.	2	2 of No.	16	1 of No.	37a	2 of No.	125
9 " "	5	2 " "	22	2 " "	48a	2 " "	126
3 " "	10	4 " "	35	4 " "	90a	2 " "	126a
8 " "	12	35 " "	37	1 " "	111c	1 " "	191
						1 " "	199

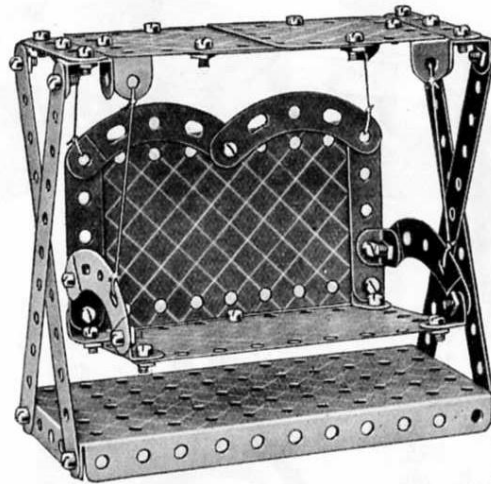




B83.
Weighing Machine

Parts required

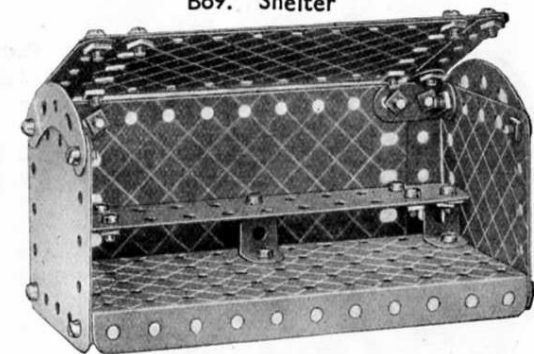
4 of No. 2
7 " " 5
4 " " 10
8 " " 12
1 " " 17
1 " " 24
2 " " 35
36 " " 37
2 " " 37a
2 " " 48a
1 " " 52
2 " " 90a
3 " " 111c
1 " " 190
1 " " 191



B86.
Swinging Garden Seat

Parts required

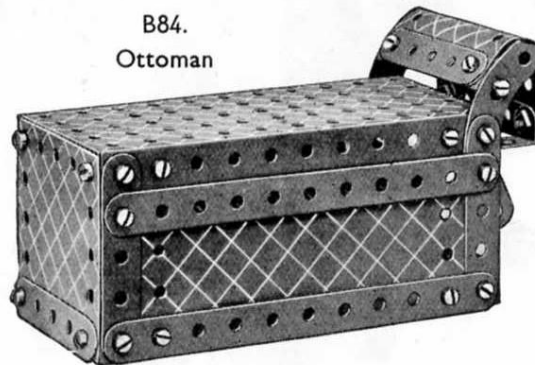
4 of No. 2
8 " " 5
2 " " 11
8 " " 12
34 " " 37
1 " " 40
2 " " 48a
1 " " 52
4 " " 90a
2 " " 126a
2 " " 190
2 " " 191



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	



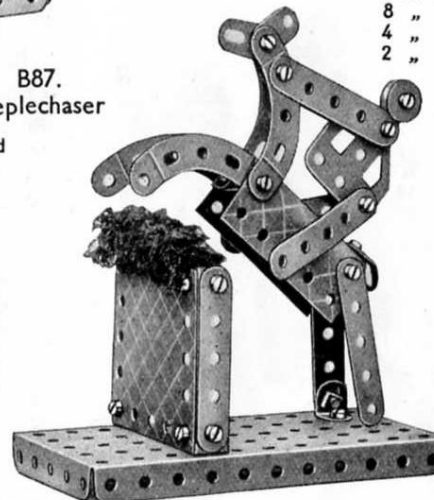
B84.
Ottoman

Parts required

4 of No. 2	1 of No. 48a
7 " " 5	1 " " 52
2 " " 10	2 " " 90a
2 " " 11	1 " " 190
4 " " 12	2 " " 191
34 " " 37	1 " " 199

Parts required

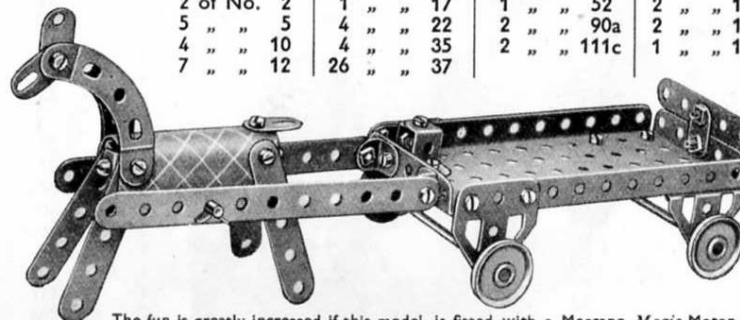
9 of No. 5
4 " " 10
7 " " 12
1 " " 23
20 " " 37
8 " " 37a
2 " " 48a
1 " " 52
4 " " 90a
4 " " 111c
1 " " 126a
1 " " 190
1 " " 199



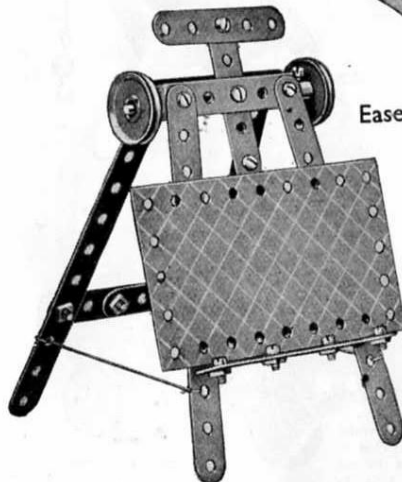
B87.
Steeplechaser

B88.
Horse and Cart

Parts required	2 of No. 16	2 of No. 37a	1 of No. 125
2 of No. 2	1 " " 17	1 " " 52	2 " " 126
5 " " 5	4 " " 22	2 " " 90a	2 " " 126a
4 " " 10	4 " " 35	2 " " 111c	1 " " 199
7 " " 12	26 " " 37		



The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples showing how the motor can be incorporated in models is shown at the end of this section. If the Motor is fitted, a Bush Wheel should be mounted on a 2" Rod fitted between the hind legs of the horse.



B85.
Easel and Board

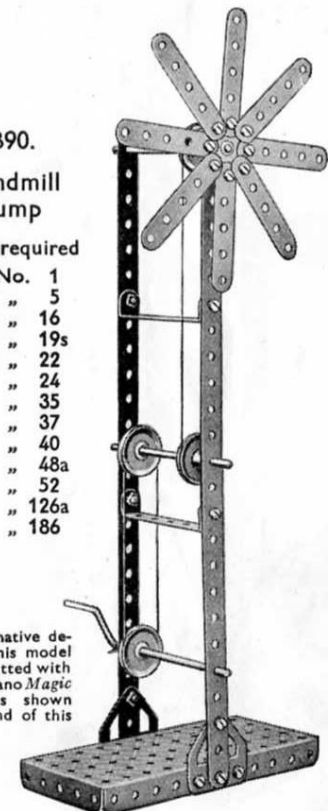
Parts required

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

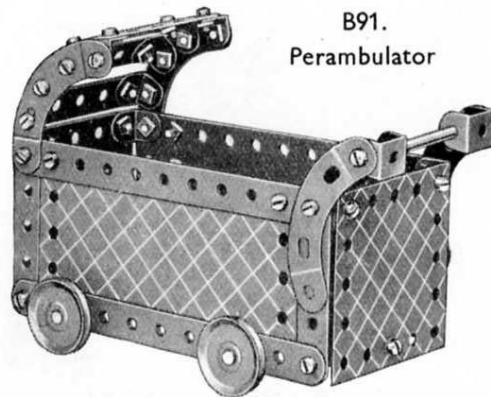
B90.
Windmill Pump

Parts required

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

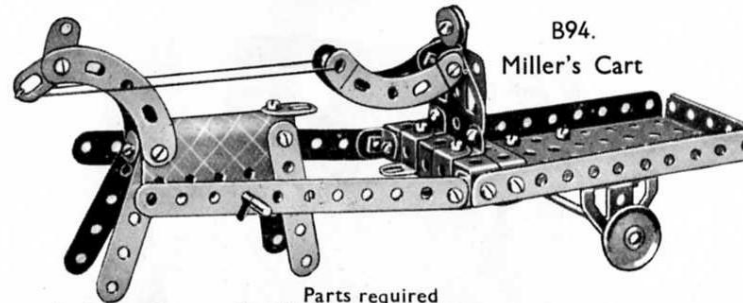


An alternative design of this model (B90M), fitted with the Meccano Magic Motor, is shown at the end of this section.



B91.
Perambulator

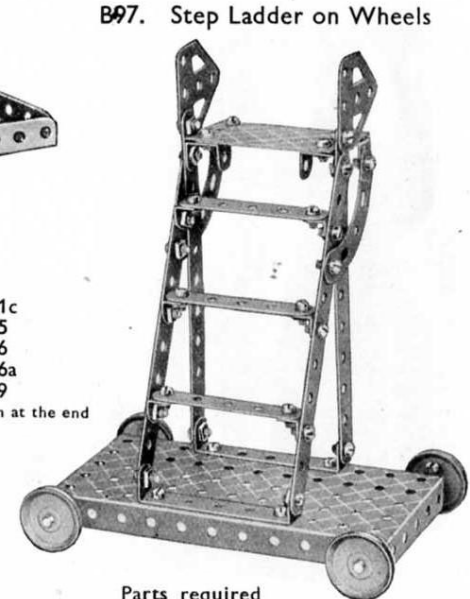
Parts required	
4 of No. 2	
8 " " 5	
2 " " 11	
8 " " 12	
2 " " 16	
1 " " 17	
4 " " 22	
36 " " 37	
2 " " 48a	
1 " " 52	
4 " " 90a	
2 " " 190	
2 " " 191	



B94.
Miller's Cart

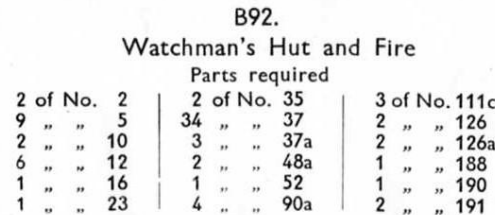
Parts required			
2 of No. 2	2 of No. 16	2 of No. 37a	2 of No. 111c
4 " " 5	2 " " 22	1 " " 40	2 " " 125
4 " " 10	1 " " 23	2 " " 48a	2 " " 126
1 " " 11	4 " " 35	1 " " 52	2 " " 126a
8 " " 12	26 " " 37	4 " " 90a	1 " " 199

An alternative design of this model (B94M), fitted with the Meccano Magic Motor, is shown at the end of this section.



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

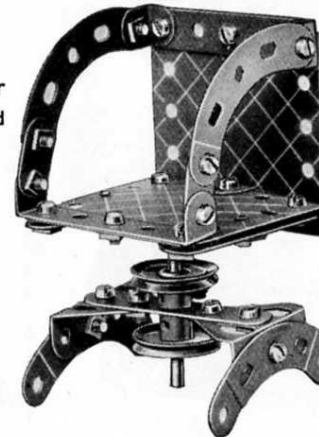


B92.
Watchman's Hut and Fire

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

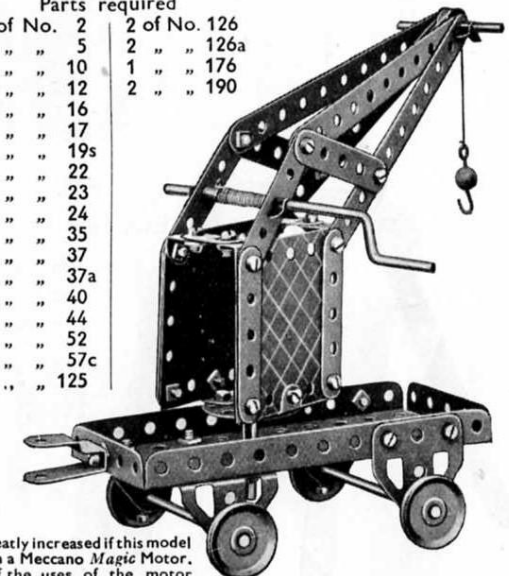
B95.
Revolving
Office Chair

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	

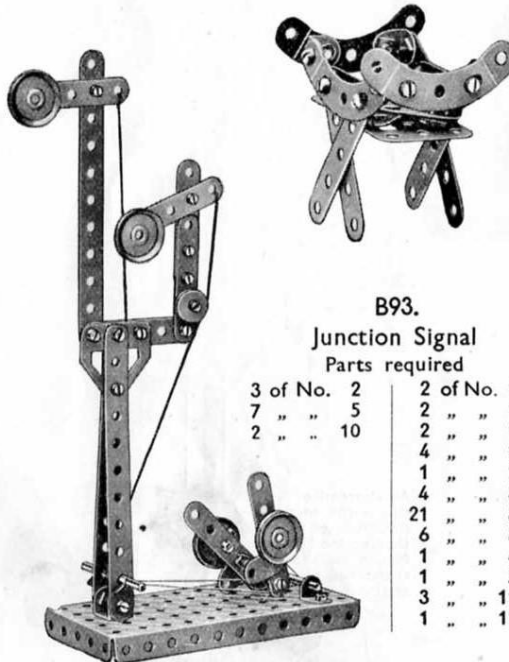


B98. Breakdown Crane

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 " " 44	
1 " " 52	
1 " " 57c	
1 " " 125	



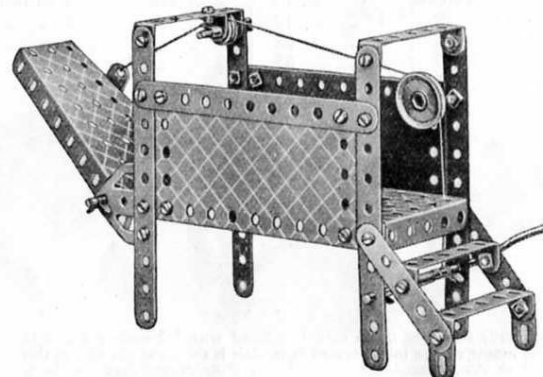
The fun is greatly increased if this model is fitted with a Meccano Magic Motor. Examples of the uses of the motor are shown at the end of this section.



B93.
Junction Signal

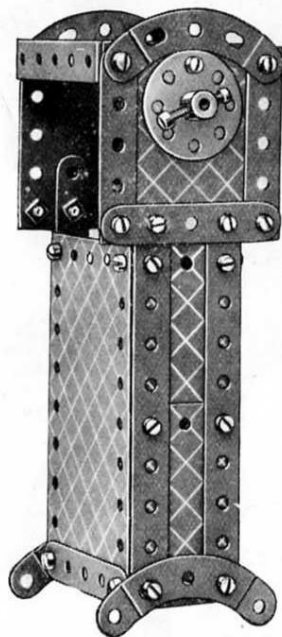
Parts required	
3 of No. 2	2 of No. 11
7 " " 5	2 " " 12
2 " " 10	2 " " 17
	4 " " 22
	1 " " 23
	4 " " 35
	21 " " 37
	6 " " 37a
	1 " " 40
	1 " " 52
	3 " " 111c
	1 " " 126a

B96. Gangway



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

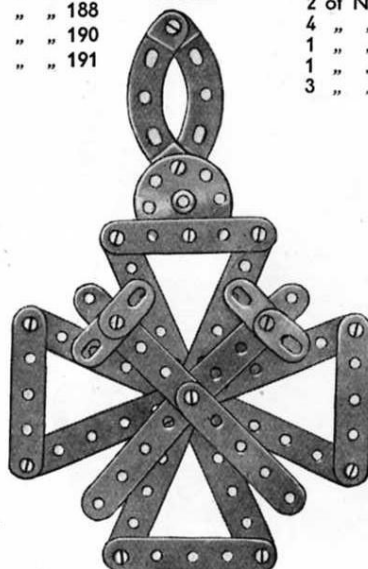
B99. Grandfather Clock



Parts required

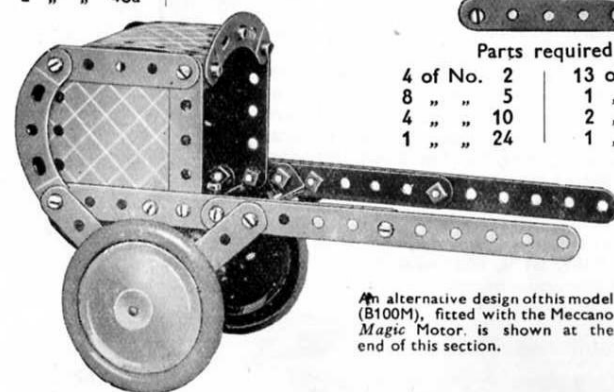
4 of No. 2
8 " " 5
8 " " 12
1 " " 24
31 " " 37
2 " " 48a
4 " " 90a
1 " " 111c
2 " " 188
2 " " 190
2 " " 191

B101. Medal



Parts required

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



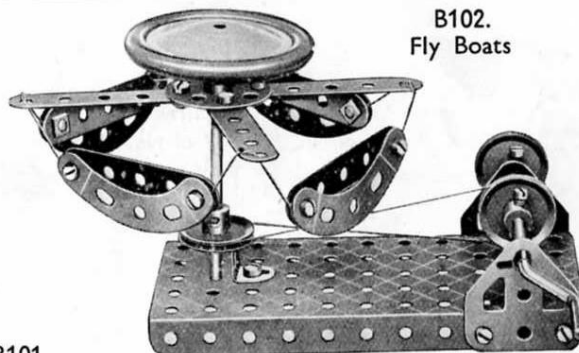
B100.

Rickshaw

Parts required

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

B102. Fly Boats

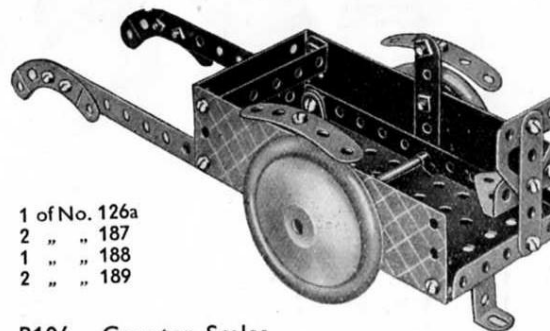


Parts required

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

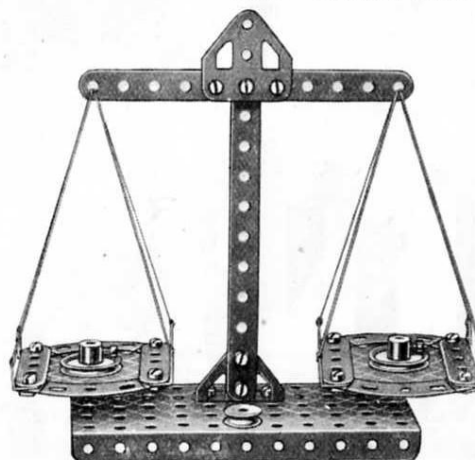
Parts required

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



B103. Milk Float

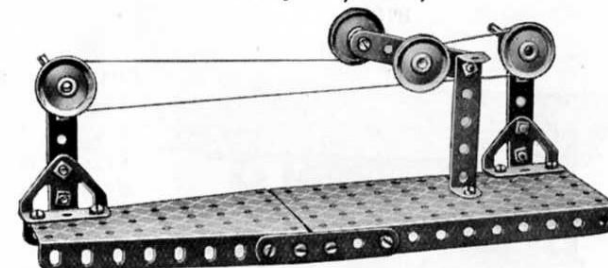
B104. Counter Scales



Parts required

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

B105. Jockey Pulley

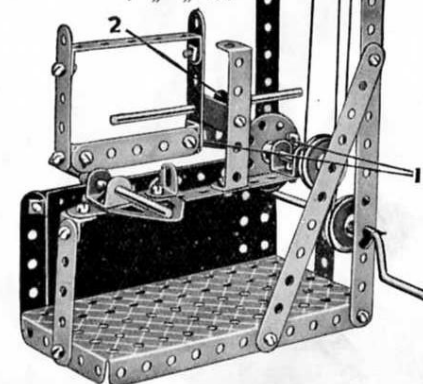


B106. Power Hack Saw

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

Parts required

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



An alternative design of this model (B106M), fitted with the Meccano Magic Motor, is shown at the end of this section.

B107.
Coffee Stall



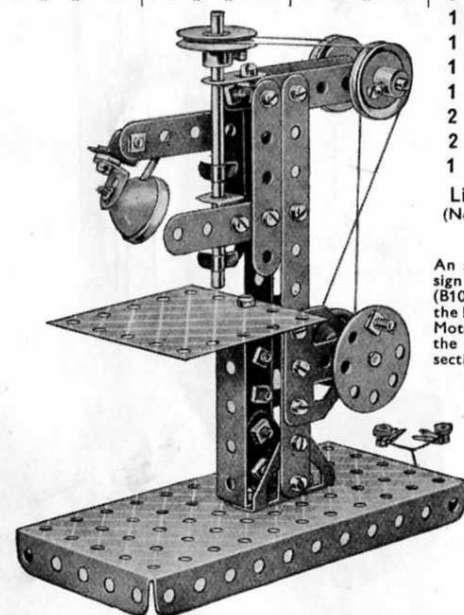
Parts required

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

Lighting Set
(Not included in
Outfit).

B108.
Sensitive Drill

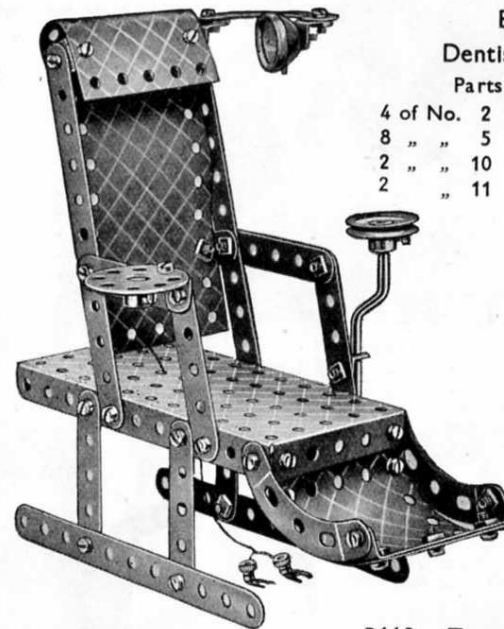
2 of No. 2	2 of No. 11	2 of No. 17	3 of No. 35
6 " " 5	3 " " 12	4 " " 22	28 " " 37
2 " " 10	1 " " 16	1 " " 24	5 " " 37a



1 " " 40
1 " " 48a
1 " " 52
1 " " 111c
2 " " 126
2 " " 126a
1 " " 190

Lighting Set
(Not included in
Outfit).

An alternative design of this model (B108M), fitted with the Meccano Magic Motor, is shown at the end of this section.



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
	1 " " 191
	1 " " 199
	1 " " 200

Lighting Set
(Not included in
Outfit).

Parts required

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

Lighting Set
(Not included in
Outfit).



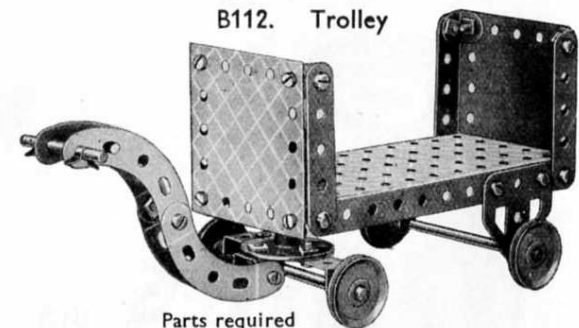
B111 Coffee Table

Parts required

4 of No. 5
4 " " 12
8 " " 37
4 " " 90a
1 " " 190

Lighting Set
(Not included in
Outfit).

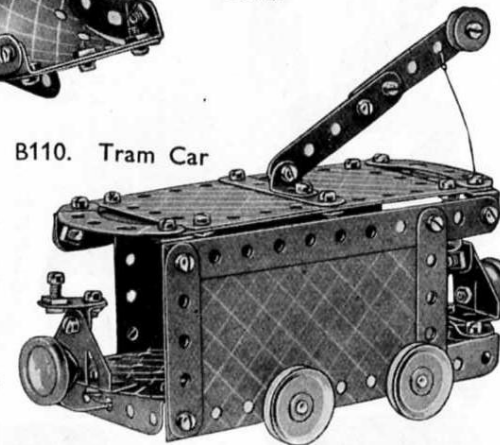
B112. Trolley



Parts required

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

B110. Tram Car



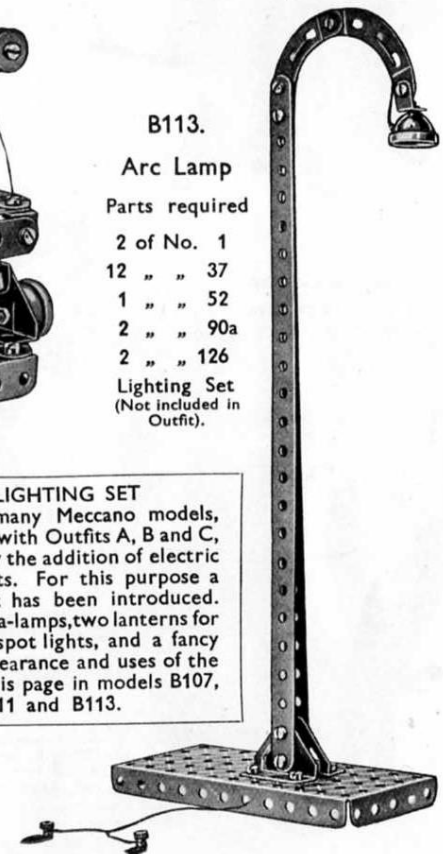
B113.

Arc Lamp

Parts required

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

Lighting Set
(Not included in
Outfit).



MECCANO LIGHTING SET

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

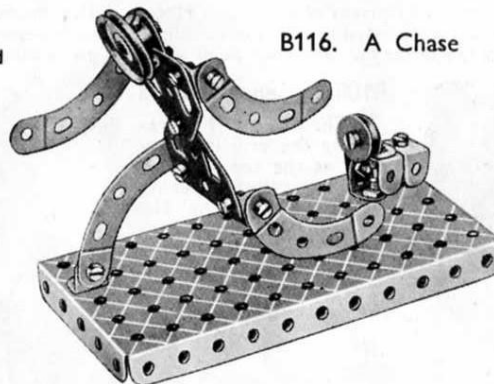
B114. Dressing Table



Parts required

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

B116. A Chase

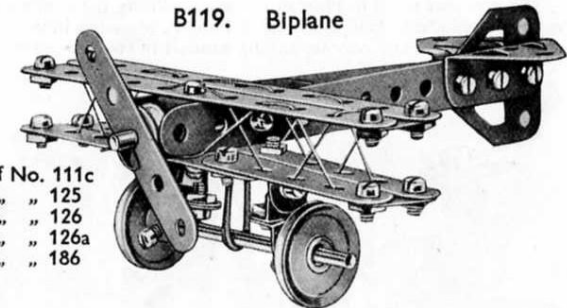


Parts required

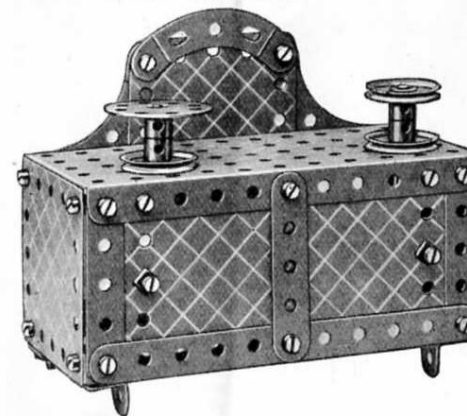
4	of No.	2
6	"	5
4	"	10
2	"	11
4	"	12
2	"	16
2	"	22
1	"	23
2	"	35
22	"	37
3	"	37a
1	"	40

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

B119. Biplane



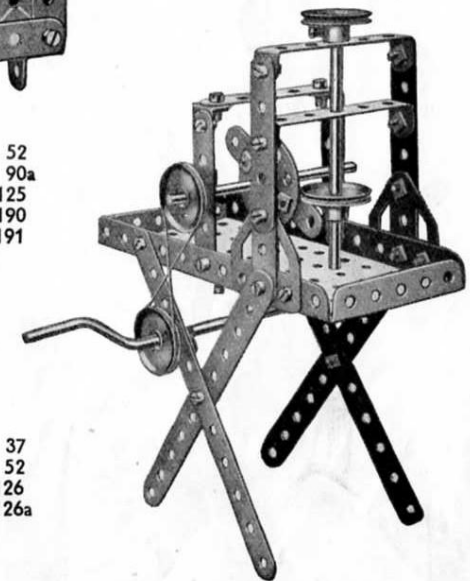
B120. Sideboard



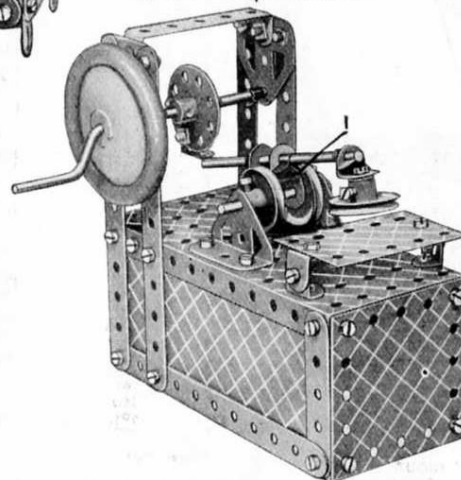
B121. Stamping Machine

Parts required

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



B117. Trip Hammer



Parts required

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

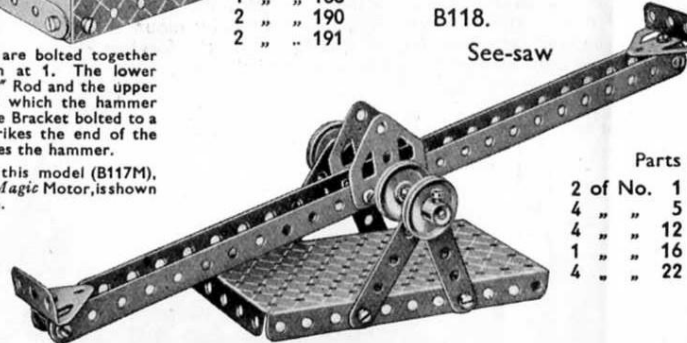
Two Double Brackets are bolted together at right angles as shown at 1. The lower Bracket pivots about a 2" Rod and the upper one carries a 3 1/2" Rod to which the hammer head is fitted. An Angle Bracket bolted to a rotating Bush Wheel strikes the end of the hammer Rod and operates the hammer.

An alternative design of this model (B117M), fitted with the Meccano Magic Motor, is shown at the end of this section.

Parts required	3 of No.	22	1 of No.	52
2 of No.	2	1	"	90a
5	"	5	2	"
8	"	12	28	"
2	"	17	2	"
			2	"

B118.

See-saw

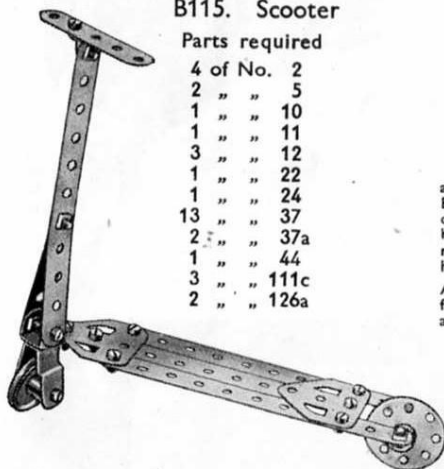


Parts required					
2 of No.	1	14 of No.	37		
4 "	5	1 "	52		
4 "	12	2 "	126		
1 "	16	2 "	126a		
4 "	22				

B115. Scooter

Parts required

4	of No.	2
2	"	5
1	"	10
1	"	11
3	"	12
1	"	22
1	"	24
13	"	37
2	"	37a
1	"	44
3	"	111c
2	"	126a



HOW TO CONTINUE

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

Outfit B Models fitted with the Magic Motor

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

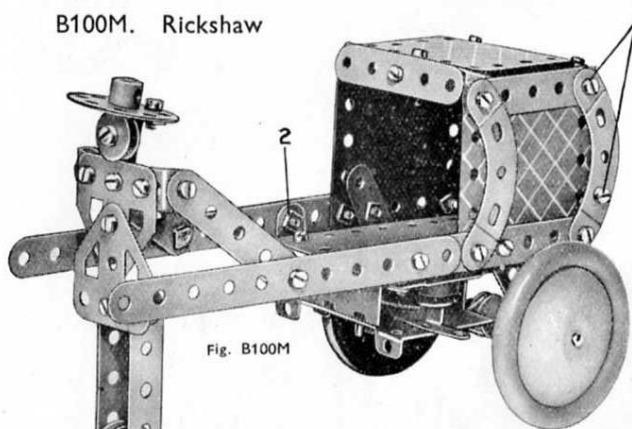
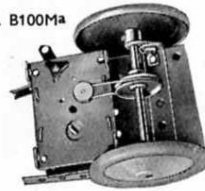
B100M. Rickshaw


Fig. B100M

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

Fig. B100Ma



Parts required		Parts required	
4 of No. 2	34 of No. 37	1 of No. 37a	
9 " " 5	1 " " 48a	2 " " 90a	
1 " " 10	2 " " 111c	1 " " 126a	
1 " " 11	2 " " 187	1 " " 190	
8 " " 12	2 " " 191		
1 " " 15b			
1 " " 17			
1 " " 22			
1 " " 23			
1 " " 24			
2 " " 35			
			<i>Magic Motor</i>

B108M. Sensitive Drill

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

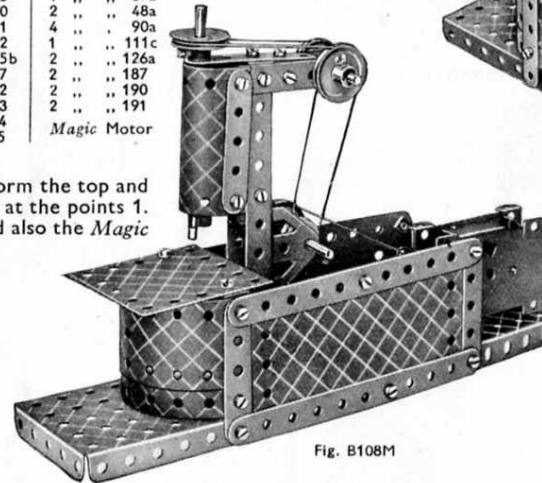


Fig. B108M

Parts required	
6 of No. 2	
9 " " 5	
2 " " 10	
2 " " 11	
7 " " 12	
1 " " 15b	
2 " " 17	
4 " " 22	
1 " " 23	
2 " " 35	
36 " " 37	
6 " " 37a	
1 " " 40	
1 " " 48a	
1 " " 52	
1 " " 54a	
6 " " 111c	
2 " " 126	
2 " " 126a	
2 " " 189	
2 " " 190	
1 " " 191	
1 " " 199	
	<i>Magic Motor</i>

B106M.
Power Hacksaw

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

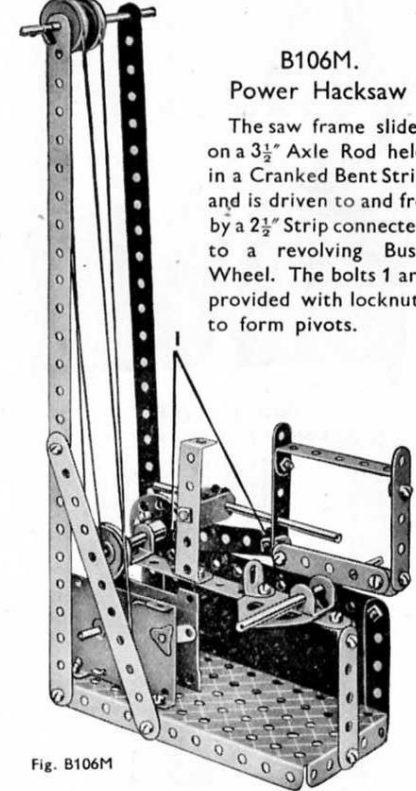
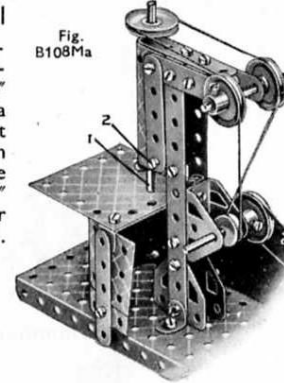


Fig. B106M

Parts required		Parts required	
2 of No. 1	6 of No. 12	2 of No. 38	
3 " " 2	1 " " 15b	1 " " 40	
7 " " 5	2 " " 16	1 " " 44	
2 " " 11	1 " " 17	2 " " 48a	
	3 " " 22	1 " " 52	
	1 " " 24	1 " " 126a	
	5 " " 35	1 " " 176	
	30 " " 37	1 " " 199	
	2 " " 37a		<i>Magic Motor</i>

B77M. Windmill

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

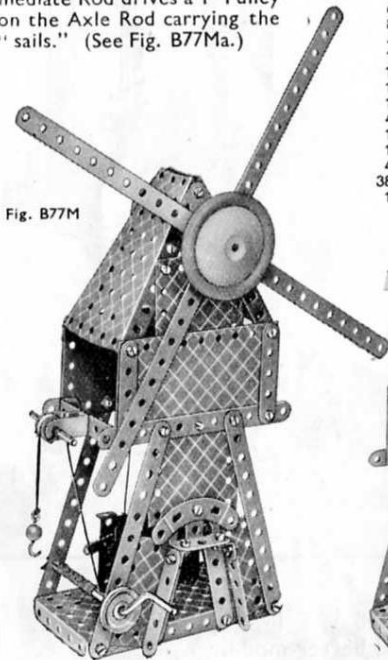


Fig. B77M

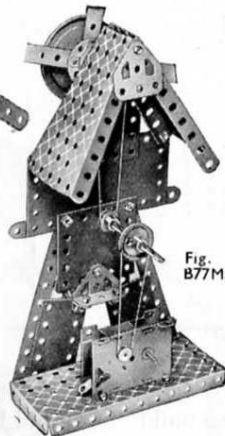


Fig. B77Ma

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

B94M. Miller's Cart

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

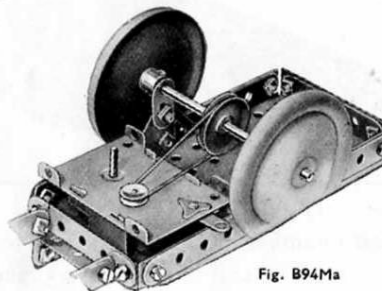


Fig. B94Ma

Parts required		Parts required	
6 of No. 2	1 of No. 188		
6 " " 5	2 " " 189		
5 " " 10	1 " " 199		
1 " " 11			<i>Magic Motor</i>
8 " " 12			
1 " " 15b			
2 " " 17			
1 " " 22			
1 " " 23			
1 " " 24			
4 " " 35			
36 " " 37			
3 " " 37a			
6 " " 38			
6 " " 40			
2 " " 48a			
1 " " 52			
4 " " 90a			
3 " " 111c			
2 " " 125			
2 " " 126			
1 " " 126a			
2 " " 187			

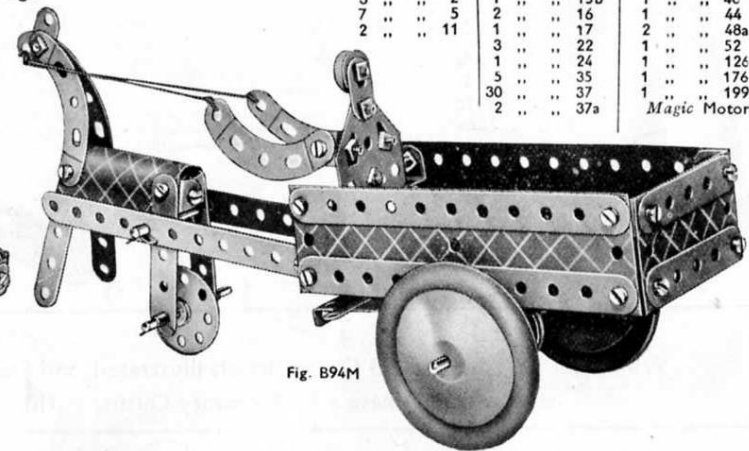
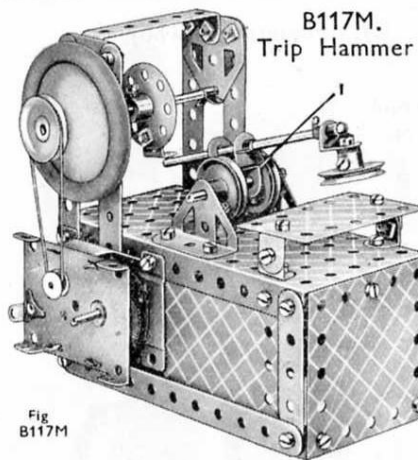


Fig. B94M



B117M.
Trip Hammer

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

Magic Motor

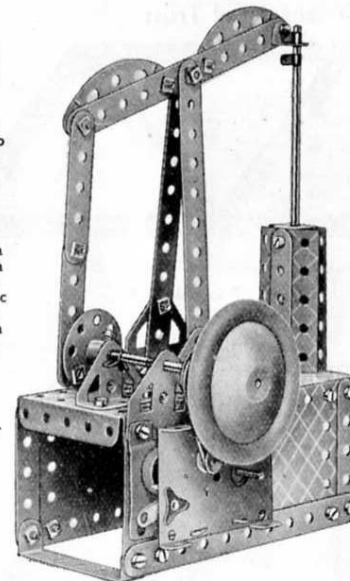


Fig. B32M

B32M. Pump

Parts required	
5 of No. 2	3 of No. 38
8 " " 5	2 " " 48a
11 " " 11	1 " " 52
12 " " 12	2 " " 90a
15b " " 15b	6 " " 111c
16 " " 16	2 " " 126
22 " " 22	2 " " 126a
24 " " 24	1 " " 186
35 " " 35	1 " " 187
36 " " 36	2 " " 188
37 " " 37	2 " " 191
37a " " 37a	

Magic Motor

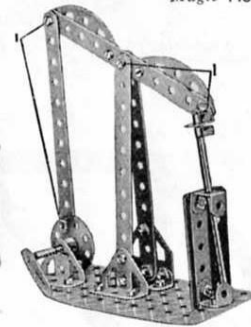


Fig. B32Ma

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

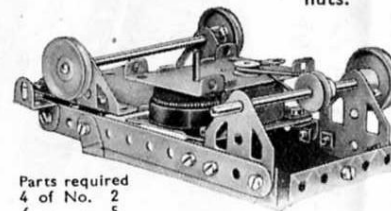


Fig. B51Ma

Parts required	
4 of No. 2	2
6 " " 5	10
11 " " 11	12
12 " " 12	16
16 " " 16	17
22 " " 22	23
23 " " 23	35
36 " " 36	37
40 " " 40	48a
48a " " 48a	52
52 " " 52	90a
125 " " 125	126
126 " " 126	126a
186 " " 186	187
188 " " 188	190
190 " " 190	191
191 " " 191	199

Magic Motor

B90M.
Windmill Pump

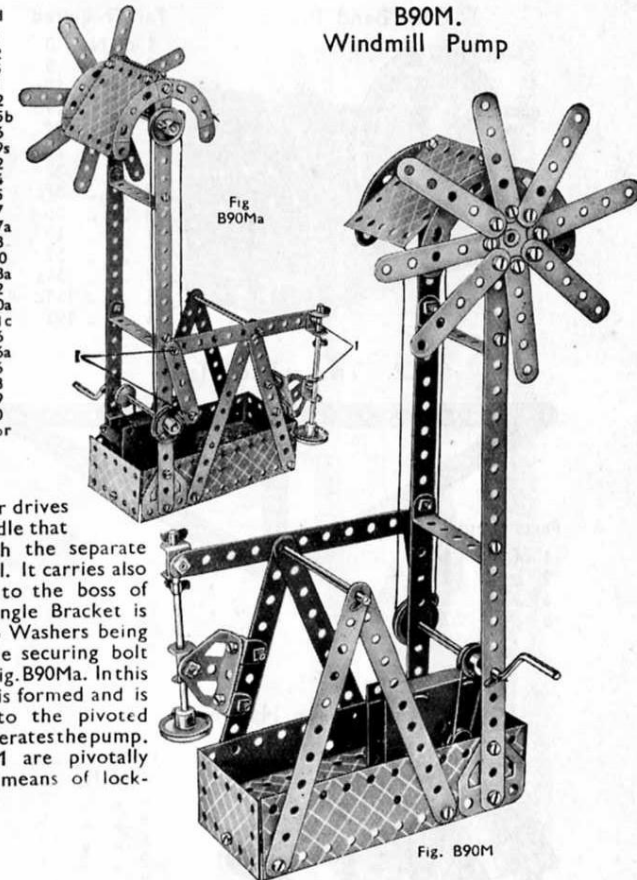


Fig. B90M

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

B51M. Bread Van

The method of mounting the Magic Motor in position is shown in Fig. B51Ma. The horse travels on a 1/2" loose Pulley mounted between its hind legs, and the forelegs should be kept clear of the ground by tying the reins to the Angle Bracket 1.

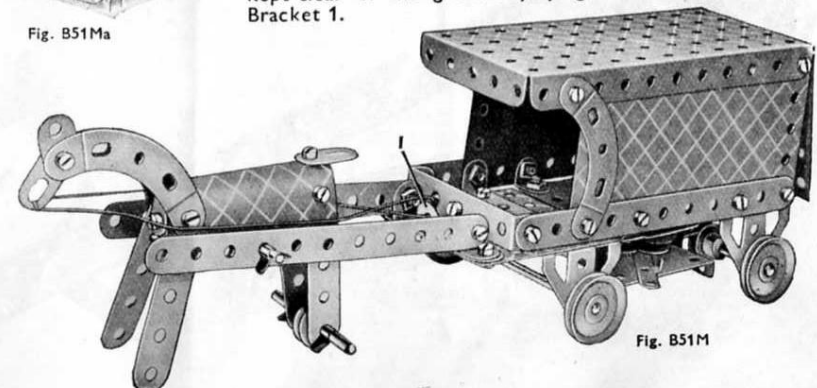


Fig. B51M

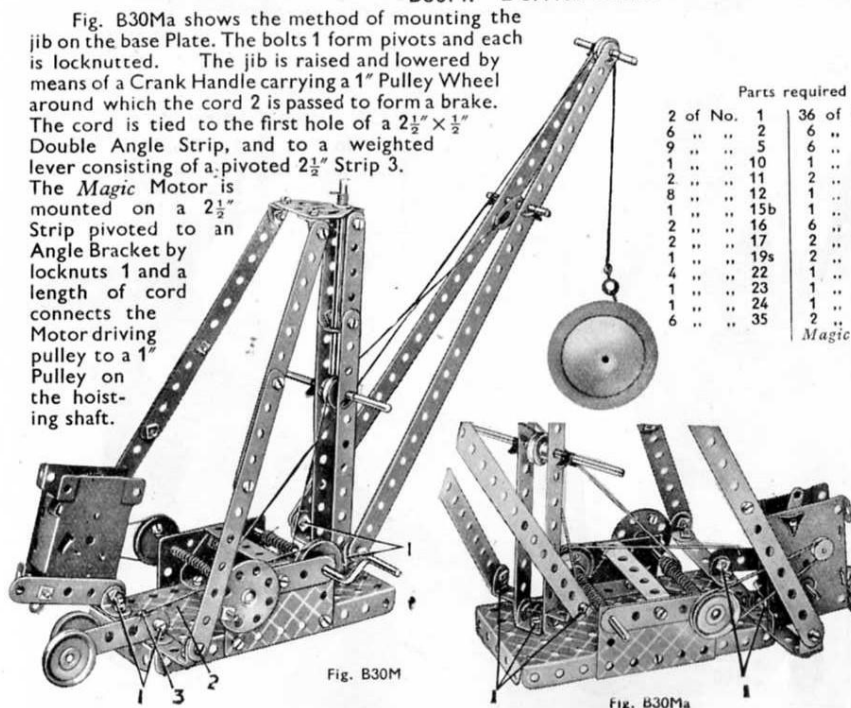


Fig. B30M

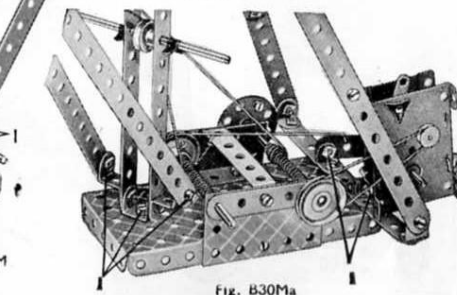


Fig. B30Ma

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

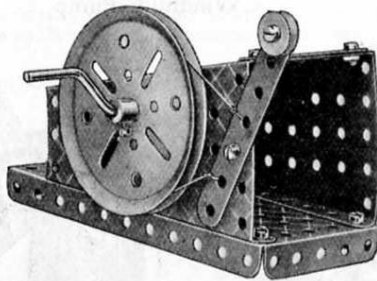
Magic Motor

Two Double Brackets are bolted together as shown at 1. The lower Bracket pivots about a 2" Rod and the upper one carries the hammer. A Bush Wheel is driven from the Magic Motor by a rubber band passing round a 1" Pulley Wheel and carries an Angle Bracket that strikes the end of the hammer Rod and operates the hammer.

B30M. Derrick Crane

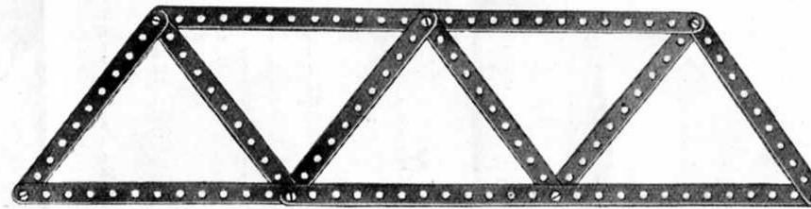
Fig. B30Ma shows the method of mounting the jib on the base Plate. The bolts 1 form pivots and each is locknuted. The jib is raised and lowered by means of a Crank Handle carrying a 1" Pulley Wheel around which the cord 2 is passed to form a brake. The cord is tied to the first hole of a 2 1/2" x 1/2"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

C1. Band Brake



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

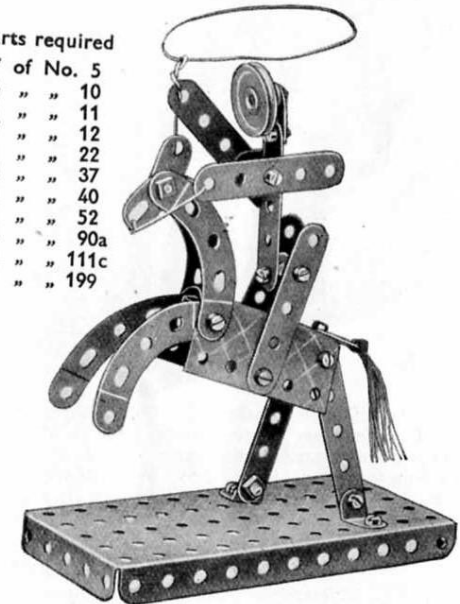
C4. Compound Triangulated Truss



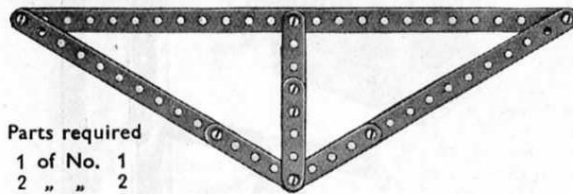
Parts required		
3 of No.	1	6 of No. 2
		7 of No. 37

C7. Mounted Cowboy

Parts required	
7 of No.	5
4 "	10
2 "	11
7 "	12
1 "	22
22 "	37
1 "	40
1 "	52
4 "	90a
1 "	111c
1 "	199



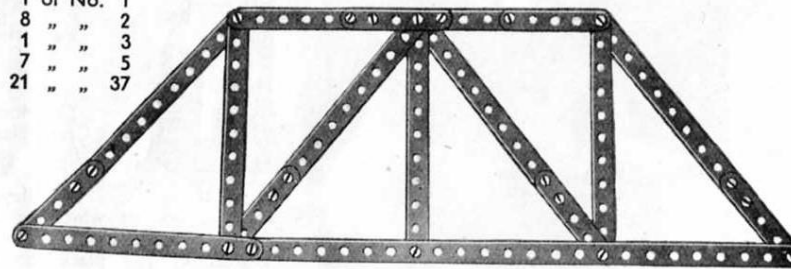
C2. Triangulated Truss



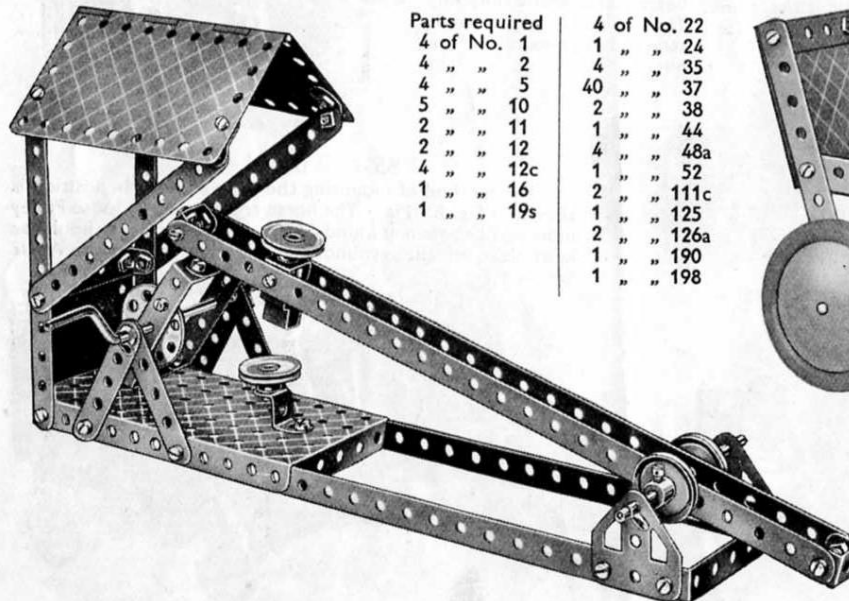
Parts required	
1 of No.	1
2 "	2
4 "	5
8 "	37

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

C5. Howe Truss

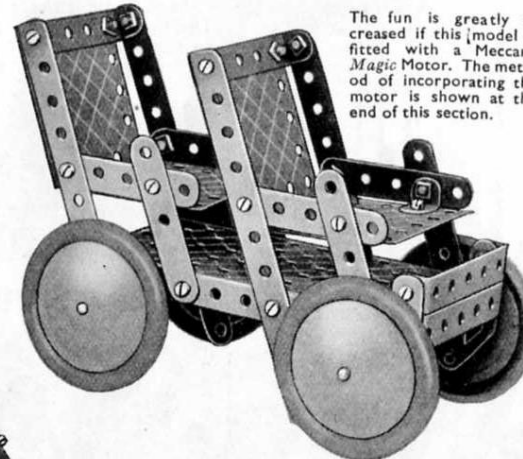


C3. Helve Hammer



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. Tandem Car

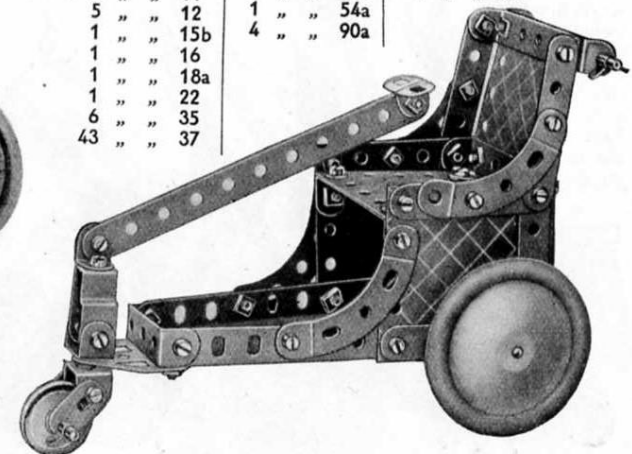


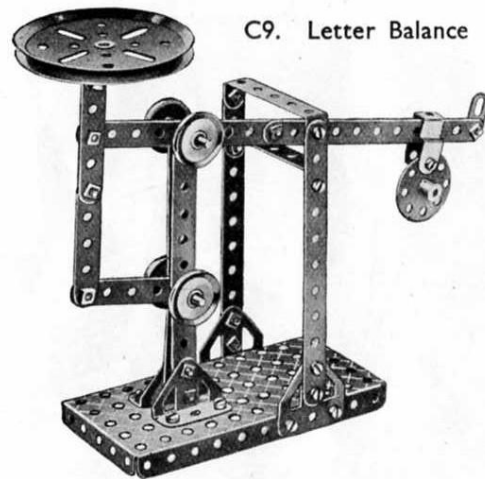
The fun is greatly increased if this model is fitted with a Meccano Magic Motor. The method of incorporating the motor is shown at the end of this section.

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

C8. Bath Chair

Parts required	
1 of No.	2
9 "	5
4 "	10
2 "	11
5 "	12
1 "	15b
1 "	16
1 "	18a
1 "	22
6 "	35
43 "	37
4 of No.	37a
8 "	38
1 "	44
1 "	48
5 "	48a
1 "	54a
4 "	90a
1 of No.	111c
1 "	126a
2 "	187
3 "	190
1 "	191

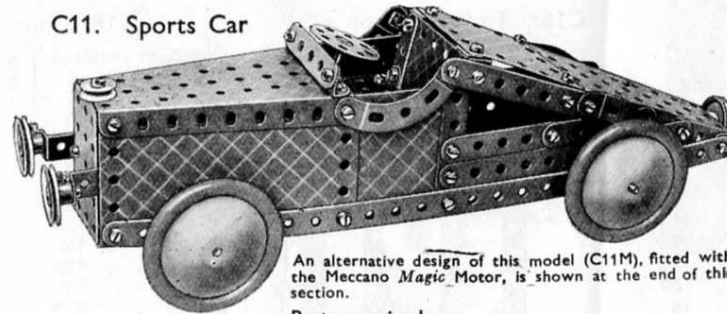




C9. Letter Balance

Parts required

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



C11. Sports Car

An alternative design of this model (C11M), fitted with the Meccano Magic Motor, is shown at the end of this section.

Parts required

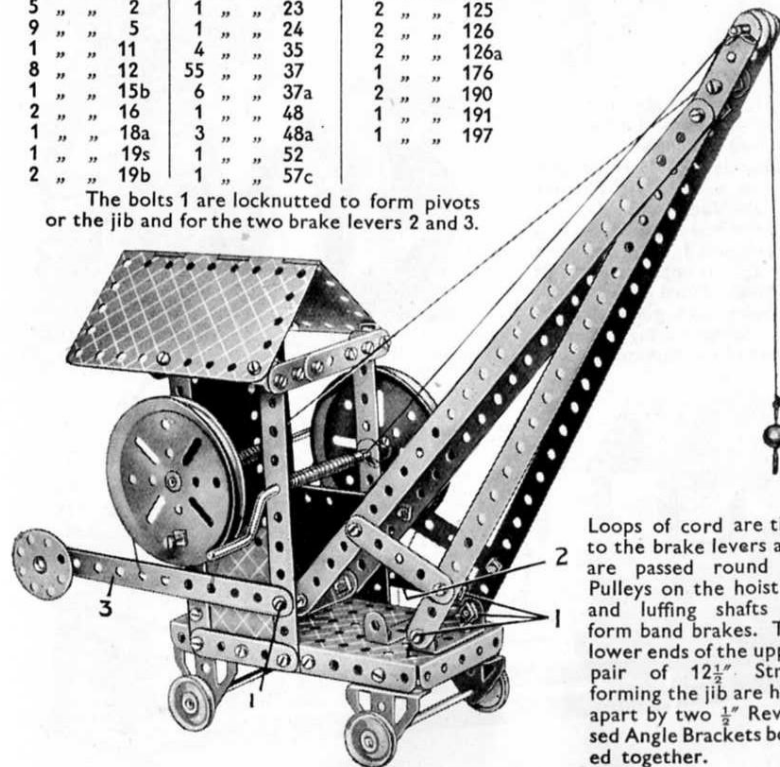
2 of No. 1	4 of No. 22	1 of No. 48	4 of No. 111c
4 " " 2	1 " " 23	2 " " 48a	2 " " 125
9 " " 5	1 " " 24	1 " " 51	2 " " 126a
2 " " 10	2 " " 35	1 " " 52	2 " " 187
8 " " 12	55 " " 37	2 " " 54a	4 " " 190
2 " " 15b	1 " " 37a	4 " " 90a	2 " " 191
1 " " 16	2 " " 38		

C10. Travelling Crane

Parts required

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

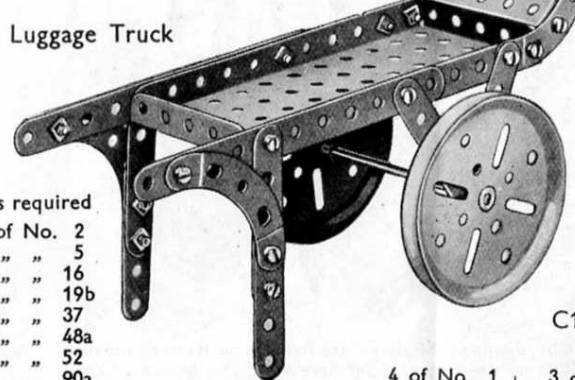
The bolts 1 are locknuttied to form pivots or the jib and for the two brake levers 2 and 3.



C12. Luggage Truck

Parts required

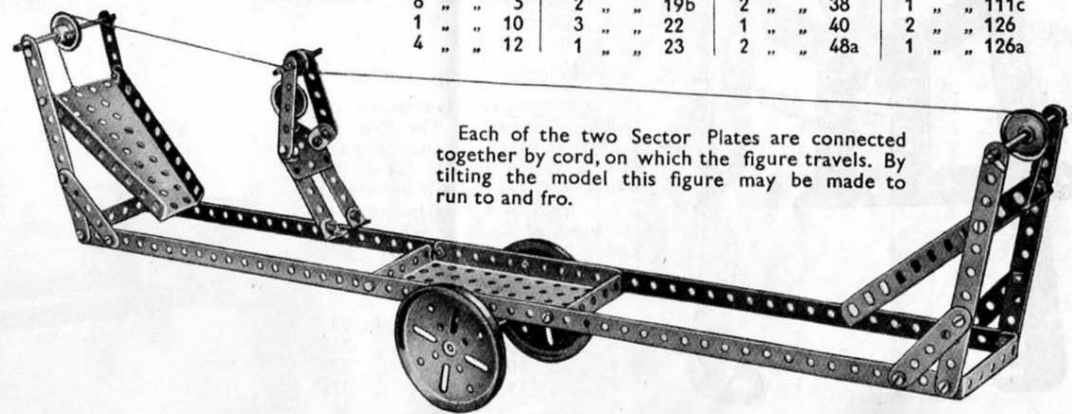
2 of No. 2
8 " " 5
1 " " 16
2 " " 19b
18 " " 37
2 " " 48a
1 " " 52
4 " " 90a



C14. Aerial Flight

Parts required

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

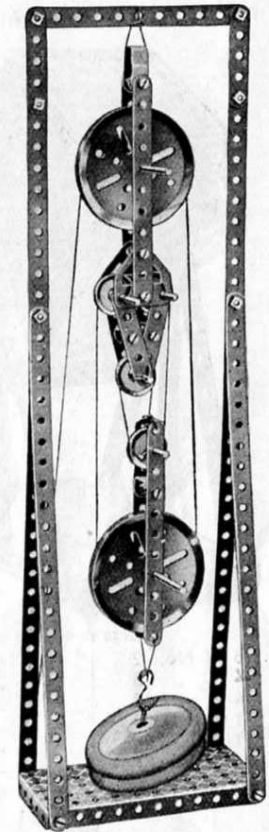


Each of the two Sector Plates are connected together by cord, on which the figure travels. By tilting the model this figure may be made to run to and fro.

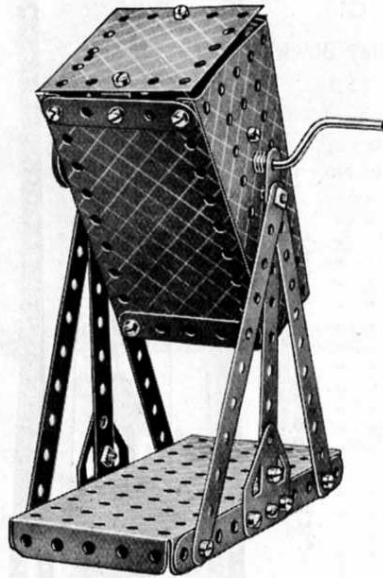
C13.
Pulley Block,
5:1

Parts required

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



C15. Butter Churn

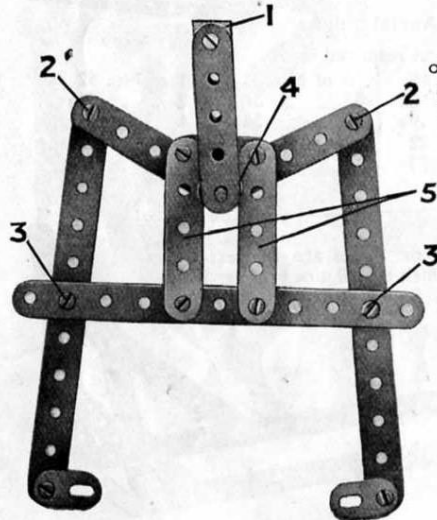


Parts required

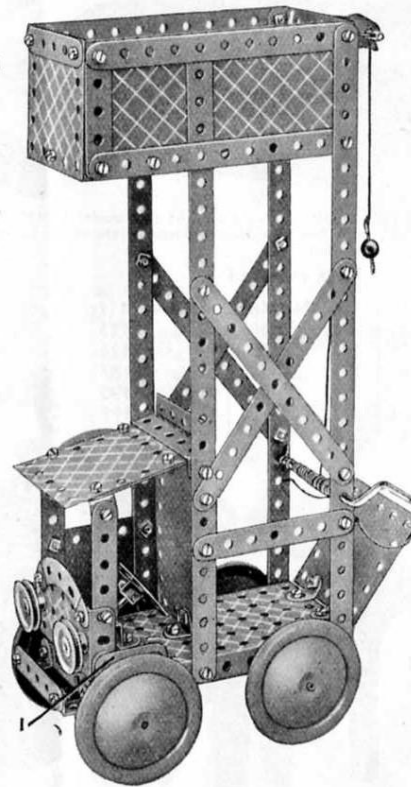
4 of No. 1	
8 " " 2	
1 " " 3	
9 " " 5	
2 " " 11	
7 " " 12	
2 " " 12c	
1 " " 15b	
1 " " 16	
2 " " 18a	
1 " " 19s	
2 " " 22	
1 " " 23	
1 " " 24	
6 " " 35	
61 " " 37	
3 " " 38	
1 " " 40	
1 " " 44	
6 " " 48a	
1 " " 51	
1 " " 52	
1 " " 57c	
2 " " 90a	
2 " " 111c	
1 " " 125	
2 " " 126	
2 " " 126a	
4 " " 187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

Parts required

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



C16. Tower Wagon



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

C17.

Friction Grip Tongs

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

Parts required

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

C18. Pneumatic Hammer

Parts required

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

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

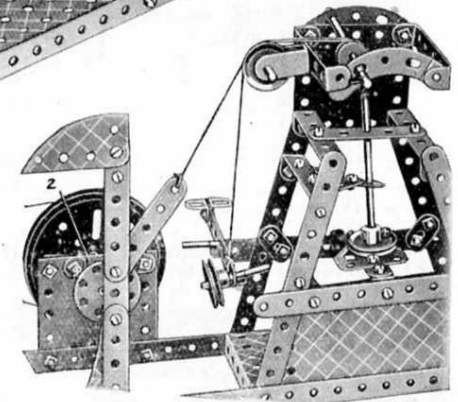
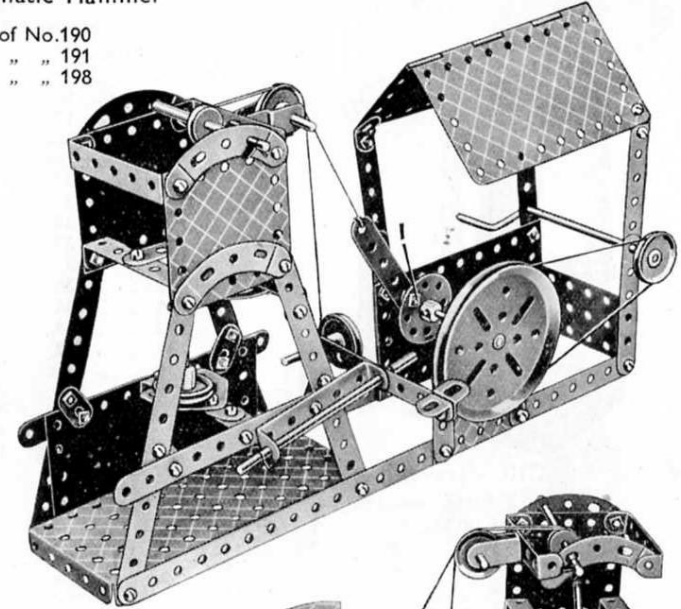
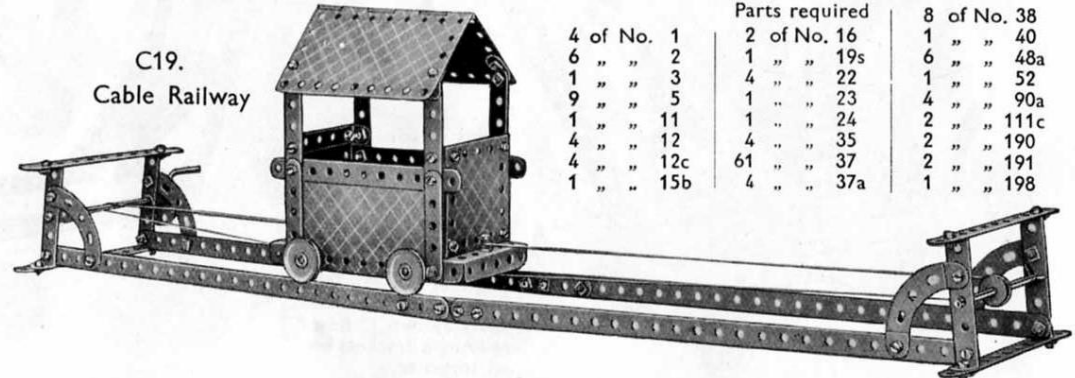


Fig. C18a

C19.
Cable Railway

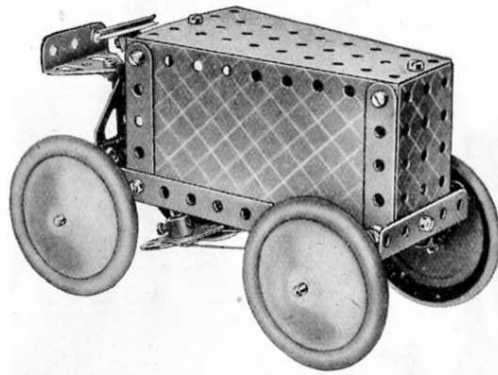
4 of No. 1	
6 " " 2	
1 " " 3	
9 " " 5	
1 " " 11	
4 " " 12	
4 " " 12c	
1 " " 15b	

Parts required

2 of No. 16	
1 " " 19s	
4 " " 22	
1 " " 23	
1 " " 24	
4 " " 35	
61 " " 37	
4 " " 37a	

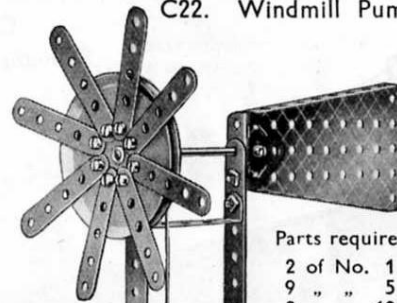
8 of No. 38	
1 " " 40	
6 " " 48a	
1 " " 52	
4 " " 90a	
2 " " 111c	
2 " " 190	
2 " " 191	
1 " " 198	

C20. Motor Tractor



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

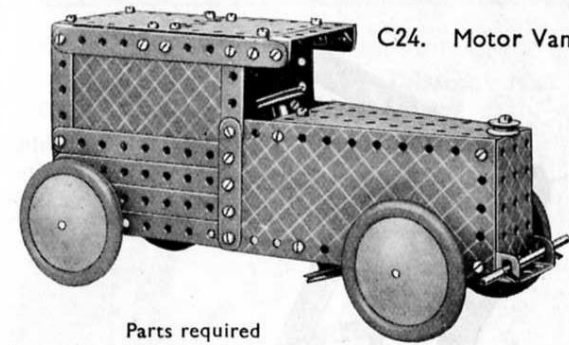
C22. Windmill Pump



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

An alternative design of this model (C22M), fitted with the Meccano Magic Motor, is shown at the end of this section.

C24. 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

C21. Elevated Jib Crane (Hand)

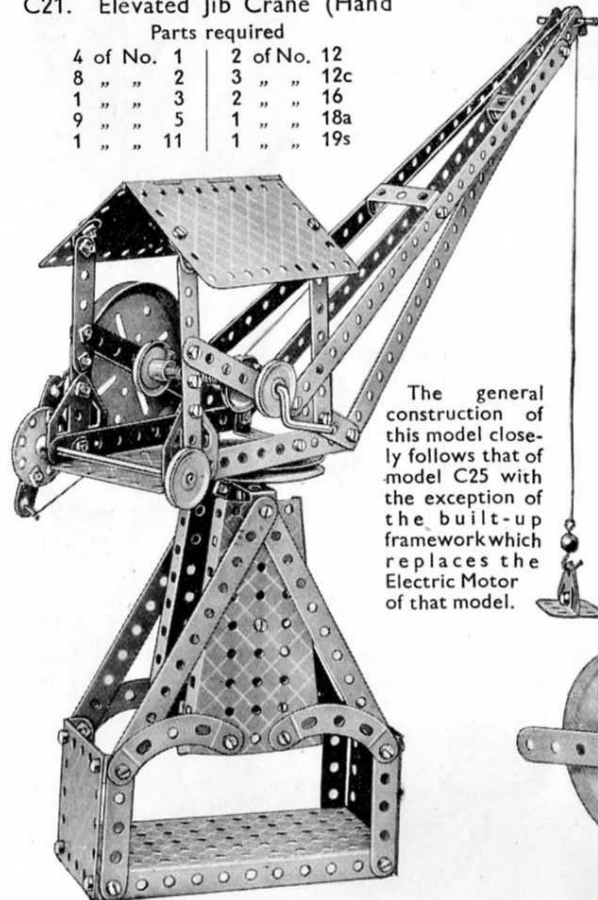
Parts required

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

Parts required for C21 (continued)

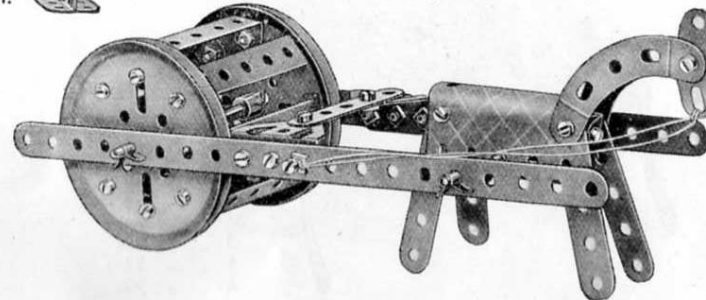
2 of No. 19b	
4 " " 22	
1 " " 23	
1 " " 24	
4 " " 35	
56 " " 37	
2 " " 37a	
4 " " 38	
1 " " 40	
1 " " 48	
6 " " 48a	
1 " " 52	
2 " " 54a	
1 " " 57c	
4 " " 90a	
2 " " 111c	
2 " " 126	
2 " " 126a	
1 " " 176	
2 " " 190	
1 " " 191	
1 " " 198	

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

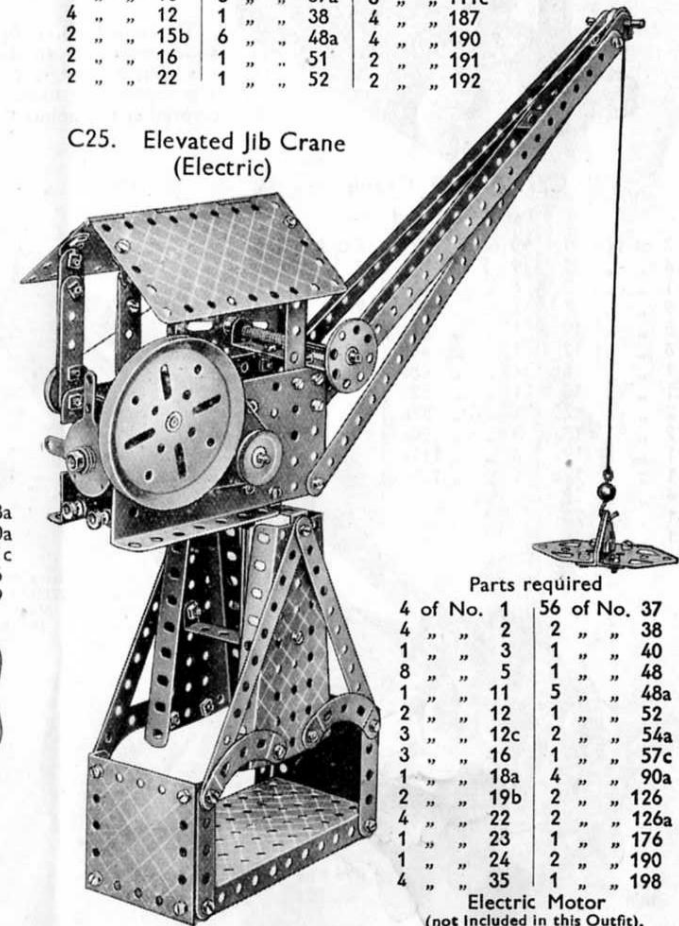


C23. Field Roller

Parts required	
4 of No. 2	1 of No. 16
7 " " 5	2 " " 19b
2 " " 10	6 " " 35
8 " " 12	34 " " 37
1 " " 15b	2 " " 37a
	1 " " 40
	6 of No. 48a
	2 " " 90a
	1 " " 111c
	2 " " 126
	1 " " 199

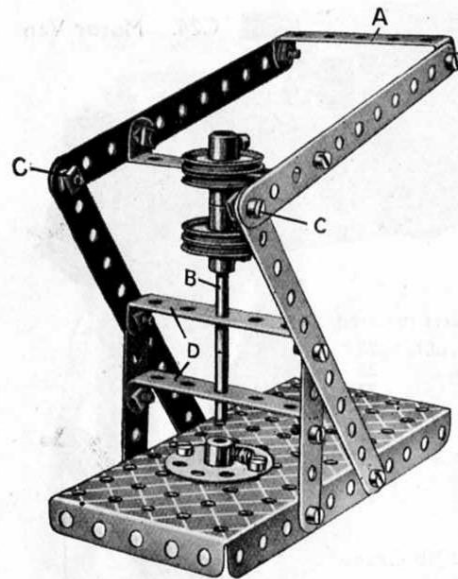


C25. Elevated Jib Crane (Electric)



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

Electric Motor
(not included in this Outfit).

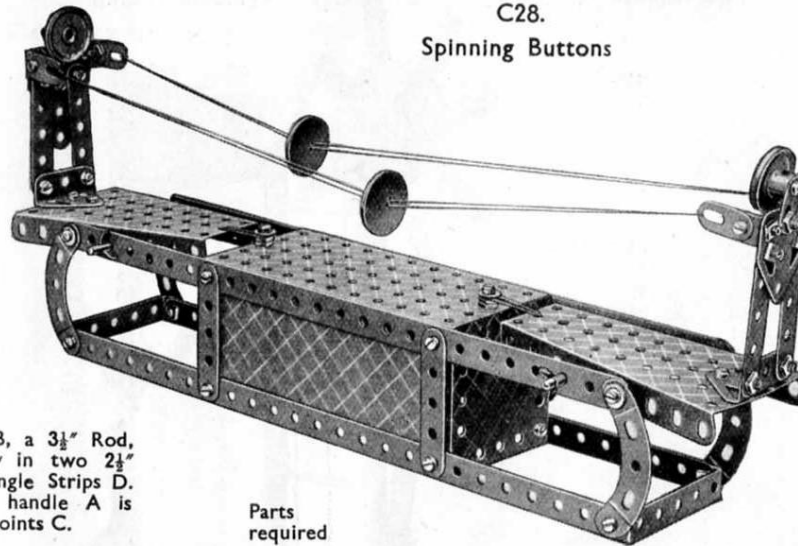


C26.
Punching
Machine

Parts required

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

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



C28.
Spinning Buttons

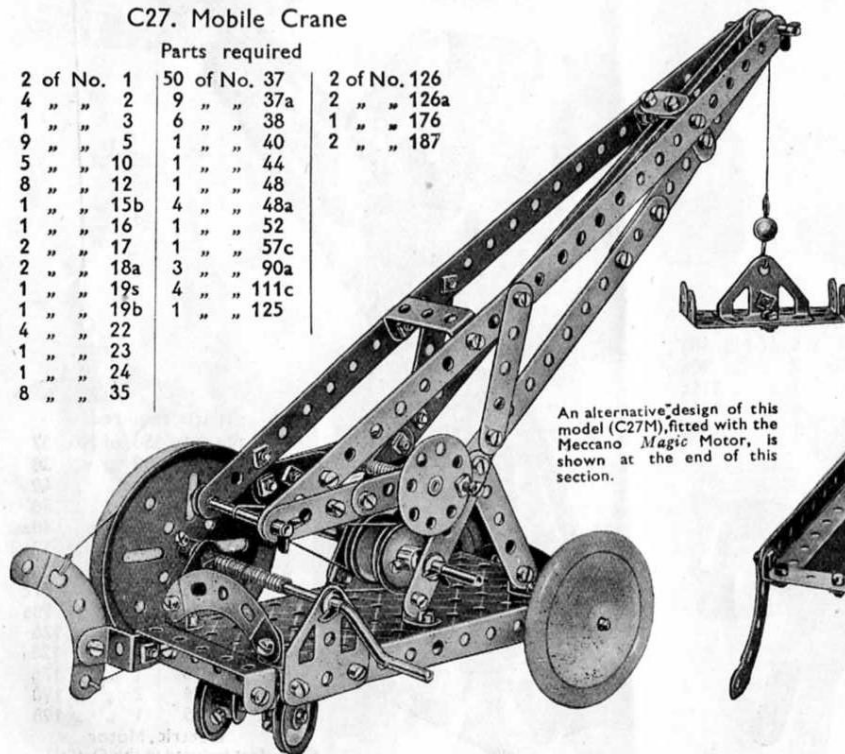
Parts
required

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

C27. Mobile Crane

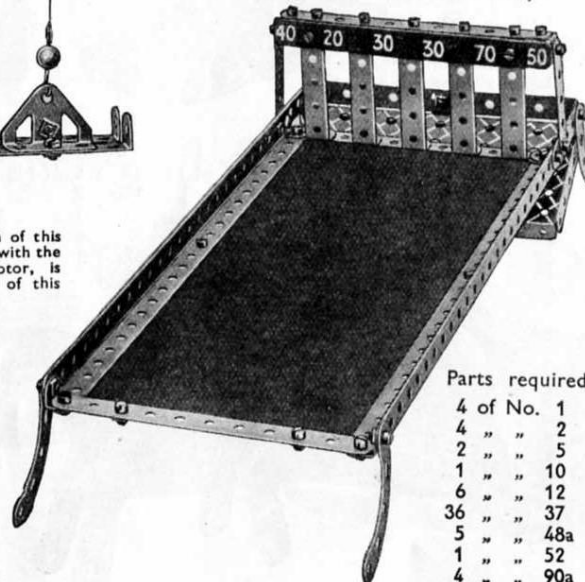
Parts required

2 of No. 1	50 of No. 37	2 of No. 126
4 " " 2	9 " " 37a	2 " " 126a
1 " " 3	6 " " 38	1 " " 176
9 " " 5	1 " " 40	2 " " 187
5 " " 10	1 " " 44	
8 " " 12	1 " " 48	
1 " " 15b	4 " " 48a	
1 " " 16	1 " " 52	
2 " " 17	1 " " 57c	
2 " " 18a	3 " " 90a	
1 " " 19s	4 " " 111c	
1 " " 19b	1 " " 125	
4 " " 22		
1 " " 23		
1 " " 24		
8 " " 35		



An alternative design of this model (C27M), fitted with the Meccano Magic Motor, is shown at the end of this section.

C29. Box Ball Alley



Parts required

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

C30.
Gramophone

Parts required

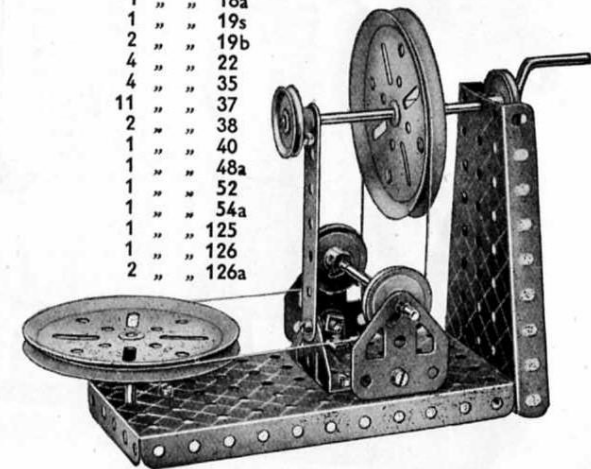
4 of No. 2
5 " " 5
2 " " 10
4 " " 12
1 " " 23
1 " " 24
29 " " 37
5 " " 37a
5 " " 48a
1 " " 52
4 " " 111c
2 " " 126a
2 " " 190
2 " " 191



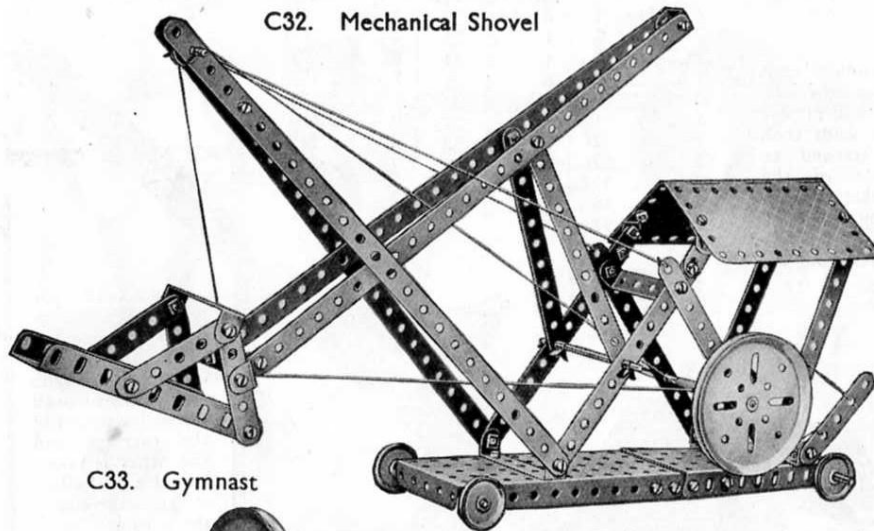
Parts required

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

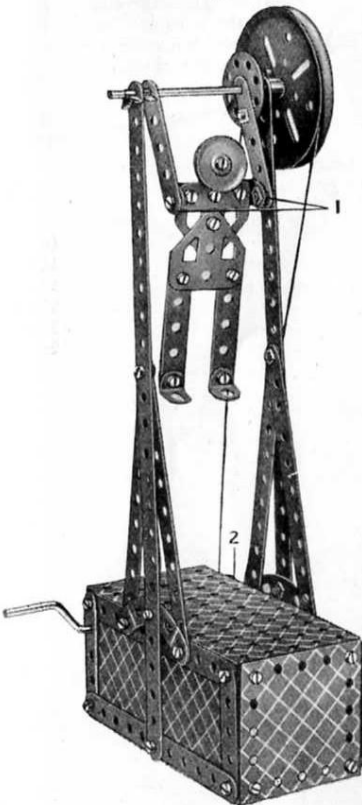
C31.
Belt Gear



C32. Mechanical Shovel



C33. Gymnast



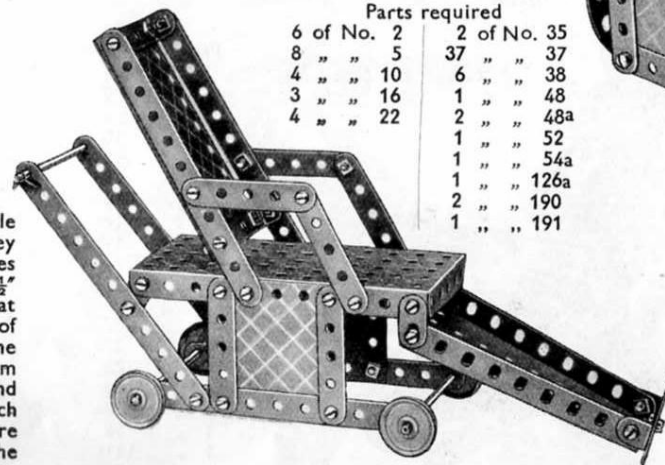
Parts required

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

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

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 passed over the jib-head Pulley and wound round a Crank Handle, its other end also being tied to the bucket. The Crank Handle is controlled by the band brake shown in the photograph.

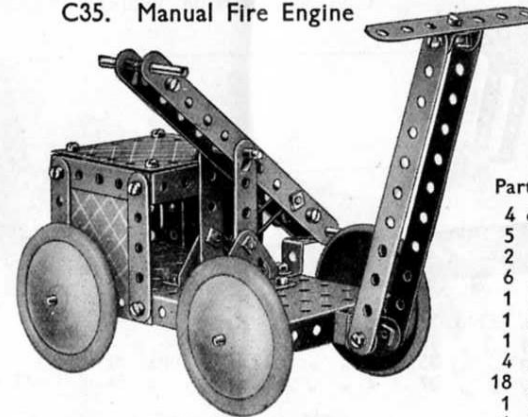
C34. Invalid Chair



Parts required

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

C35. Manual Fire Engine



Parts required

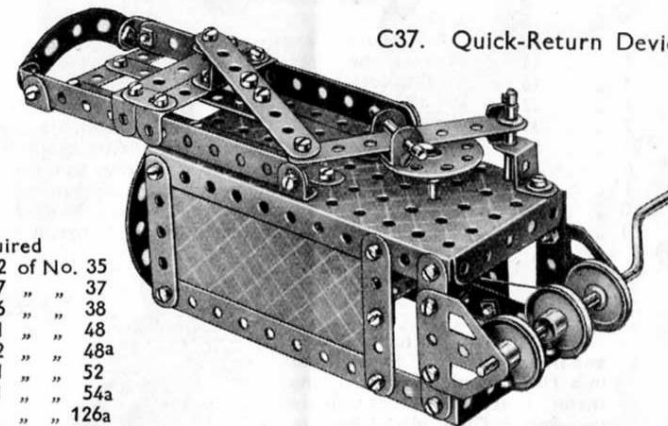
4 of No. 2	1 of No. 18a	1 of No. 52
1 " " 3	6 " " 35	2 " " 111c
1 " " 5	34 " " 37	1 " " 125
8 " " 11	6 " " 37a	2 " " 126
6 " " 12	1 " " 38	1 " " 186
2 " " 15b	1 " " 44	4 " " 187
2 " " 17	2 " " 48a	4 " " 190

C36. Telescopic Mast

Parts required

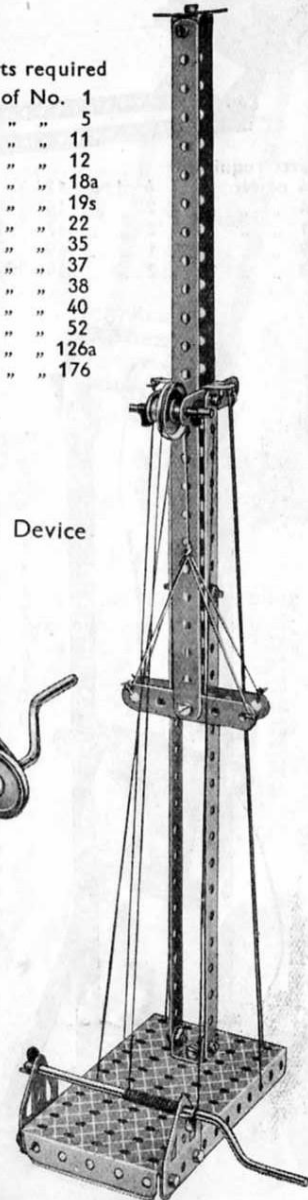
4 of No. 1	5
5 " " 5	11
2 " " 11	12
6 " " 12	18a
1 " " 18a	19s
1 " " 19s	22
4 " " 22	35
18 " " 35	37
1 " " 37	38
1 " " 38	40
1 " " 40	52
2 " " 52	126a
1 " " 126a	176

C37. Quick-Return Device

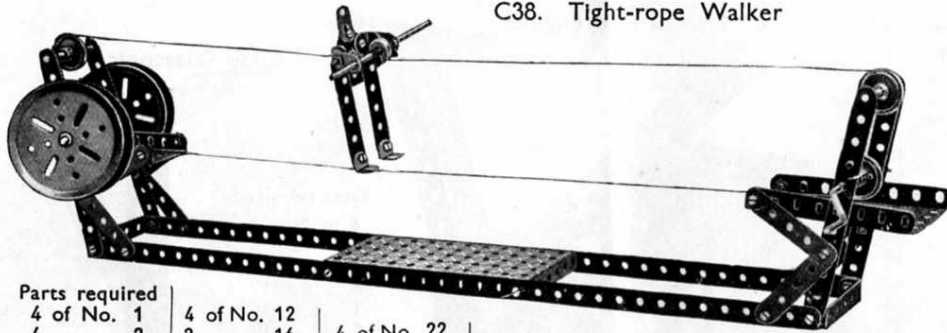


Parts required

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



C38. Tight-rope Walker



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

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 $\frac{1}{2}$ " Pulley running along the upper section of the cord.

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

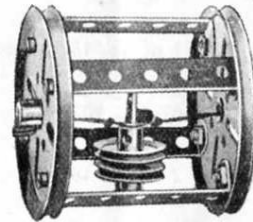
C42. Extended Ash Tip

Parts required		4 of No. 90a	
4 of No. 22	3 " " 111c		
1 " " 23	2 " " 125		
1 " " 24	2 " " 126a		
8 " " 35	1 " " 176		
66 " " 37	3 " " 190		
5 " " 37a	2 " " 192		
3 " " 38	1 " " 198		
1 " " 40			
5 " " 48a			
1 " " 52			

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 $\frac{1}{2}$ " Pulley at the outer end of the rails, after which it is secured to the carriage.

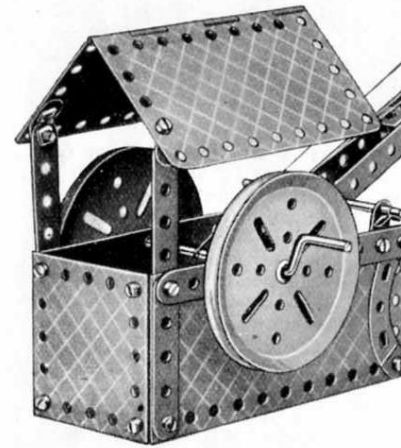
C39. Guillotine

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



Parts required	
1 of No. 18a	
2 " " 19h	
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 $\frac{1}{2}$ " Rod, is suspended from it in the middle of the drum. When the Cum Bak is rolled along any smooth level surface, the elastic becomes twisted and stores up sufficient energy to return the drum to its starting point. If the mechanism is concealed by a thin cardboard covering, the model will cause much amusement by its mystifying behaviour.

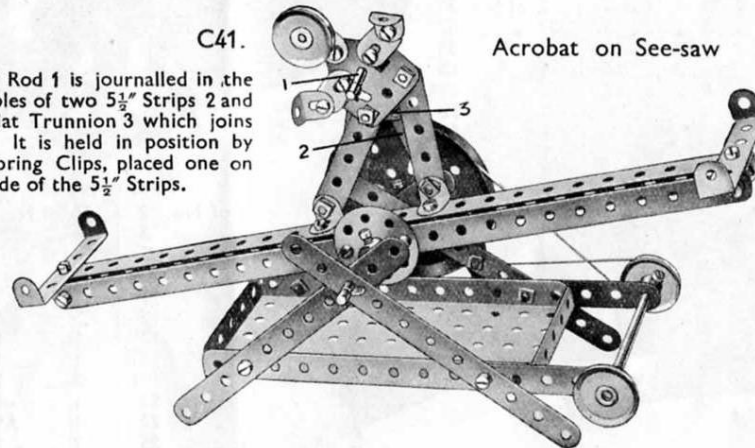


C43. Telephone

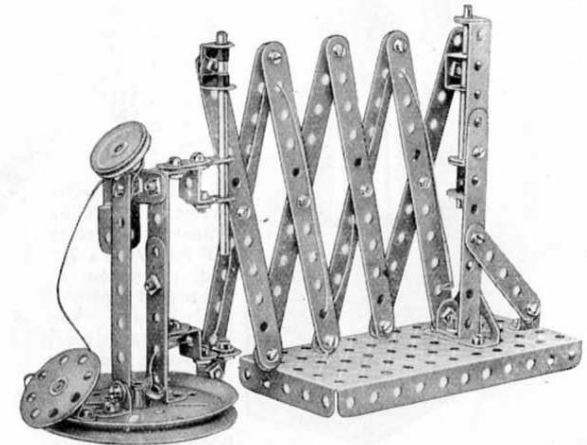
Parts required		1 of No. 40	
8 of No. 2	1 " " 22	1 " " 44	
1 " " 3	1 " " 24	5 " " 48a	
4 " " 5	4 " " 35	1 " " 52	
5 " " 10	37 " " 37	4 " " 111c	
2 " " 11	20 " " 37a	2 " " 125	
8 " " 12	4 " " 38	1 " " 126	
2 " " 16			

C41. Acrobat on See-saw

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

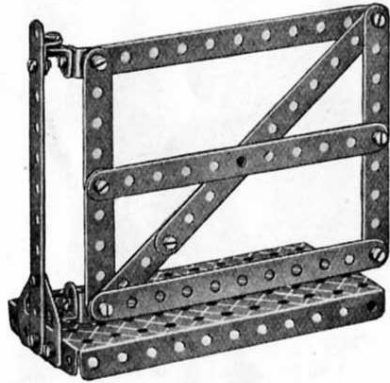


Parts required	
3 of No. 1	
6 " " 2	
4 " " 5	
3 " " 10	
2 " " 11	
4 " " 12	
2 " " 16	
1 " " 18a	
1 " " 19b	
3 " " 22	
1 " " 24	
5 " " 35	
25 " " 37	
4 " " 37a	
2 " " 38	
1 " " 40	
2 " " 48a	
1 " " 52	
1 " " 111c	
1 " " 126a	



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

C44. Gate



Parts required

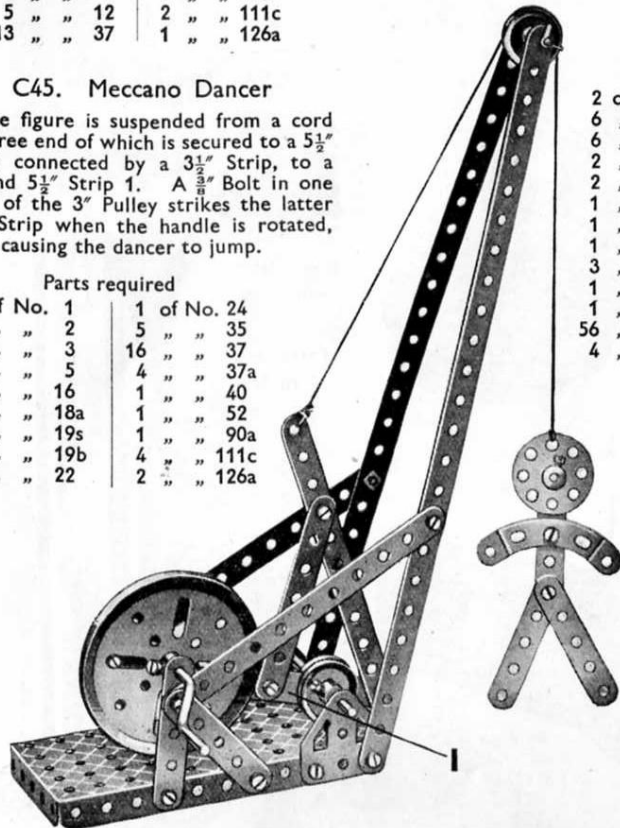
5 of No. 2	4 of No. 37a
5 " " 5	1 " " 52
5 " " 12	2 " " 111c
13 " " 37	1 " " 126a

C45. Meccano Dancer

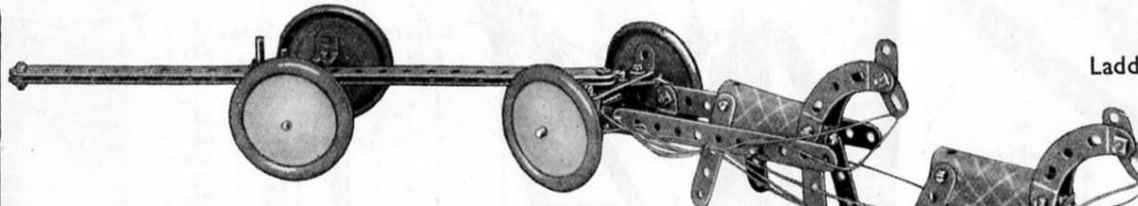
The figure is suspended from a cord the free end of which is secured to a $5\frac{1}{2}$ " Strip connected by a $3\frac{1}{2}$ " Strip, to a second $5\frac{1}{2}$ " Strip 1. A $\frac{3}{8}$ " Bolt in one hole of the 3" Pulley strikes the latter $5\frac{1}{2}$ " Strip when the handle is rotated, thus causing the dancer to jump.

Parts required

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

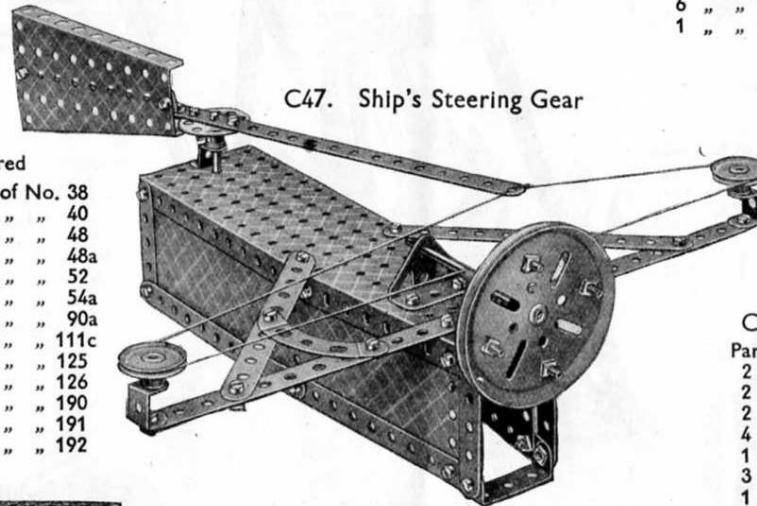


C46. Timber Drag



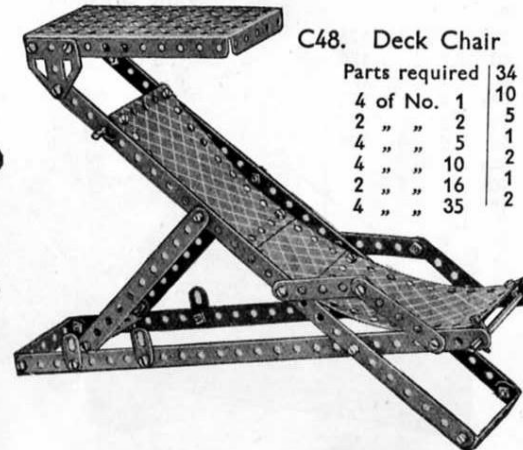
Parts required	8 of No. 12	3 of No. 37a	2 of No. 111c
2 of No. 1	2 " " 15b	8 " " 38	2 " " 126
2 " " 2	2 " " 17	1 " " 40	2 " " 126a
8 " " 5	2 " " 18a	1 " " 48	4 " " 187
4 " " 10	8 " " 35	3 " " 48a	2 " " 199
2 " " 11	27 " " 37	4 " " 90a	

C47. Ship's Steering Gear



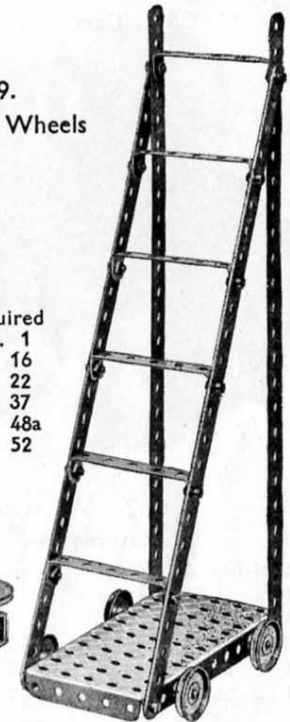
Parts required			
2 of No.	1	5 of No.	38
6	2	1	40
6	5	1	48
2	11	1	48a
2	12	1	52
1	16	2	54a
1	18a	2	90a
1	19b	6	111c
3	22	1	125
1	24	2	126
1	35	1	190
56	37	2	191
4	37a	2	192

C48. Deck Chair



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

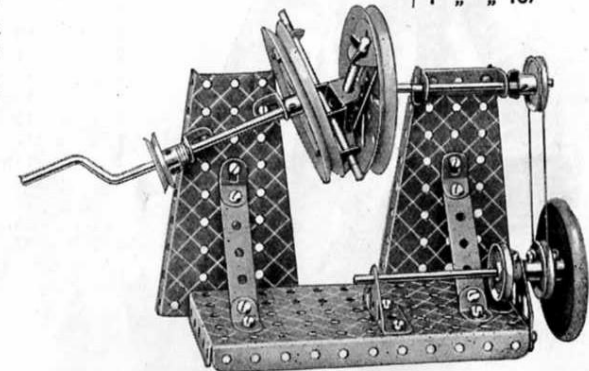
C49. Ladder on Wheels



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

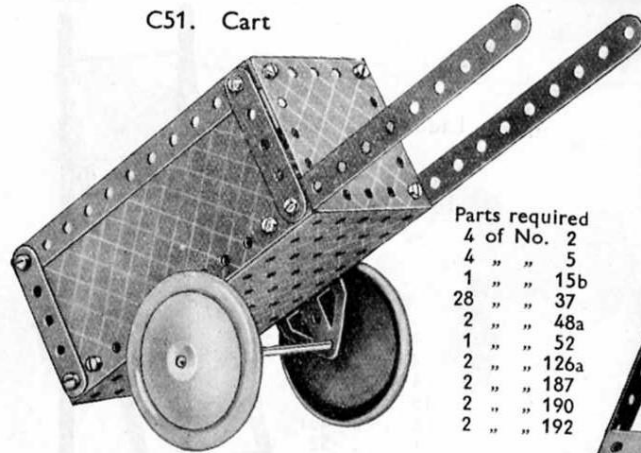
C50. Hooke's Coupling

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



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

C51. Cart



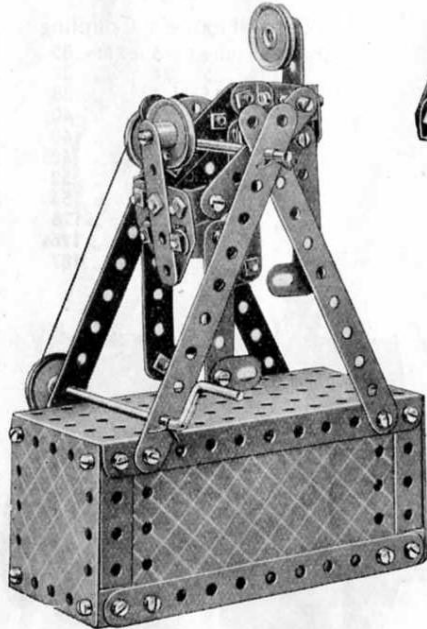
Parts required

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

C52. Wrestlers

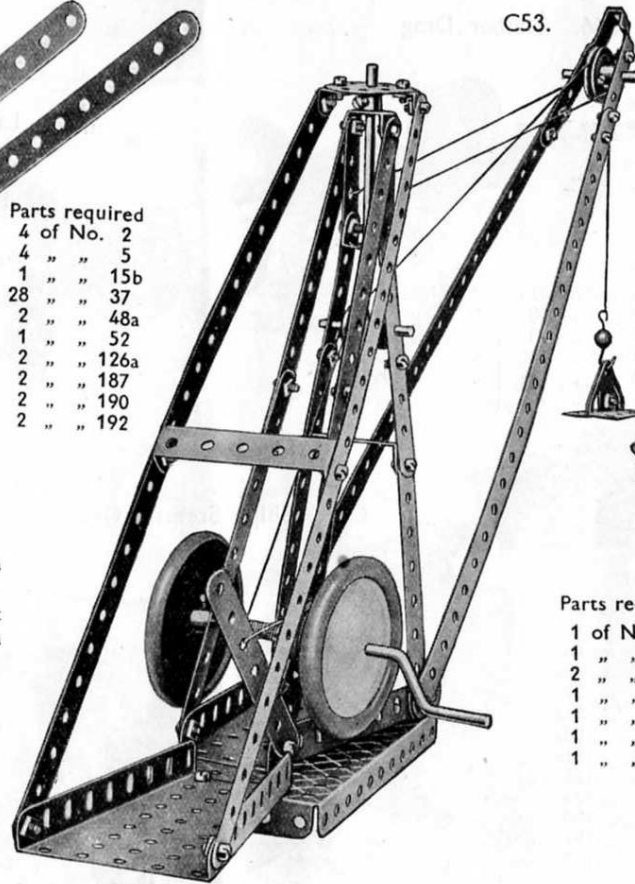
Parts required

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



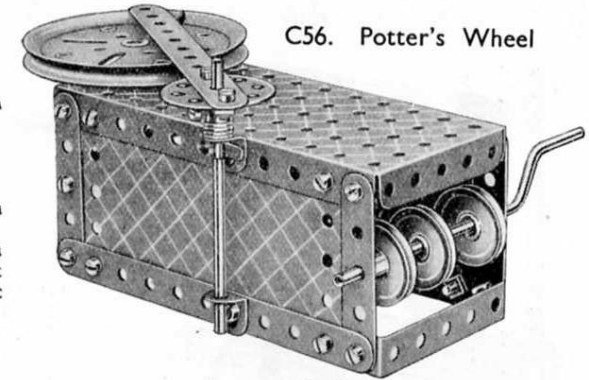
C53.

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 " " 18a	1 " " 54a
1 " " 19s	1 " " 57c
4 " " 22	2 " " 111c
1 " " 23	2 " " 126
1 " " 24	1 " " 176
3 " " 35	2 " " 187



C56. Potter's Wheel

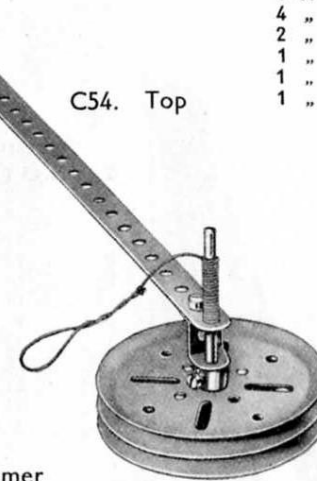
Parts required

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

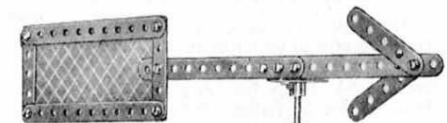
C54. Top

Parts required

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

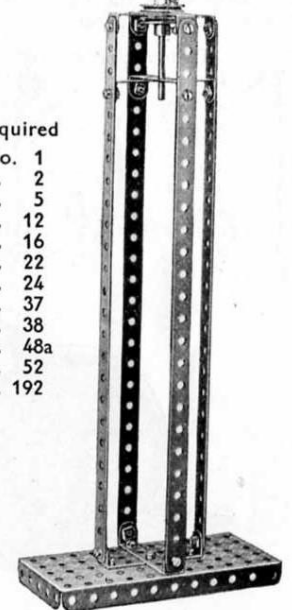


C57. Weather Vane



Parts required

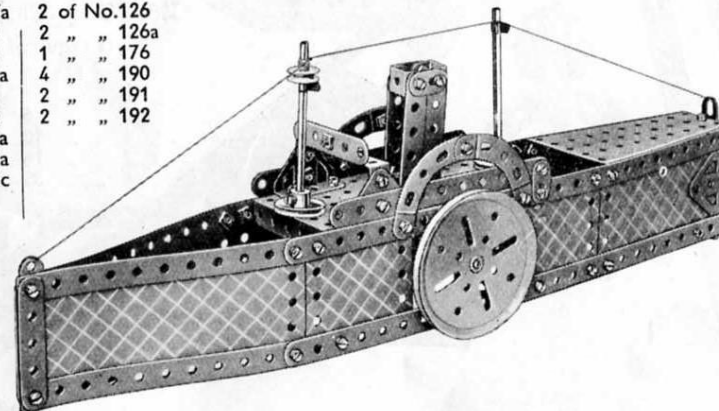
4 of No. 1
4 " " 2
4 " " 5
1 " " 12
1 " " 16
2 " " 22
1 " " 24
27 " " 37
2 " " 38
6 " " 48a
1 " " 52
1 " " 192



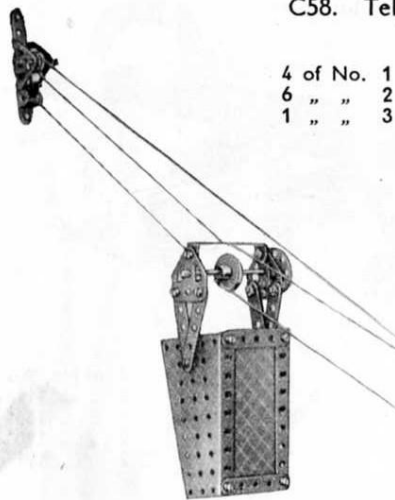
C55. Paddle Steamer

Parts required

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



C58. Telpher Span (Electric)



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

Parts required

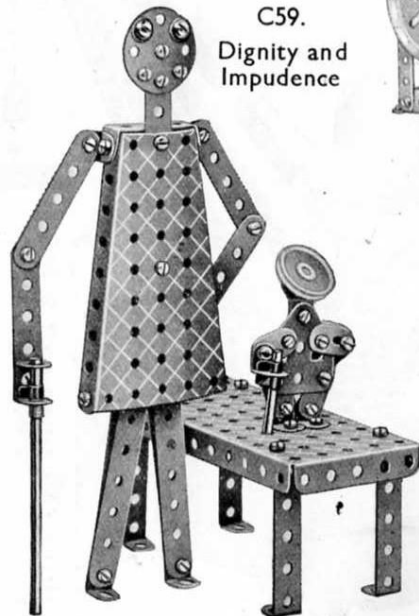
8 of No. 5	1 of No. 24
2 " " 11	8 " " 35
8 " " 12	61 " " 37
2 " " 12c	4 " " 37a
3 " " 16	7 " " 38
1 " " 17	1 " " 40
1 " " 18a	1 " " 48
2 " " 19b	3 " " 48a
4 " " 22	1 " " 52
1 " " 23	2 " " 54a
	2 " " 90a
	2 " " 111c
	2 " " 126
	2 " " 126a
	1 " " 176
	2 " " 191
	1 " " 198

E6. Electric Motor
(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.

C59.

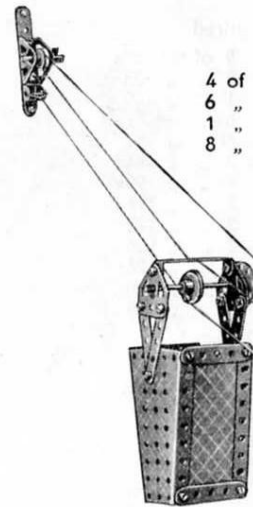
Dignity and Impudence



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

C60 Telpher Span (Hand)

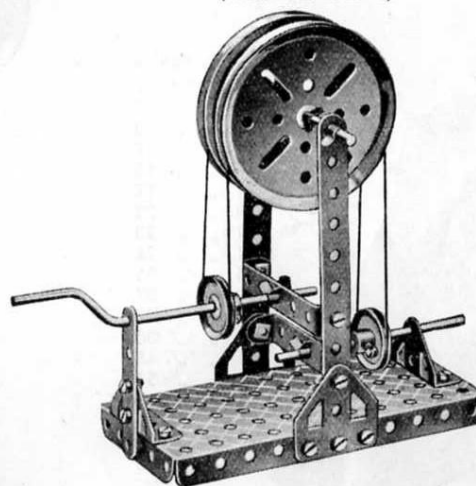


4 of No. 1
6 " " 2
1 " " 3
8 " " 5

Parts required

2 of No. 11	1 of No. 23
8 " " 12	1 " " 24
2 " " 12c	6 " " 35
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

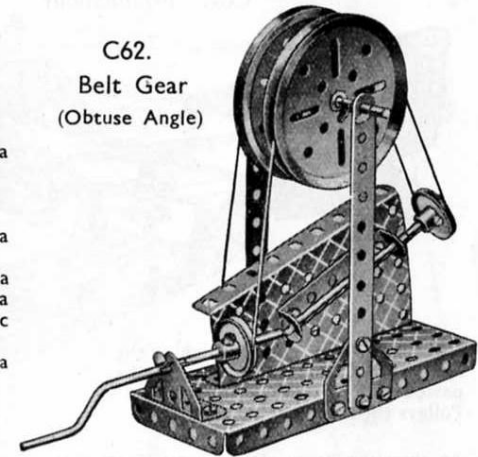
A 3" Pulley on the Crank Handle is connected by a cord to a similar Pulley on the winding shaft that is also fitted with a 1" Pulley carrying the operating cord.

C61. Belt Gear
(Shafts not in Line)

Parts required

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

C62.

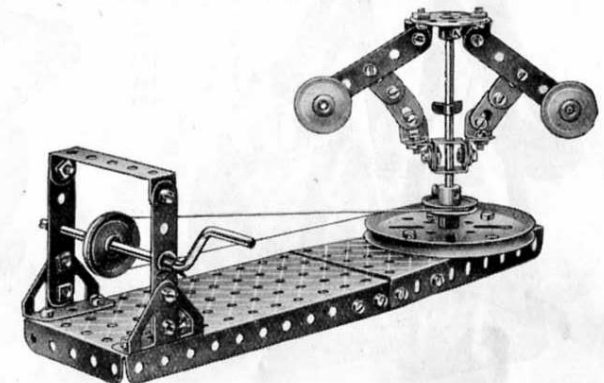
Belt Gear
(Obtuse Angle)

Parts required

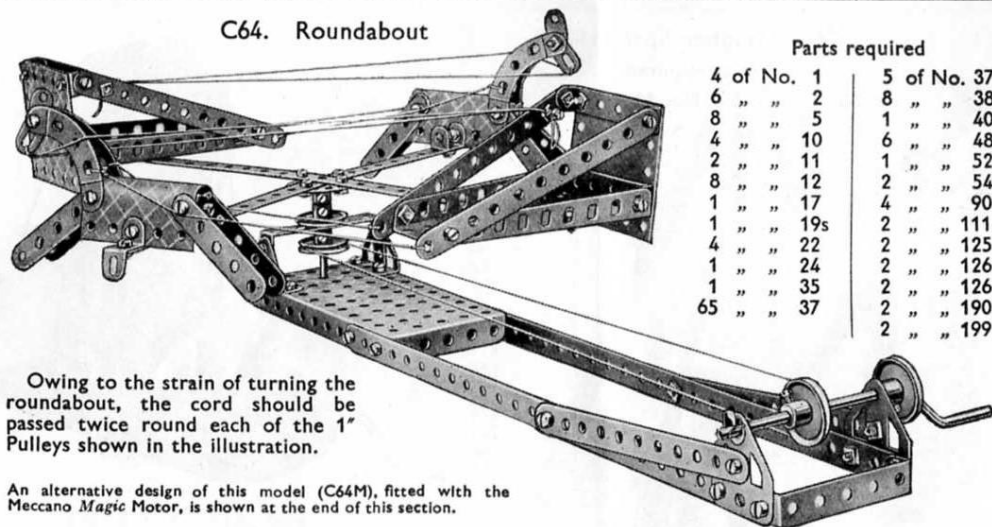
2 of No. 2	2 of No. 38
1 " " 12	1 " " 40
2 " " 16	1 " " 48a
1 " " 19s	1 " " 52
2 " " 19b	1 " " 54a
2 " " 22	1 " " 126
8 " " 35	2 " " 126a
15 " " 37	

C63. 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	



C64. Roundabout



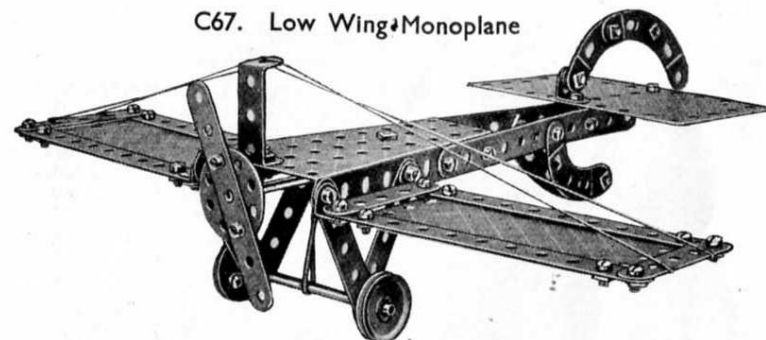
Parts required

4 of No. 1	5 of No. 37a
6 " " 2	8 " " 38
8 " " 5	1 " " 40
4 " " 10	6 " " 48a
2 " " 11	1 " " 52
8 " " 12	2 " " 54a
1 " " 17	4 " " 90a
1 " " 19s	2 " " 111c
4 " " 22	2 " " 125
1 " " 24	2 " " 126
1 " " 35	2 " " 126a
65 " " 37	2 " " 190
	2 " " 199

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

An alternative design of this model (C64M), fitted with the Meccano Magic Motor, is shown at the end of this section.

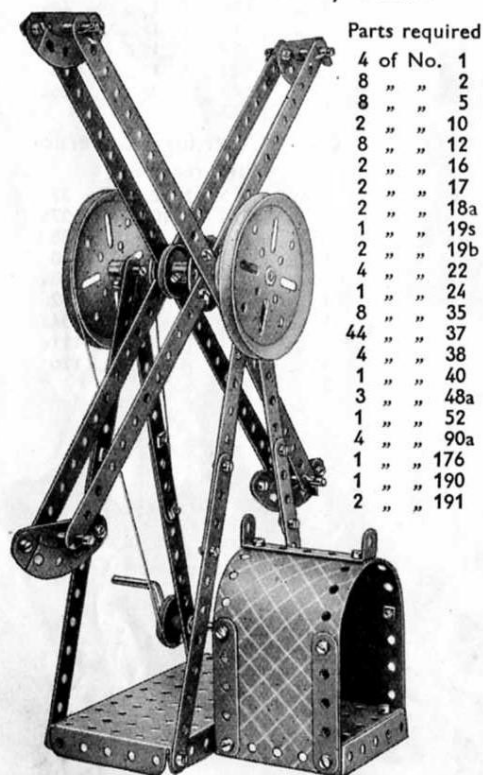
C67. Low Wing Monoplane



Parts required

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

C65. Fly Boats

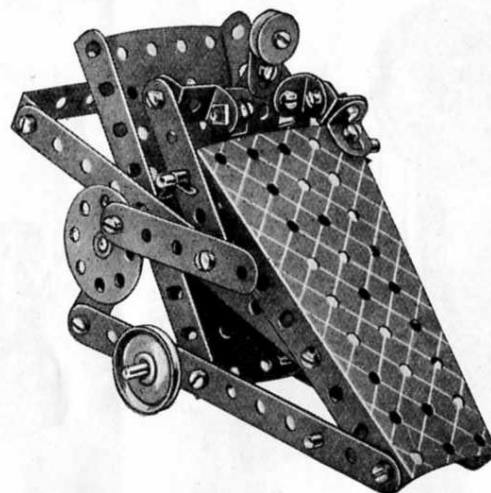


Parts required

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

C66. The Invalid

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



Parts required

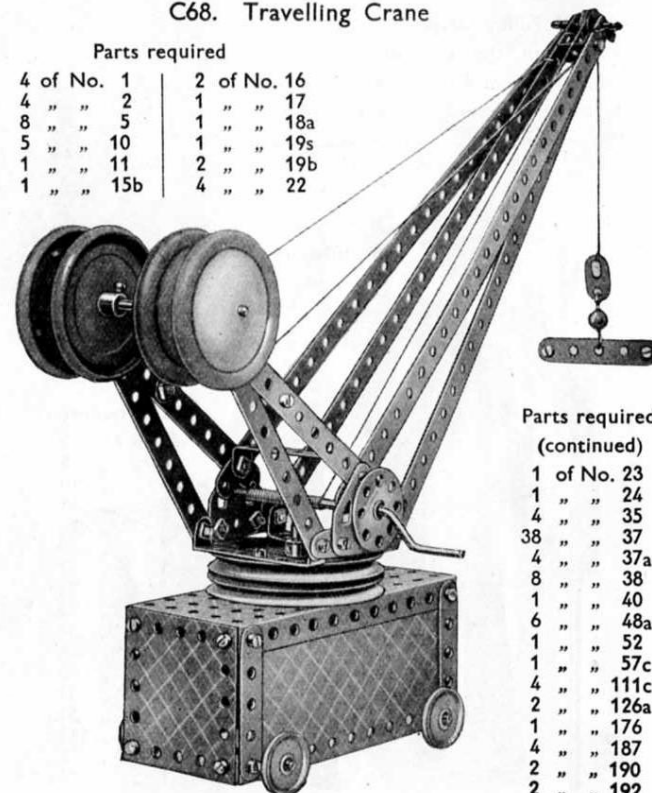
4 of No. 2
4 " " 5
1 " " 10
4 " " 12
3 " " 16
1 " " 17
4 " " 22
1 " " 23
1 " " 24
4 " " 35
22 " " 37
5 " " 37a
4 " " 38
1 " " 48a
2 " " 54a
1 " " 111c
1 " " 125
1 " " 126a
1 " " 186

An alternative design of this model (C65M), fitted with the Meccano Magic Motor, is shown at the end of this section.

C68. Travelling Crane

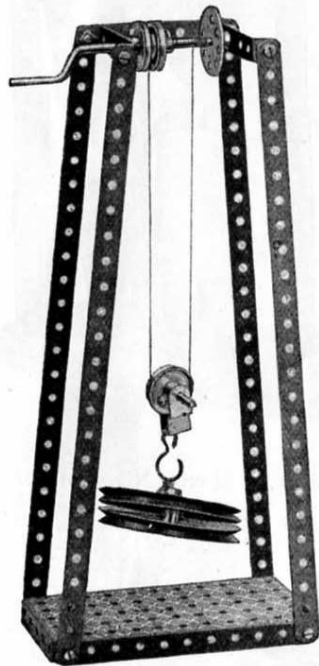
Parts required

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

Parts required
(continued)

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

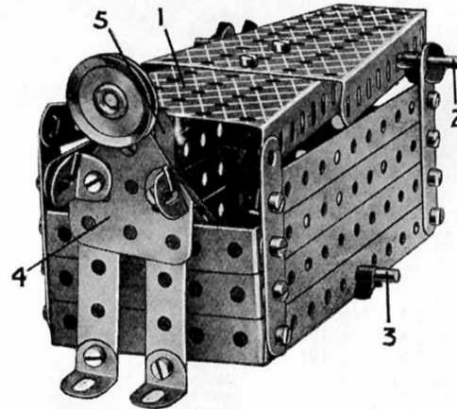
C69. Chinese Windlass



Parts required

4 of No. 1
1 " " 3
1 " " 18a
1 " " 19s
2 " " 19b
3 " " 22
1 " " 23
1 " " 24
8 " " 37
1 " " 40
1 " " 44
2 " " 48a
1 " " 52
1 " " 57c
1 " " 176

C71. Disappearing Meccanitian



Parts required

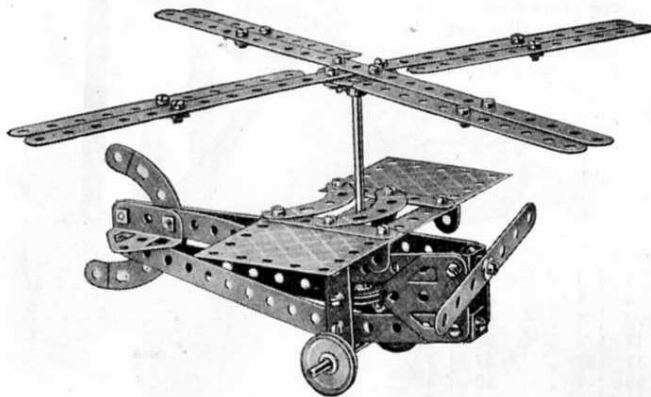
6 of No. 2
6 " " 5
1 " " 10
4 " " 12
2 " " 16
1 " " 22
6 " " 35
23 " " 37
1 " " 44
6 " " 48a
1 " " 52
2 " " 54a
1 " " 111c
1 " " 126a
Four short lengths of elastic

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

C70. Autogiro

Parts required

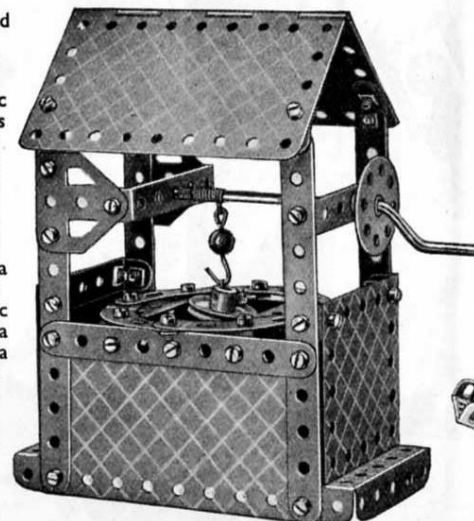
2 of No. 1	2 of No. 11	33 of No. 37	4 of No. 90a
8 " " 2	2 " " 12	3 " " 37a	2 " " 111c
1 " " 3	2 " " 16	7 " " 38	2 " " 126
9 " " 5	4 " " 22	1 " " 48	2 " " 126a
5 " " 10	1 " " 24	1 " " 48a	2 " " 190



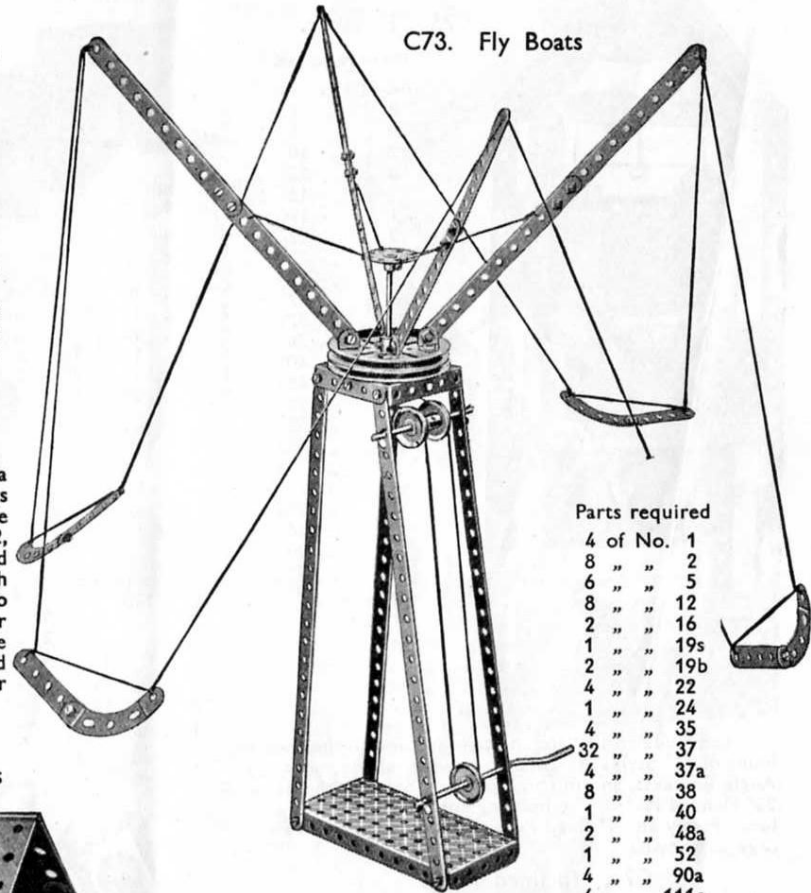
C72. Well Windlass

Parts required

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



C73. Fly Boats



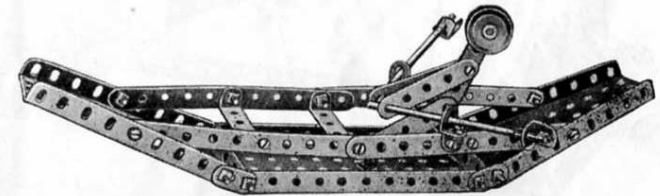
Parts required

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

C74. Rowing Boat

Parts required

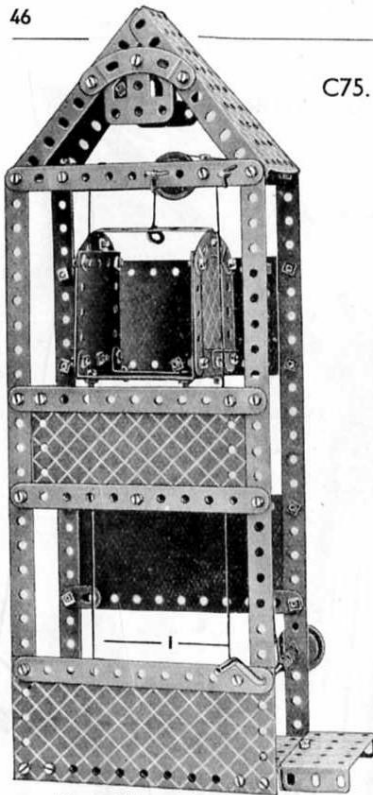
4 of No. 2	2 of No. 16	3 of No. 48a
4 " " 5	1 " " 22	1 " " 52
4 " " 10	6 " " 35	2 " " 54a
7 " " 12	25 " " 37	1 " " 111c



C75. Elevator

Parts required

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

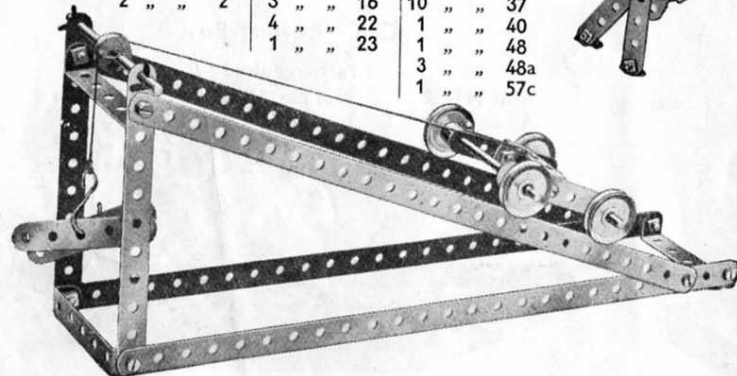


The guide cords 1 for the cage are tied to the centre holes of $2\frac{1}{2}$ " Strips attached to the top of the model by Angle Brackets, and in corresponding holes in the $5\frac{1}{2}$ " x $2\frac{1}{2}$ " Flanged Plate. The hoisting cord is passed over a loose Pulley and 1" fixed Pulley before being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

C76. Inclined Plane

Parts required

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



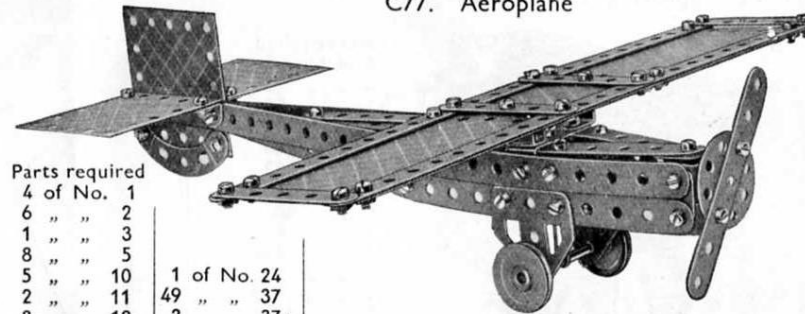
C77. Aeroplane

Parts required

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

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

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



C78. Revolving Gymnasts

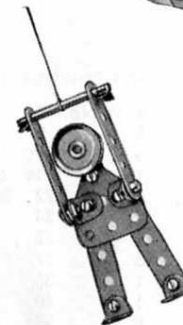
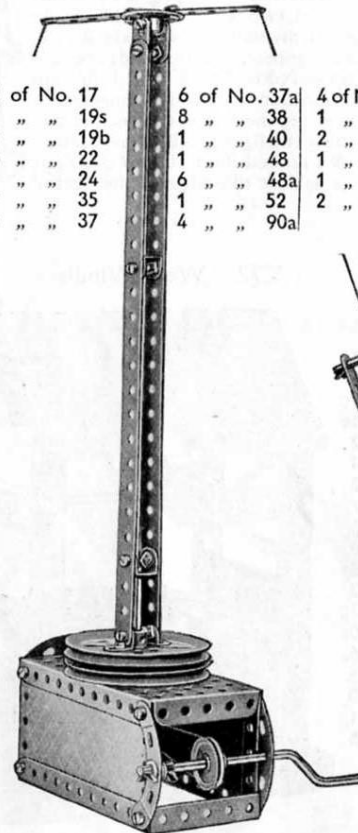
Parts required

2 of No. 1
3 " " 2
8 " " 5
4 " " 10
2 " " 11
8 " " 12
1 " " 16

2 of No. 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

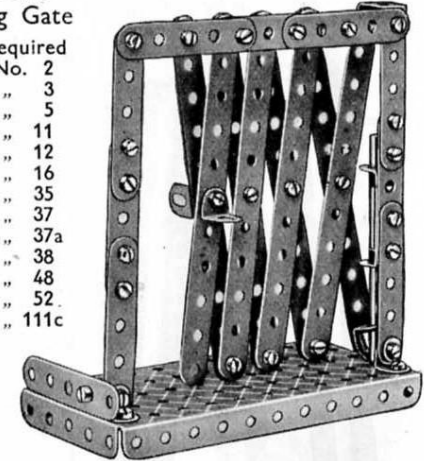
4 of No. 111c
1 " " 125
2 " " 126a
1 " " 186
1 " " 190
2 " " 192



C79. Sliding Gate

Parts required

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



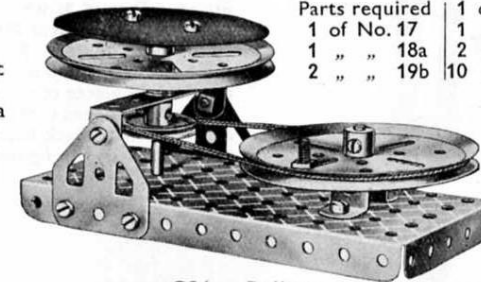
An alternative design of this model (C77M), fitted with the Meccano Magic Motor, is illustrated at the end of this section.

C80. Rotary Linisher

Parts required

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

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



Disc of Emery Cloth (not included in Outfit)

C81. Ballista

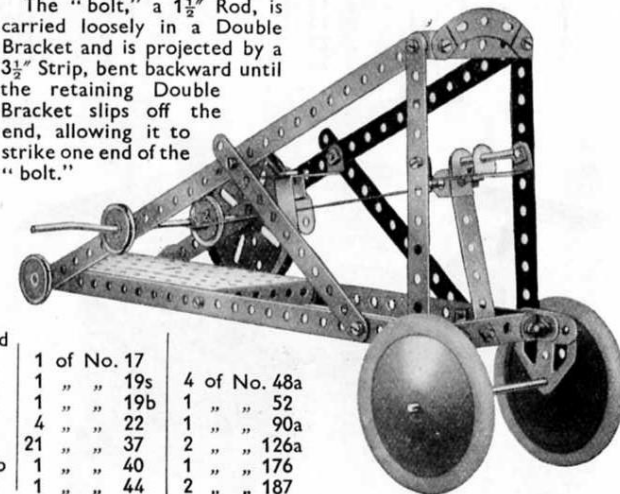
The "bolt," a $1\frac{1}{2}$ " Rod, is carried loosely in a Double Bracket and is projected by a $3\frac{1}{2}$ " Strip, bent backward until the retaining Double Bracket slips off the end, allowing it to strike one end of the "bolt."

Parts required

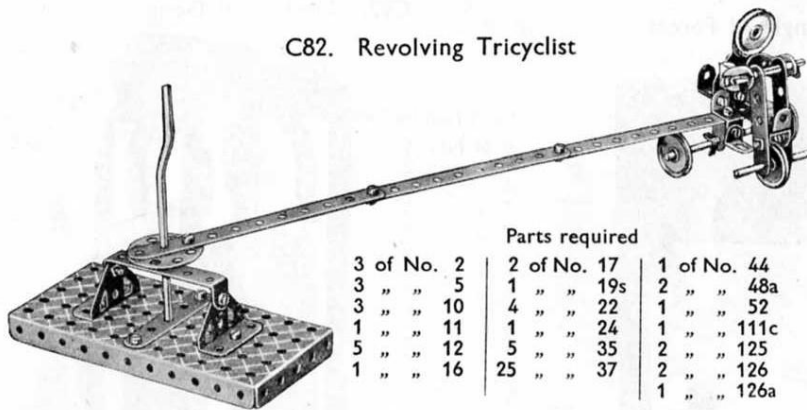
4 of No. 1
4 " " 2
1 " " 3
2 " " 11
2 " " 12
1 " " 15b
1 " " 16

1 of No. 17
1 " " 19s
1 " " 19b
4 " " 22
21 " " 37
1 " " 40
1 " " 44

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

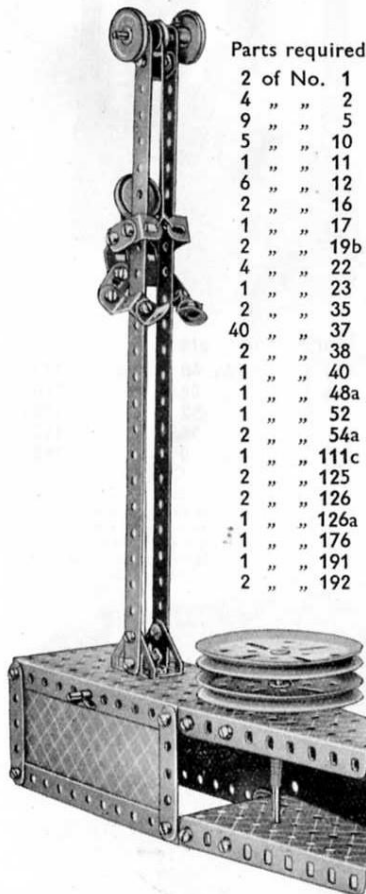


C82. Revolving Tricyclist



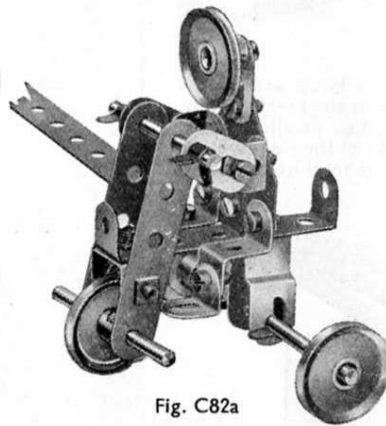
Parts required		
3 of No. 2	2 of No. 17	1 of No. 44
3 " " 5	1 " " 19s	2 " " 48a
3 " " 10	4 " " 22	1 " " 52
1 " " 11	1 " " 24	1 " " 111c
5 " " 12	5 " " 35	2 " " 125
1 " " 16	25 " " 37	2 " " 126
		1 " " 126a

C83. Man Climbing Pole



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

Fig. C82a

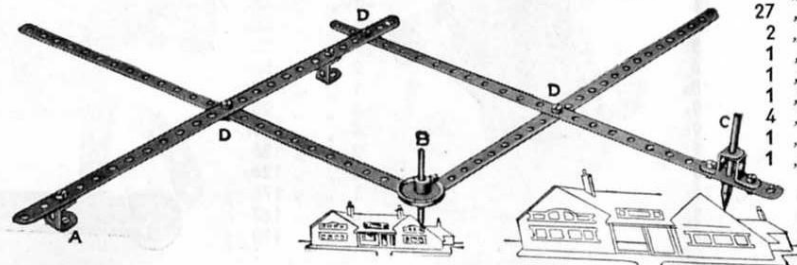


C85. Pantograph

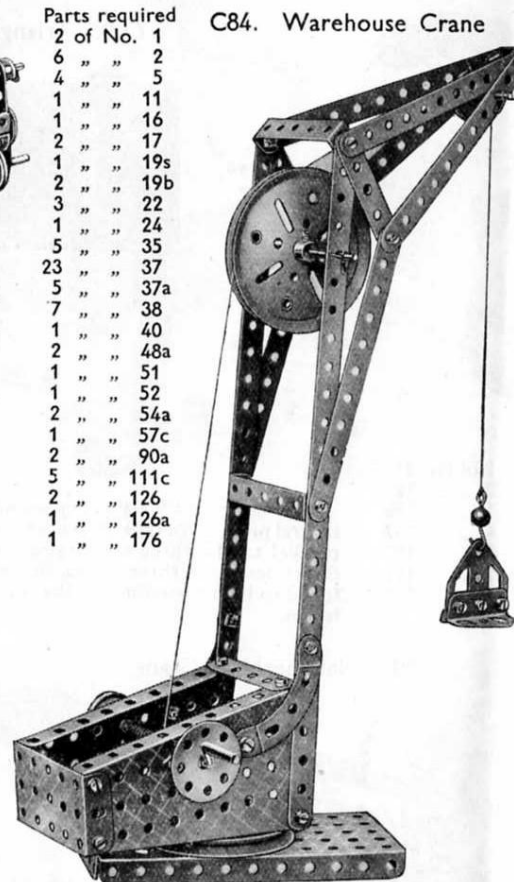
The apparatus is fixed at the point A. If an enlarged sketch is to be made the point B is traced round the outlines, the writing point C reproducing the sketch on a large scale. When a reduced drawing is to be made, the point C traces the outline, whilst the point B reproduces the sketch on a smaller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

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

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



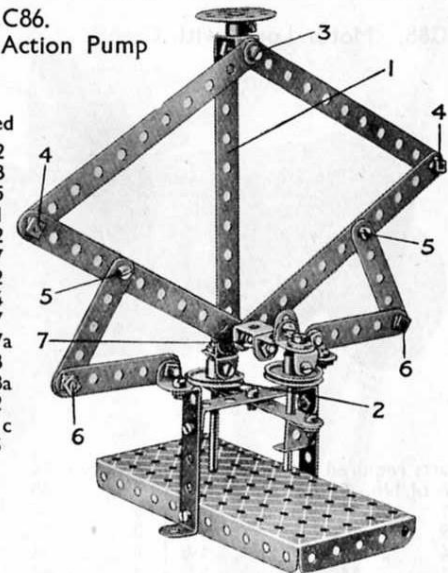
C84. Warehouse Crane



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

C86. Double Action Pump

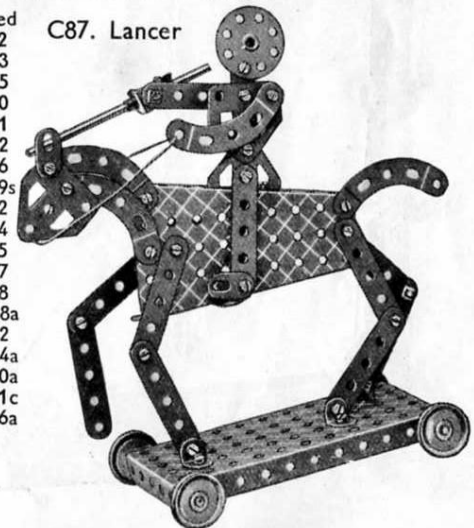
Parts required	
5 of No. 2	
1 " " 3	
4 " " 5	
2 " " 11	
6 " " 12	
2 " " 17	
2 " " 22	
1 " " 24	
24 " " 37	
9 " " 37a	
7 " " 38	
3 " " 48a	
1 " " 52	
3 " " 111c	
2 " " 125	



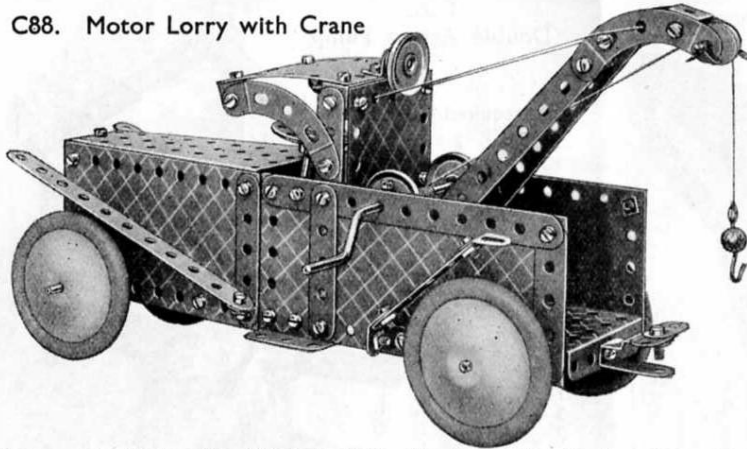
The 5½" Strip 1 is attached to the 1" Pulley Wheel 2 by means of two Angle Brackets, through the lower one of which passes the Set-Screw that secures the Pulley to its 2" Rod. Two Washers are placed beneath the head of the bolt joining the Angle Brackets in order to prevent its shank from binding on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

Parts required	
1 of No. 2	
1 " " 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	

C87. Lancer



C88. Motor Lorry with Crane



Parts required

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

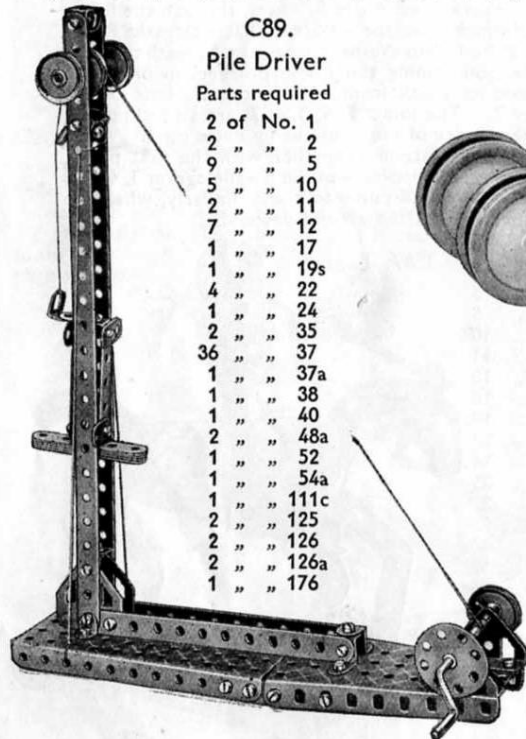
Parts required	4 of No. 12c	1 of No. 24	5 of No. 48a	2 of No. 126
8 of No. 2	2 " " 15b	5 " " 35	1 " " 51	2 " " 126a
1 " " 3	1 " " 16	66 " " 37	1 " " 52	1 " " 176
9 " " 5	1 " " 18a	3 " " 37a	2 " " 54a	4 " " 187
4 " " 10	1 " " 19s	4 " " 38	1 " " 57c	3 " " 190
1 " " 11	4 " " 22	1 " " 40	4 " " 90a	2 " " 191
7 " " 12	1 " " 23	1 " " 44	4 " " 111c	2 " " 192

C89.

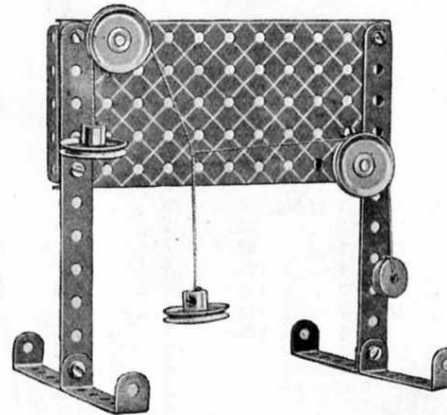
Pile Driver

Parts required

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

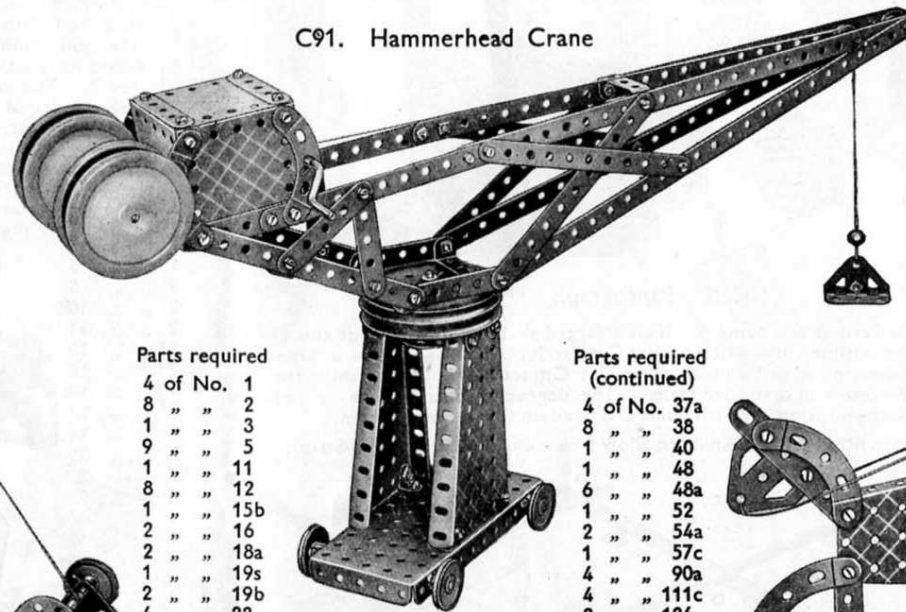


C90. Triangle of Forces



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

C91. Hammerhead Crane



Parts required

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

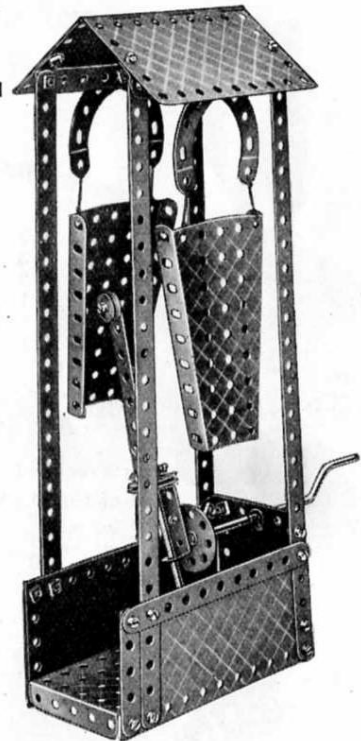
Parts required
(continued)

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

C92. Mechanical Gong

Parts required

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



C93. Horse and Cart

Parts required

6	of No. 2
9	" " 5
3	" " 10
2	" " 11
3	" " 12
2	" " 12c
1	" " 15b
1	" " 16

2 of No. 18a

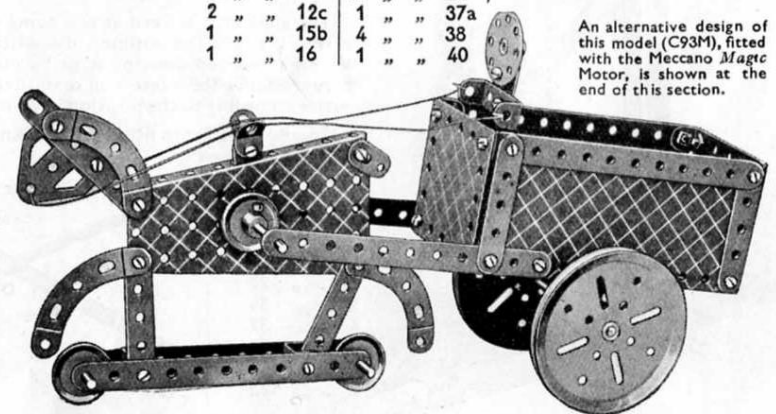
2	" " 19b
4	" " 22
1	" " 24
2	" " 35
40	" " 37
1	" " 37a
4	" " 38
1	" " 40

1 of No. 48

2	" " 48a
1	" " 52
1	" " 54a
3	" " 90

1 of No. 111c

2	" " 126
2	" " 126a
2	" " 190
2	" " 192

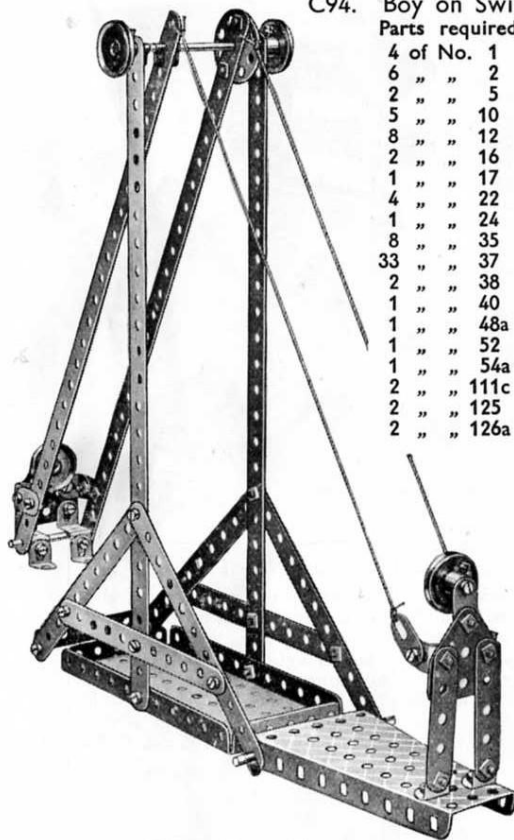


An alternative design of this model (C93M), fitted with the Meccano Magic Motor, is shown at the end of this section.

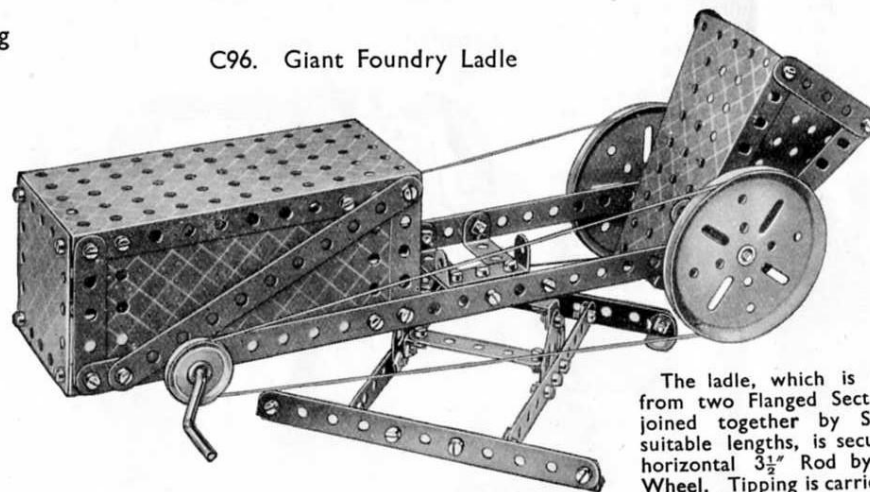
C94. Boy on Swing

Parts required

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



C96. Giant Foundry Ladle

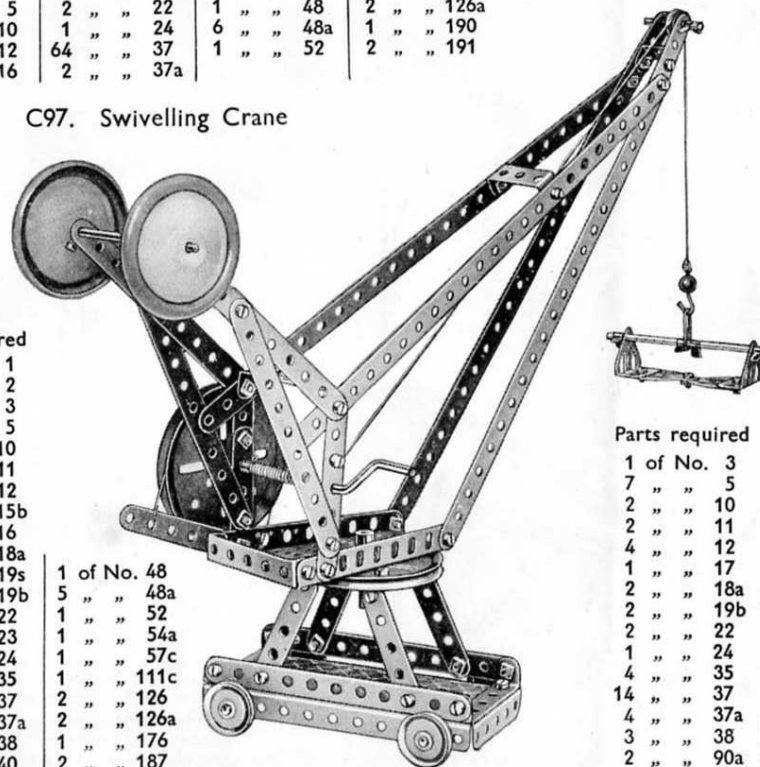


The ladle, which is built up from two Flanged Sector Plates joined together by Strips of suitable lengths, is secured to a horizontal $3\frac{1}{2}$ " Rod by a Bush Wheel. Tipping is carried out by two cords as shown.

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				

C97. Swivelling Crane



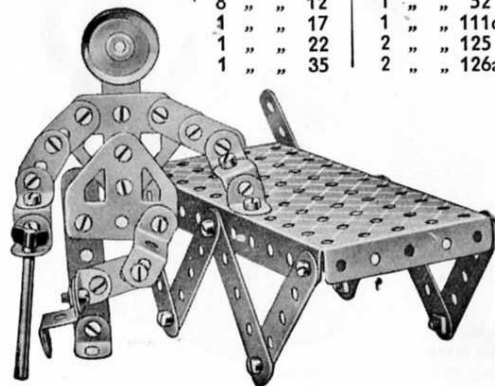
Parts required

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

C95. 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

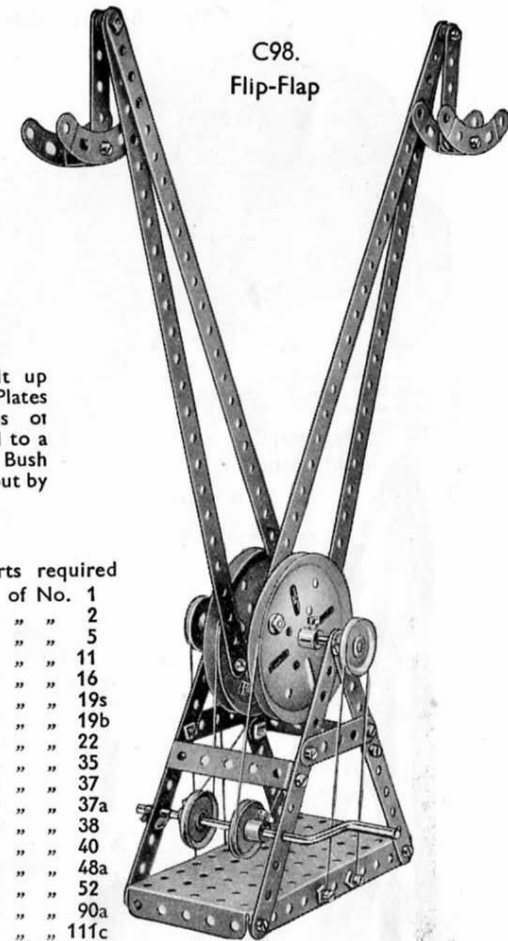
1	of No. 48
5	" " 48a
1	" " 52
1	" " 54a
1	" " 57c
1	" " 111c
2	" " 126
2	" " 126a
1	" " 176
2	" " 187

Parts required

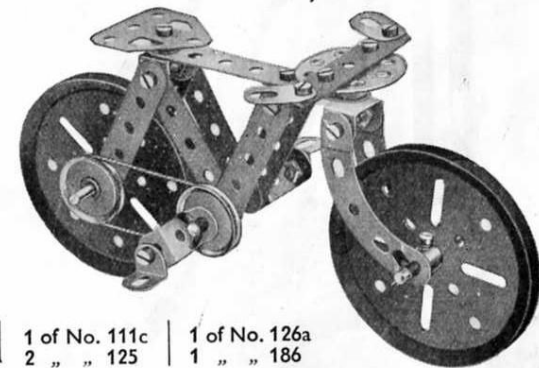
1	of No. 3
7	" " 5
2	" " 10
2	" " 11
4	" " 12
1	" " 17
2	" " 18a
2	" " 19b
2	" " 22
1	" " 24
4	" " 35
14	" " 37
4	" " 37a
3	" " 38
2	" " 90a

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

C98. Flip-Flap

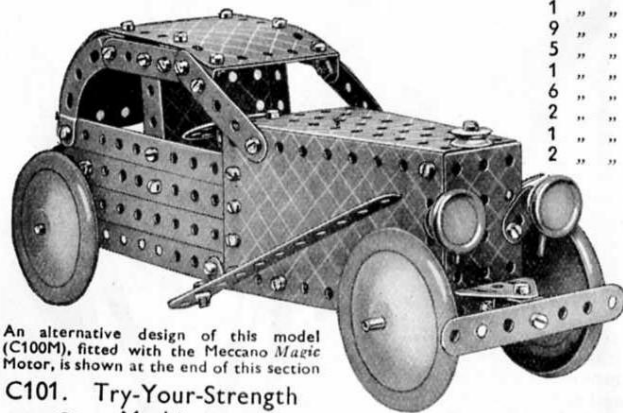


C99. Bicycle



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

C100. Sports Coupé

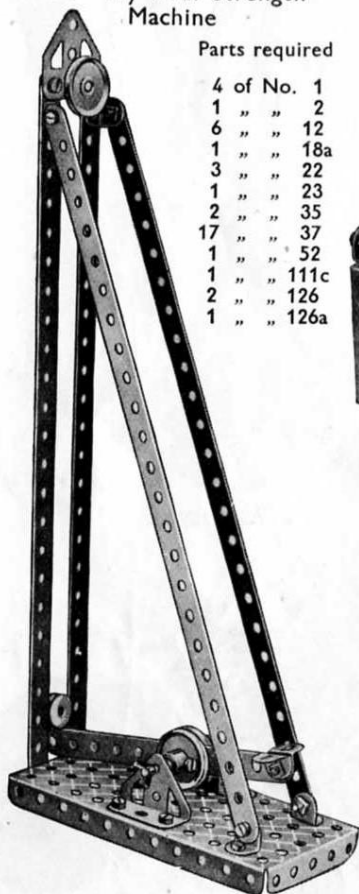


An alternative design of this model (C100M), fitted with the Meccano Magic Motor, is shown at the end of this section

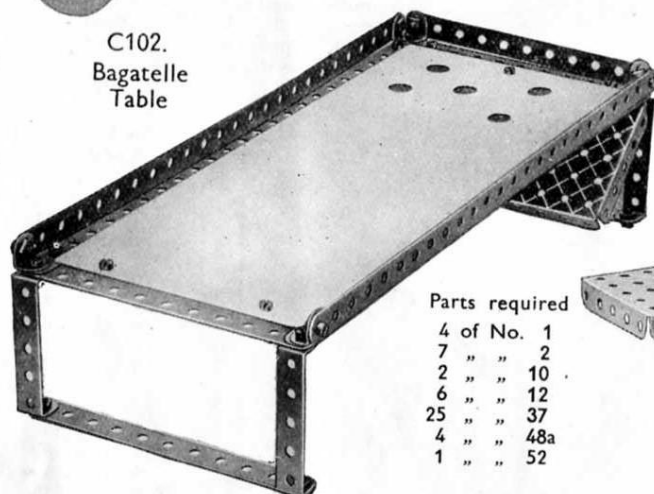
C101. Try-Your-Strength Machine

Parts required

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



C102. Bagatelle Table

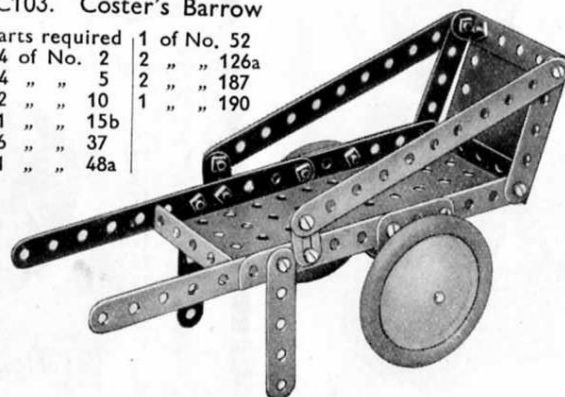


Parts required

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

C103. Coster's Barrow

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

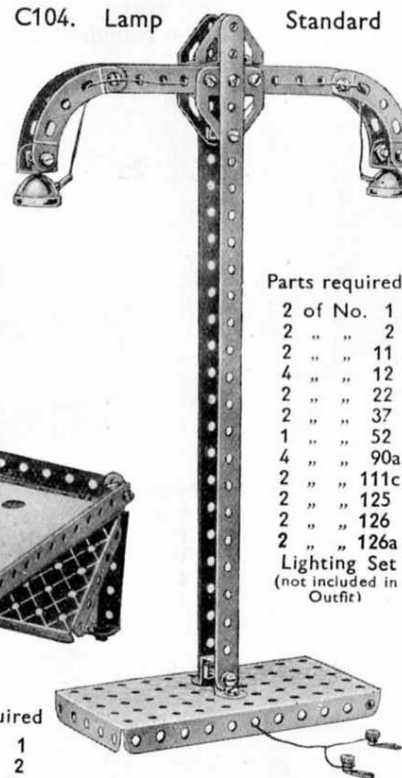


Parts required	1 of No. 23
8 of No. 2	1 " " 24
1 " " 3	66 " " 37
9 " " 5	4 " " 37a
5 " " 10	6 " " 48a
1 " " 11	1 " " 51
6 " " 12	1 " " 52
2 " " 15b	2 " " 54a
1 " " 17	2 " " 90a
2 " " 22	6 " " 111c
	1 " " 125
	1 " " 126
	2 " " 126a
	4 " " 187
	1 " " 190
	2 " " 191
	1 " " 192
	1 " " 200

Lighting Set
(not included in Outfit)

C104. Lamp

Standard



Parts required

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

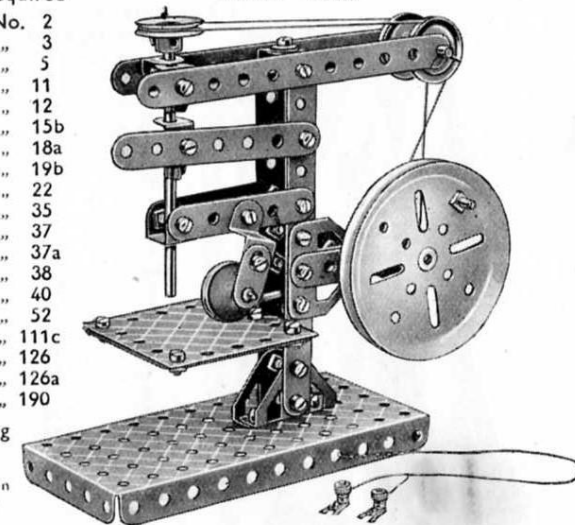
Lighting Set
(not included in Outfit)

Parts required

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

Lighting Set
(not included in Outfit)

C105. Drill



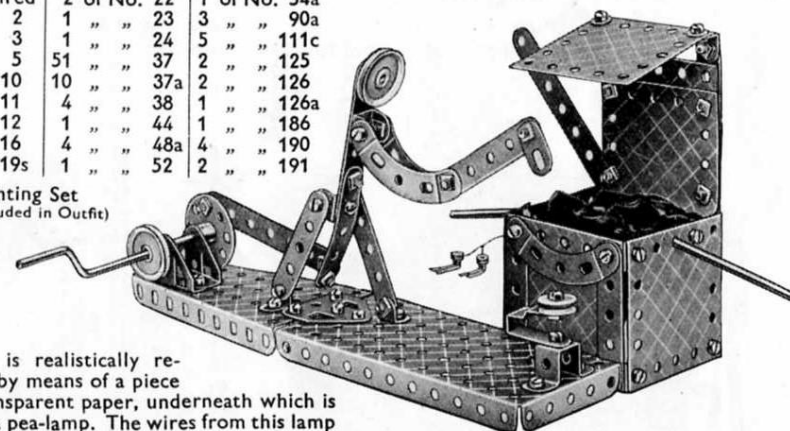
MECCANO LIGHTING SET

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

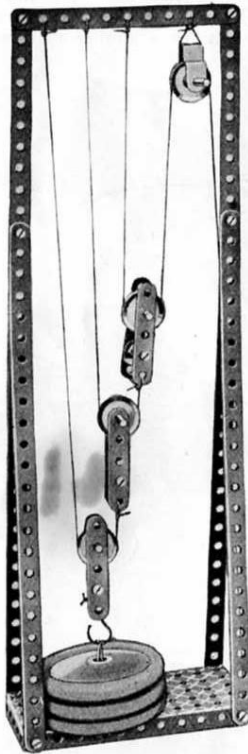
C106. Blacksmith

Parts required	2 of No. 22	1 of No. 54a
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 " " 44	1 " " 186
2 " " 16	4 " " 48a	4 " " 190
1 " " 19s	1 " " 52	2 " " 191

Lighting Set
(not included in Outfit)



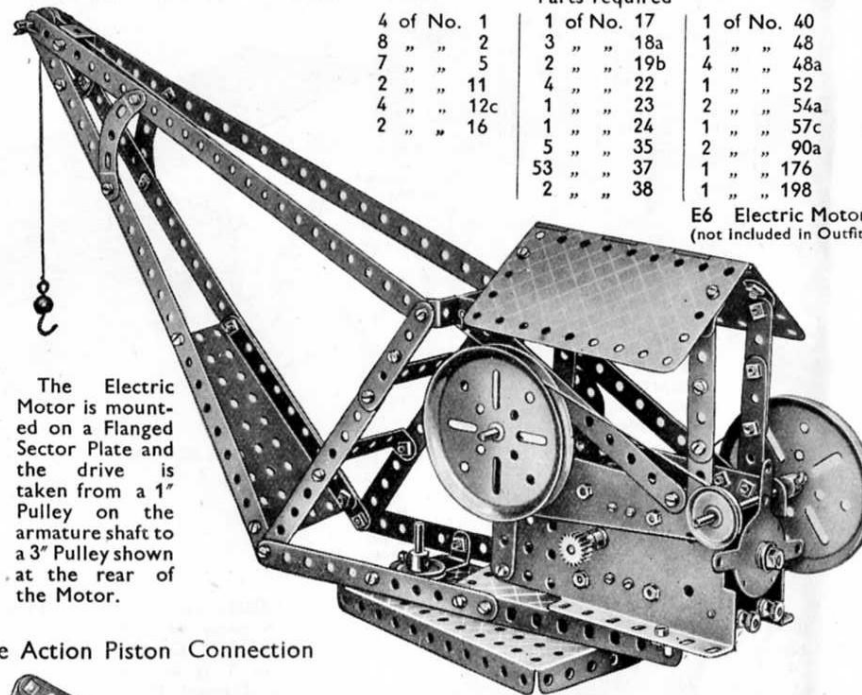
The fire is realistically represented by means of a piece of red transparent paper, underneath which is concealed a pea-lamp. The wires from this lamp are shown at the back of the model.



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 " "	44
1 " "	52
1 " "	57c
3 " "	187



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

C109. Swivelling Jib Crane (Electric)

Parts required

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

E6 Electric Motor
(not included in Outfit)

C110.
Overhead
Crane

Parts required

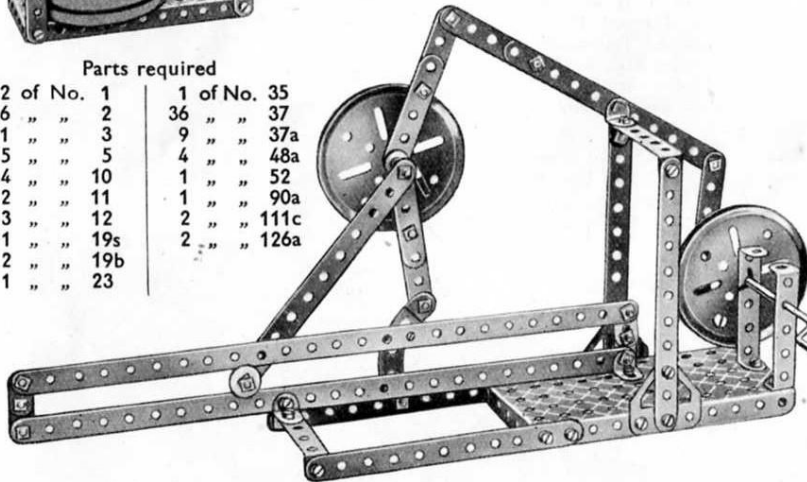
4 of No.	1
4 " "	2
8 " "	5
2 " "	10
8 " "	12
2 " "	16
1 " "	18a
1 " "	19s
4 " "	22
1 " "	23
4 " "	35
48 " "	37
2 " "	37a
1 " "	40
6 " "	48a
1 " "	57c
4 " "	90a
1 " "	111c
2 " "	126a
1 " "	176
2 " "	191



C108. Double Action Piston Connection

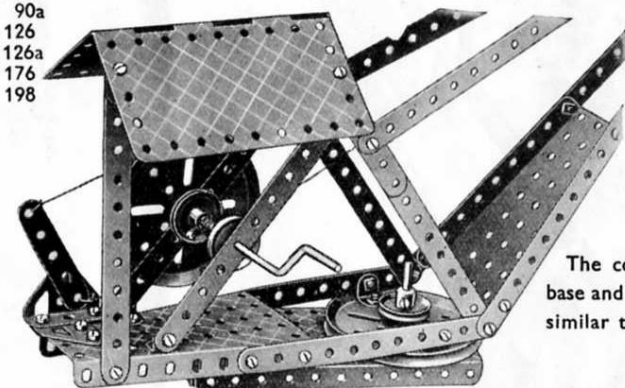
Parts required

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



Parts required

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



C111. Swivelling Jib Crane
(Hand)

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

HOW TO CONTINUE

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

Outfit C Models fitted with Meccano Magic Motor

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

C11M. Sports Car

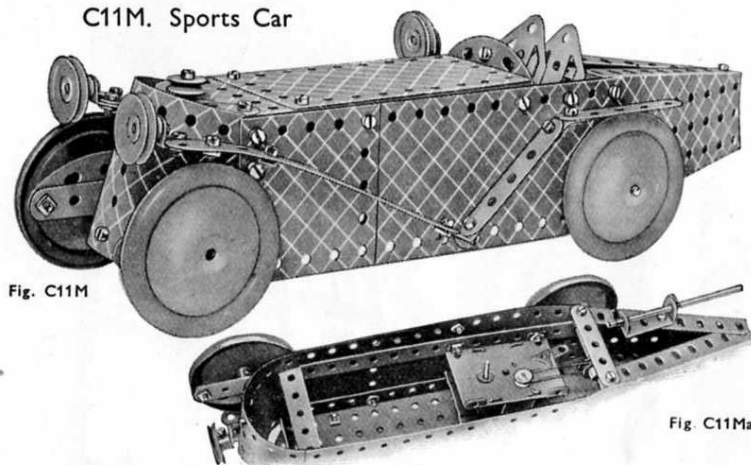


Fig. C11M

Fig. C11Ma

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

The underneath view of the model shown in Fig. C11Ma shows how the chassis is formed from two 12½" Strips that project beyond the front of the model. The *Magic Motor* is bolted to one Strip and drives the special ½" loose Pulley on the axle of the rear Road Wheels.

Parts required		
4 of No. 1		
6 " " 2		
1 " " 3		
6 " " 5		
2 " " 10		
2 " " 11		
6 " " 12		
1 " " 16		
1 " " 18a		
2 " " 22		
1 " " 23		
1 " " 24		
3 " " 35		
40 " " 37		
6 " " 37a		
2 " " 38		
1 " " 48		
1 " " 90a		
5 " " 111c		
2 " " 125		
4 " " 126a		
4 " " 190		
2 " " 192		
<i>Magic Motor</i>		

C77M. Aeroplane

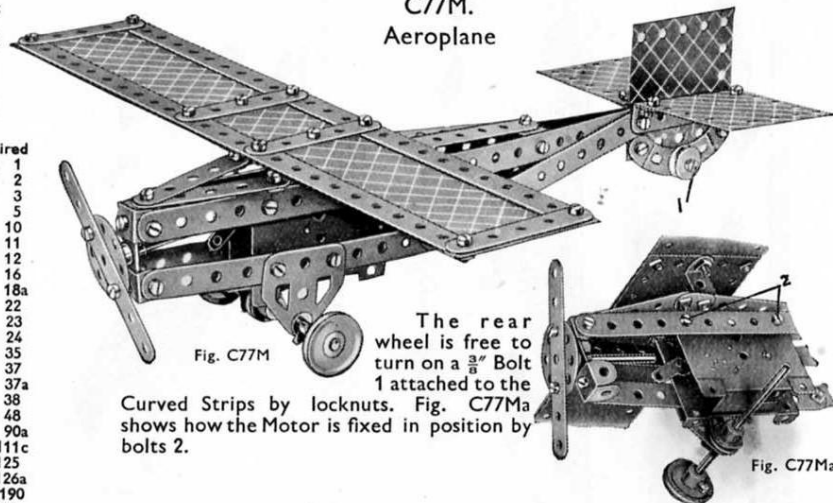


Fig. C77M

Fig. C77Ma

The rear wheel is free to turn on a ⅜" Bolt 1 attached to the *Magic Motor*. Fig. C77Ma shows how the Motor is fixed in position by bolts 2.

C27M. Mobile Crane

The jib pivots on two bolts 1, which are each fitted with locknuts. A Crank Handle controls the raising and lowering of the jib and the method of winding the cord round the handle can be seen in Fig. C27Ma. A brake is fitted to the Crank Handle and consists of a pivoted 2½" Curved Strip to which is tied a loop of cord that passes round the 3" Pulley.

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

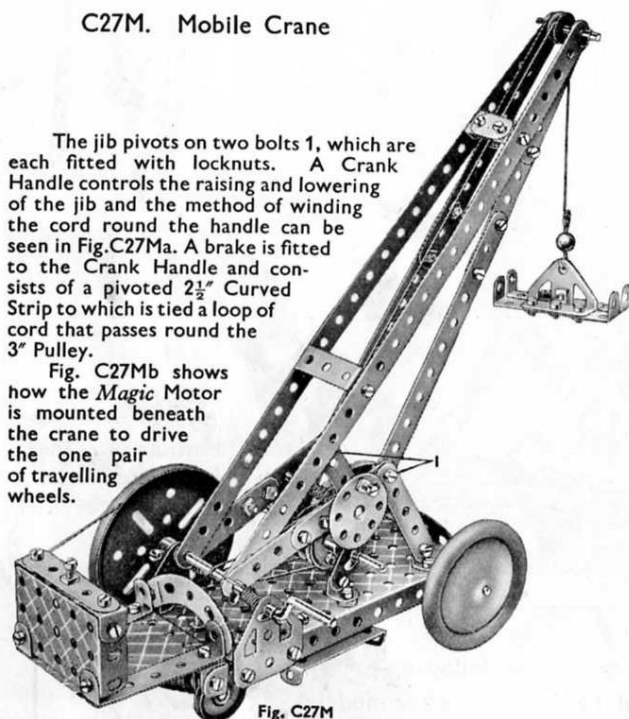


Fig. C27M

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

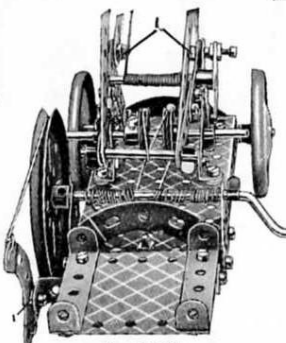


Fig. C27Ma

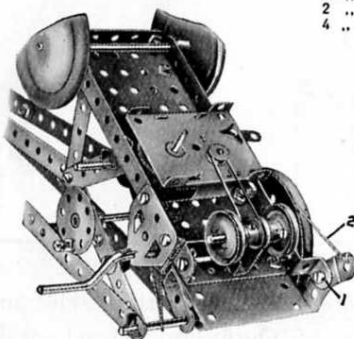


Fig. C27Mb

Fig. C93Ma shows an underneath view of the cart. A 2½" x ½" Double Angle Strip 1 is bolted across the Flanged Plate and carries the Trunnions for the Axle Rod. The *Magic Motor* is bolted beneath the Flanged Plate.

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

C93M. Horse and Cart

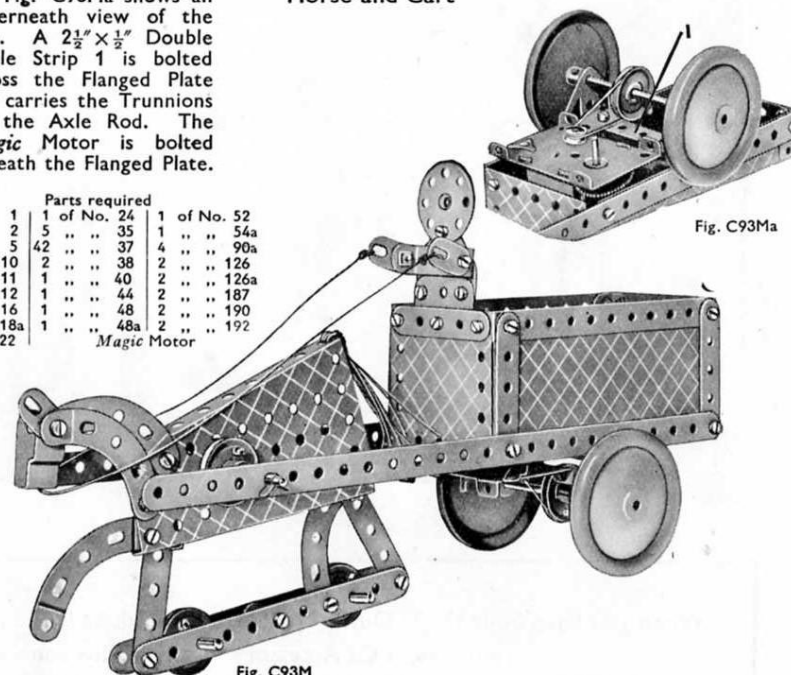


Fig. C93Ma

Fig. C93M

C65M. Flyboats

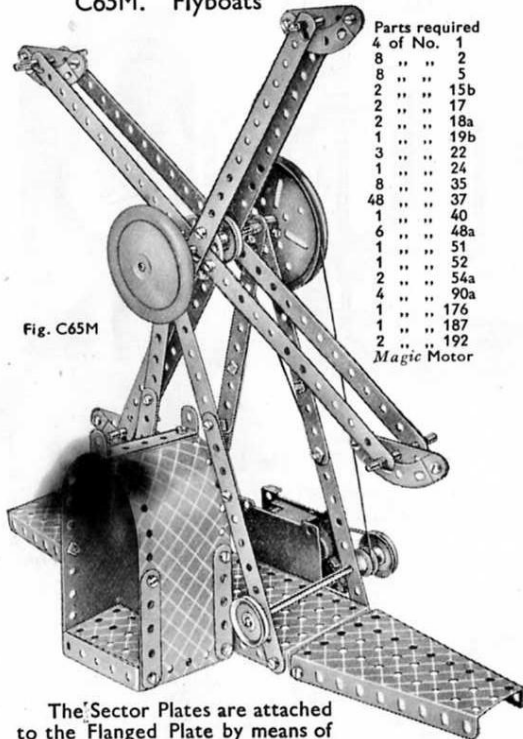


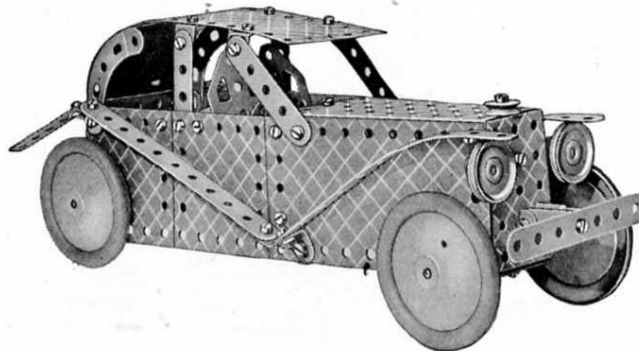
Fig. C65M

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

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

C100M. Sports Coupé

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



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

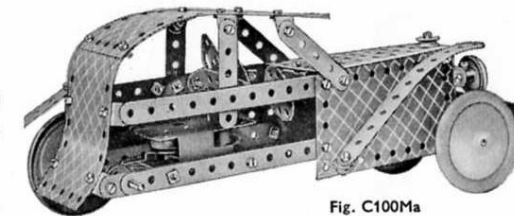


Fig. C100Ma

C64M. Roundabout

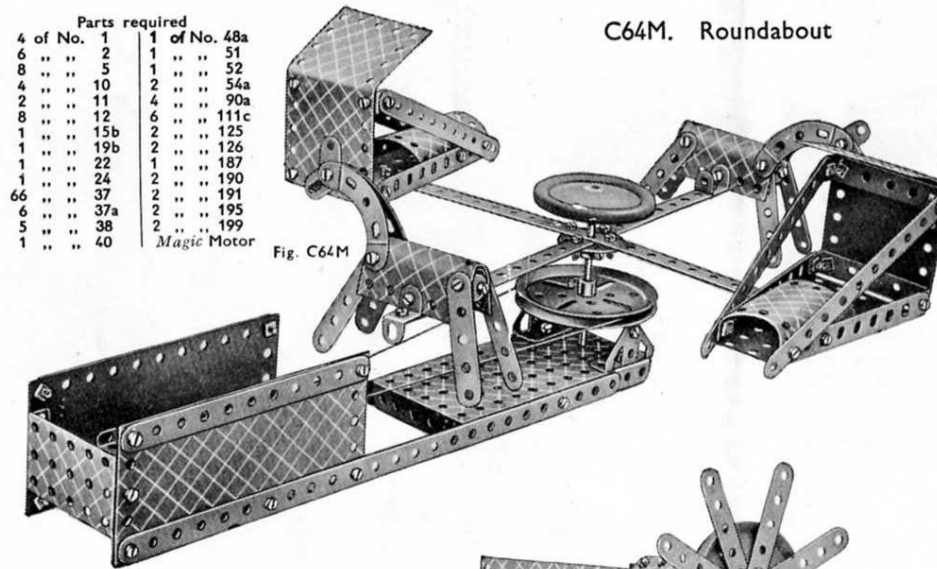


Fig. C64M

Parts required		
4 of No. 1	1	of No. 48a
6 " " 2	1	" " 51
8 " " 5	1	" " 52
4 " " 10	2	" " 54a
2 " " 11	4	" " 90a
8 " " 12	6	" " 111c
1 " " 15b	2	" " 125
1 " " 19b	2	" " 126
1 " " 22	1	" " 187
1 " " 24	2	" " 190
66 " " 37	2	" " 191
6 " " 37a	2	" " 195
5 " " 38	2	" " 199
1 " " 40	Magic Motor	

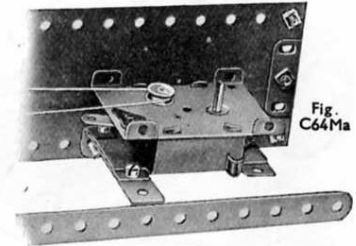


Fig. C64Ma

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

C22M. Windmill Pump

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

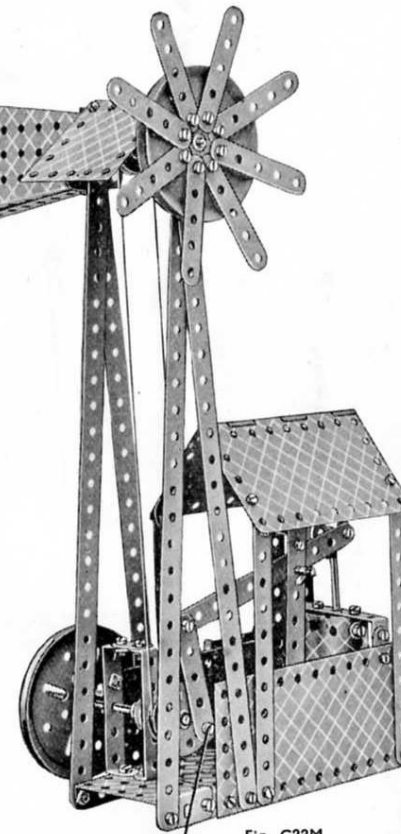


Fig. C22M

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

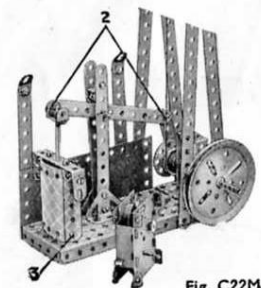
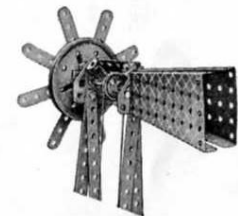
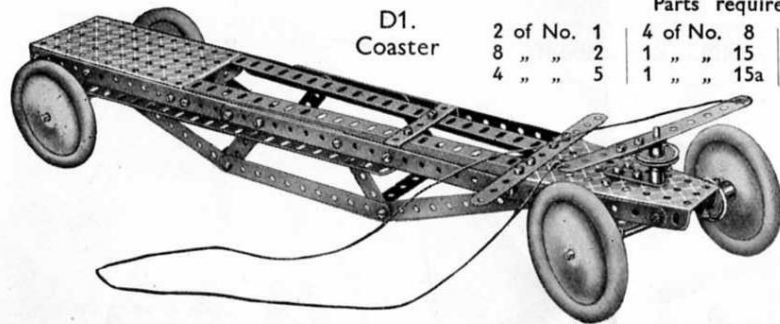


Fig. C22Ma

D1.
Coaster

Parts required			
2 of No. 1	4 of No. 8	1 of No. 17	
8 " " 2	1 " " 15	3 " " 22	
4 " " 5	1 " " 15a	1 " " 23	
		1 " " 24	
		44 " " 37	
		4 " " 38	
		1 " " 48	
		4 " " 48a	
		1 " " 52	
		1 " " 54a	
		2 " " 62	
		2 " " 126	
		4 " " 187	

The chassis is built up from two 12½" Angle Girders and two 12½" Strips, joined together as shown and spaced apart by a 5½"×2½" Flanged Plate, a Flanged Sector Plate and a 2½"×½" Double Angle Strip. The rear axle is carried in two Trunnions and the front axle Fig. D1a in a 2½"×½" Double Angle Strip that is secured by a Bush Wheel to a short Rod mounted in the boss of a Crank.

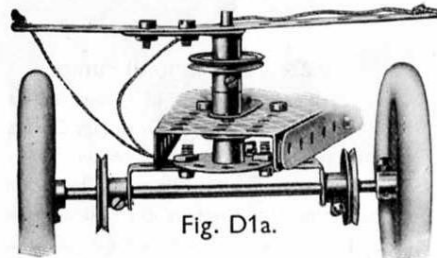
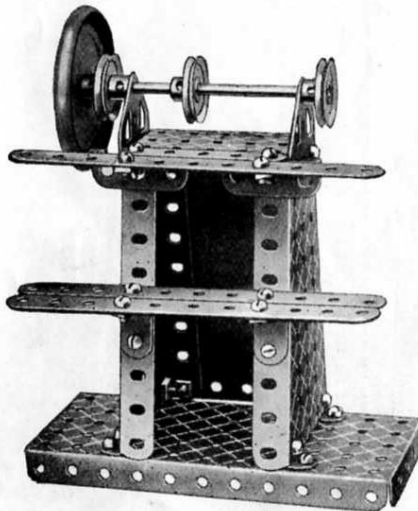


Fig. D1a.

D2. Polishing Spindle

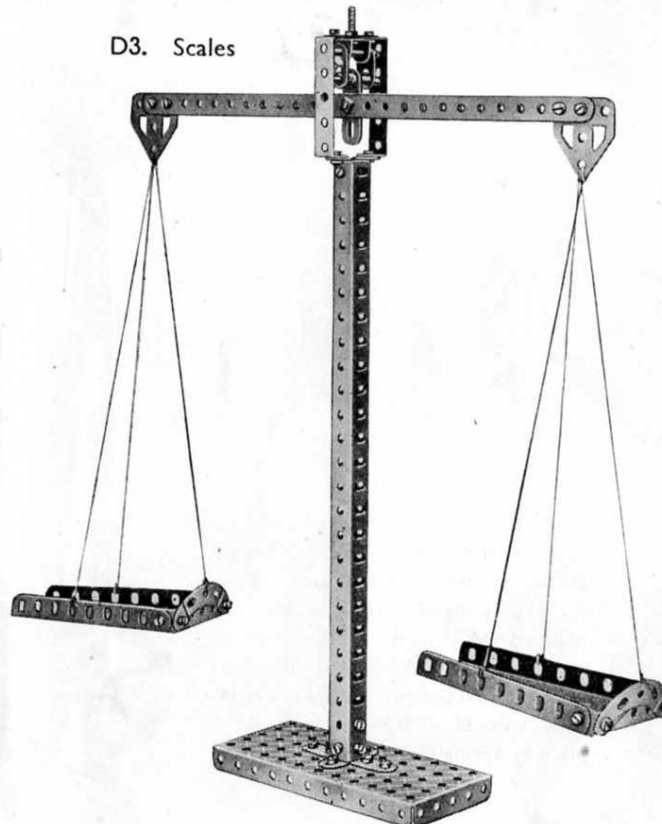
Parts required			
3 of No. 2	3 of No. 22	2 of No. 126	
1 " " 5	30 " " 37	2 " " 126a	
4 " " 12	1 " " 51	1 " " 187	
2 " " 12a	1 " " 52	1 " " 191	
1 " " 15b	2 " " 54a		



Parts required

2 of No. 1	
1 " " 6a	
2 " " 8	
2 " " 10	
1 " " 11	
2 " " 12	
2 " " 12a	
2 " " 18a	
2 " " 35	
31 " " 37	
4 " " 38	
1 " " 40	
1 " " 45	
4 " " 48a	
1 " " 52	
2 " " 54a	
2 " " 62	
2 " " 90a	
1 " " 115	
2 " " 126a	

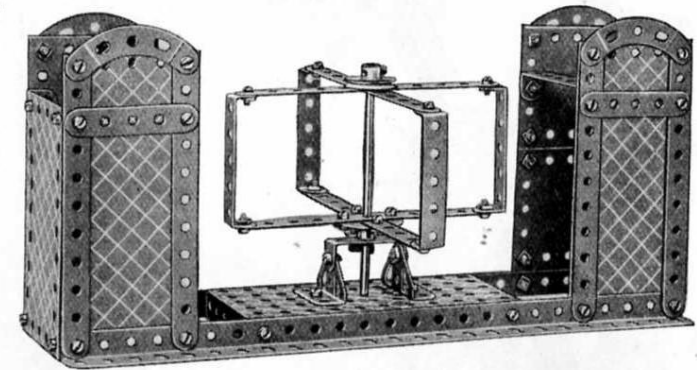
D3. Scales



Parts required

12 of No. 2	
4 " " 5	
2 " " 8	
4 " " 12	
1 " " 15a	
1 " " 22	
1 " " 24	
1 " " 35	
52 " " 37	
1 " " 38	
1 " " 48	
8 " " 48a	
1 " " 52	
4 " " 90a	
2 " " 126	
4 " " 190	
2 " " 191	
2 " " 195	

D4. Turnstile

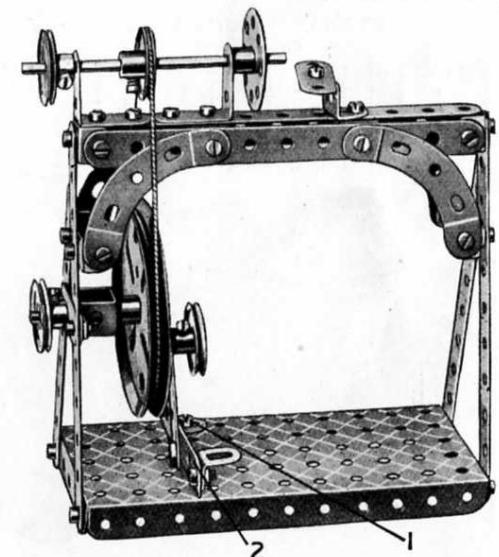


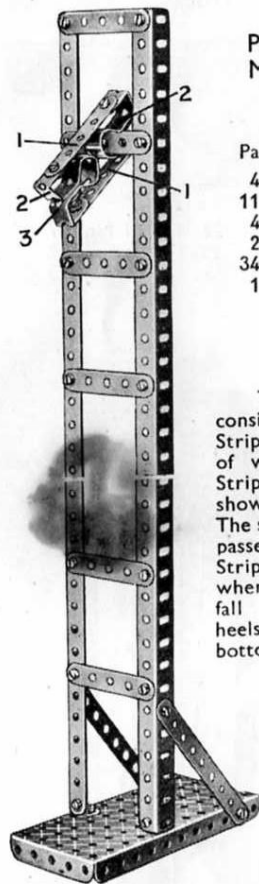
D5. Treadle Lathe

The 2½" Strip 2, forming the treadle, is attached pivotally by means of a bolt and two nuts to the Angle Bracket 1. One end of a further 2½" Strip is connected by the same means to the 2½" Strip 2, and the other end is mounted on a Threaded Pin secured to the 3" Pulley Wheel.

Parts required

7 of No. 2	2 of No. 12a	1 of No. 35	1 of No. 45
1 " " 3	1 " " 16	34 " " 37	1 " " 52
1 " " 5	1 " " 17	2 " " 37a	4 " " 90a
2 " " 6a	3 " " 19b	4 " " 38	1 " " 115
4 " " 11	4 " " 22	1 " " 40	1 " " 125
6 " " 12	1 " " 24		



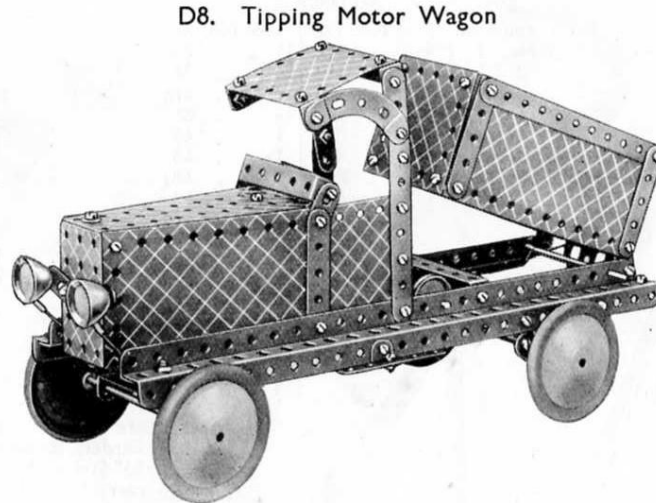


D6.
Performing
Meccanician

Parts required

4 of No.	2
11 "	5
4 "	8
2 "	12
34 "	37
1 "	52

The Meccanician consists of two $2\frac{1}{2}$ " Strips 1 to the ends of which two $5\frac{1}{2}$ " Strips 2, bent as shown, are bolted. The slot 3 should be passed over the top Strip of the ladder, when the device will fall "head over heels" to the bottom.



D8. Tipping Motor Wagon

The steering column is journaled at its upper end in a $\frac{1}{2}$ " Reversed Angle Bracket, and at its lower end in one of the holes of a Flanged Sector Plate. A Bush Wheel on the lower end of the steering column is attached by two short lengths of cord to a $2\frac{1}{2}$ " x $\frac{1}{2}$ " Double Angle Strip forming the front axle bearing. This bearing is pivotally connected to the underside of the wagon by means of a Double Bent Strip.

The body of the wagon, when tipping, pivots about two $\frac{3}{8}$ " Bolts that pass through the end holes of the chassis girders and are attached to Flat Brackets on the body. The tipping movement is controlled by a cord attached to the Crank Handle by an Anchoring Spring.

Parts required

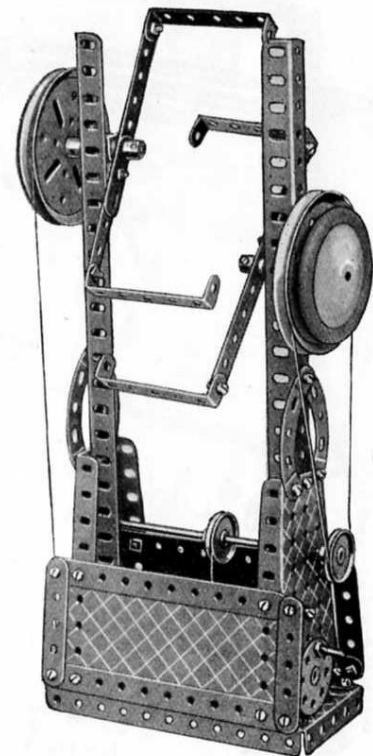
2 of No.	2
2 "	3
12 "	5
4 "	8
8 "	10
2 "	12
1 "	15
1 "	15a
1 "	15b
1 "	16
1 "	19s
3 "	22
1 "	24
5 "	35
65 "	37
6 "	37a
7 "	38
1 "	40
1 "	45
8 "	48a
1 "	51
1 "	52
2 "	54a
4 "	90a
2 "	111c
1 "	125
2 "	126a
1 "	176
4 "	187
4 "	190
2 "	191
2 "	192

(1 Lighting Set not included in Outfit)

D9. Candy Puller

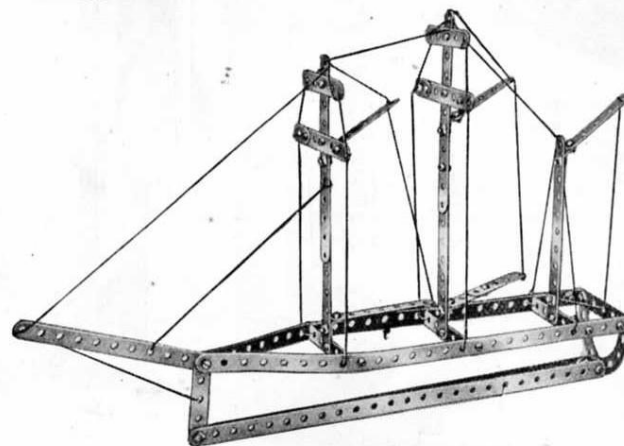
Parts required

6 of No.	2
4 "	5
2 "	8
4 "	12
2 "	15
2 "	17
2 "	19b
4 "	22
1 "	24
44 "	37
8 "	38
1 "	40
1 "	45
4 "	48a
1 "	52
2 "	54a
2 "	62
4 "	90a
1 "	115
2 "	125
1 "	176
1 "	186
2 "	187
2 "	191



D7.

Square-Topsail Schooner



Parts required

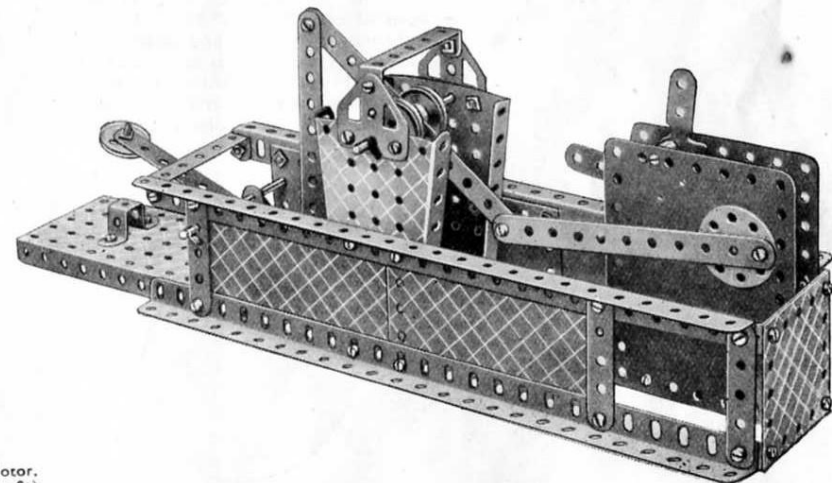
4 of No.	1
6 "	2
1 "	3
10 "	5
4 "	10
1 "	11
5 "	12
41 "	37
1 "	40
4 "	48a
2 "	90a

Parts required

4 of No.	2
5 "	5
4 "	8
1 "	11
1 "	12
2 "	16
2 "	22
1 "	22a
1 "	24
6 "	35
41 "	37
9 "	37a
8 "	38
1 "	45
4 "	48a
1 "	52
2 "	54a
6 "	111c
2 "	126a
2 "	190
2 "	191
2 "	195

No. 2 Clockwork Motor, (not included in Outfit)

D10. Mechanical Hammer



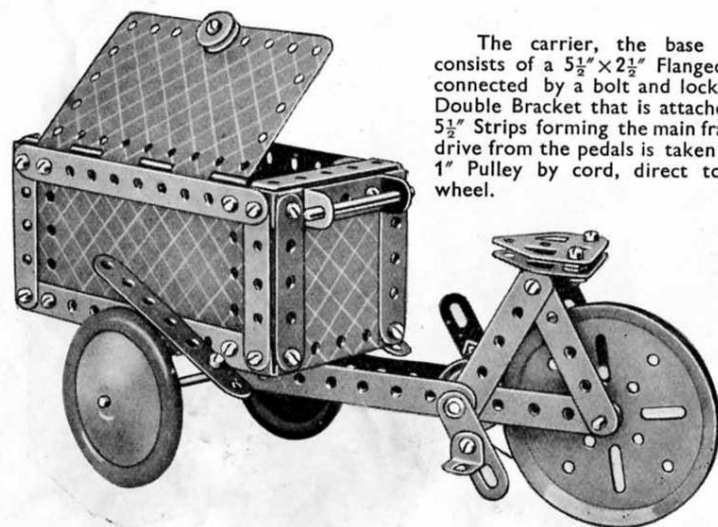
D11.
Towel Horse

Parts required

6 of No.	1
4 " "	2
2 " "	8
4 " "	10
4 " "	12
2 " "	22a
28 " "	37
2 " "	37a
8 " "	38
4 " "	90a
2 " "	111c

D12. Carrier Tricycle

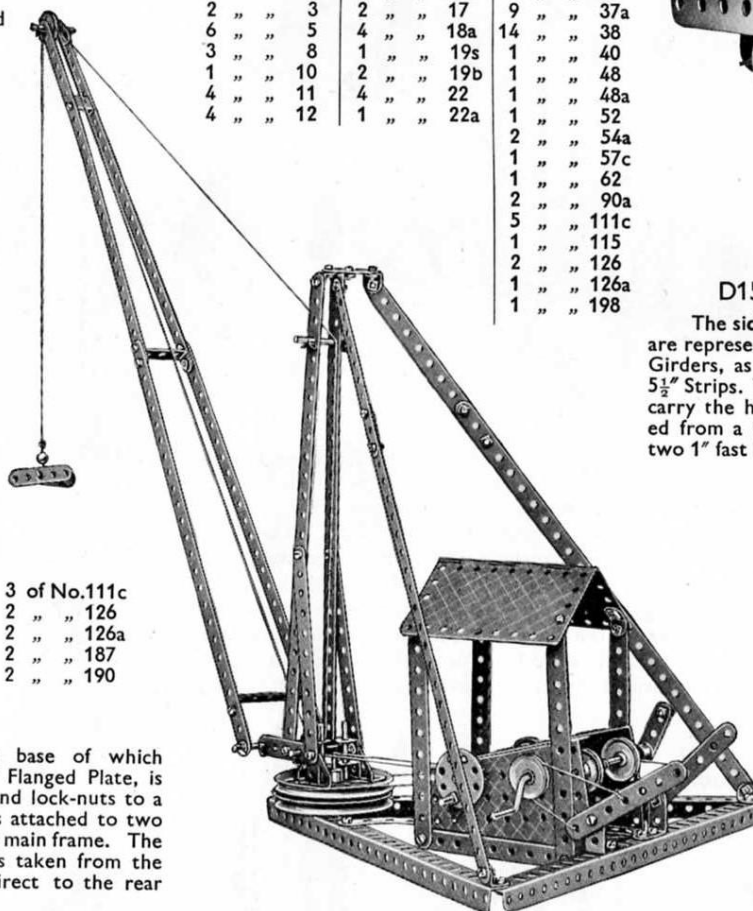
Parts required				
4 of No. 2	1 of No. 15b	1 of No. 23	1 of No. 40	3 of No. 111c
2 " " 3	1 " " 17	4 " " 35	1 " " 48	2 " " 126
2 " " 5	2 " " 18a	40 " " 37	4 " " 48a	2 " " 126a
2 " " 11	1 " " 19b	10 " " 37a	1 " " 52	2 " " 187
6 " " 12	1 " " 22	9 " " 38	2 " " 62	2 " " 190
1 of No. 191		1 of No. 198		



The carrier, the base of which consists of a $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flanged Plate, is connected by a bolt and lock-nuts to a Double Bracket that is attached to two $5\frac{1}{2}''$ Strips forming the main frame. The drive from the pedals is taken from the 1" Pulley by cord, direct to the rear wheel.

D13. Derrick

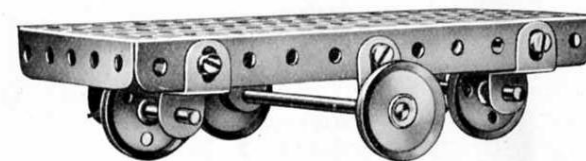
Parts required		2 of No. 12a		1 of No. 24	
8 of No.	1	4 " "	12c	11 " "	35
8 " "	2	3 " "	16	56 " "	37
2 " "	3	2 " "	17	9 " "	37a
6 " "	5	4 " "	18a	14 " "	38
3 " "	8	1 " "	19s	1 " "	40
1 " "	10	2 " "	19b	1 " "	48
4 " "	11	4 " "	22	1 " "	48a
4 " "	12	1 " "	22a	1 " "	52
				2 " "	54a
				1 " "	57c
				1 " "	62
				2 " "	90a
				5 " "	111c
				1 " "	115
				2 " "	126
				1 " "	126a
				1 " "	198



The base of this model is built up of three $12\frac{1}{2}''$ Angle Girders fitted with a $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flanged Plate held in place at its unsupported end by means of two $2\frac{1}{2}''$ small radius Curved Strips. Two Flanged Sector Plates are secured to this Flanged Plate as shown and these carry the three hoisting, slewing and luffing barrels. Brakes for two of these consist of $3\frac{1}{2}''$ Strips and Cord, the Strips being pivotally attached to the base by means of $1'' \times 1''$ Angle Brackets.

The roof is represented by a Hinged Plate secured to $5\frac{1}{2}''$ Strips, as uprights, by means of Obtuse Angle Brackets.

D14. Revolving Truck



Parts required

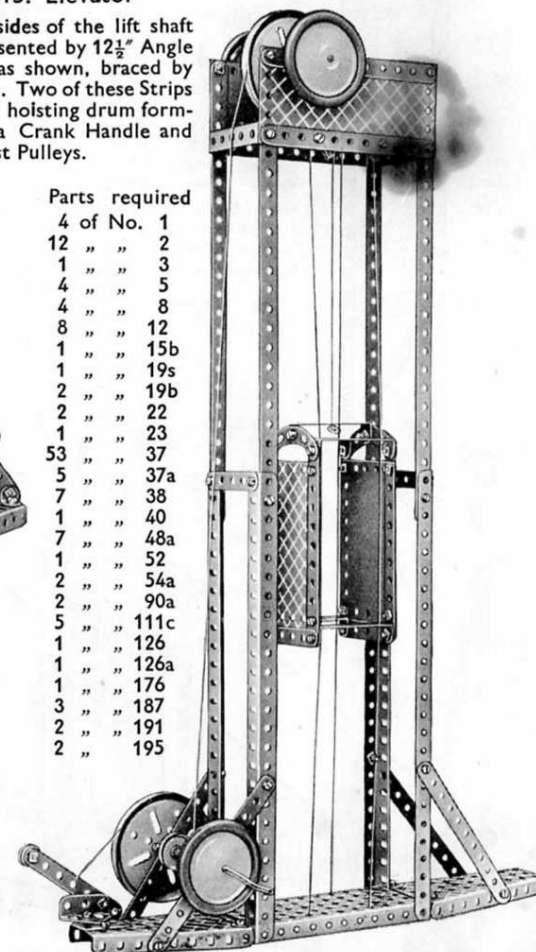
2 of No.	10	2 of No.	22	6 of No.	37
1 " "	16	2 " "	22a	1 " "	52
2 " "	17	4 " "	35	4 " "	125

D15. Elevator

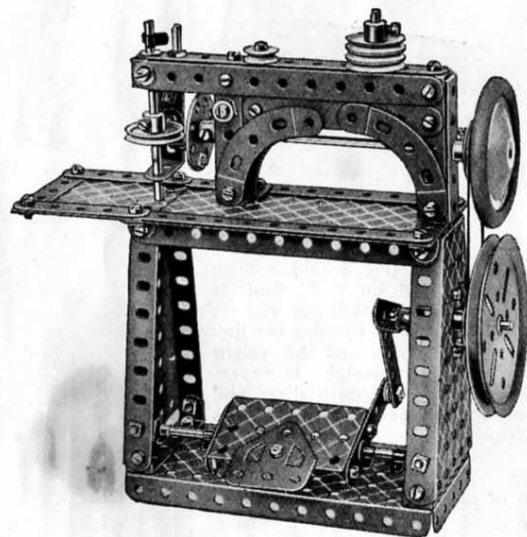
The sides of the lift shaft are represented by $12\frac{1}{2}''$ Angle Girders, as shown, braced by $5\frac{1}{2}''$ Strips. Two of these Strips carry the hoisting drum formed from a Crank Handle and two 1" fast Pulleys.

Parts required

4 of No.	1
12 " "	2
1 " "	3
4 " "	5
4 " "	8
8 " "	12
1 " "	15b
1 " "	19s
2 " "	19b
2 " "	22
1 " "	23
53 " "	37
5 " "	37a
7 " "	38
1 " "	40
7 " "	48a
1 " "	52
2 " "	54a
2 " "	90a
5 " "	111c
1 " "	126
1 " "	126a
1 " "	176
3 " "	187
2 " "	191
2 " "	195



D16. Sewing Machine



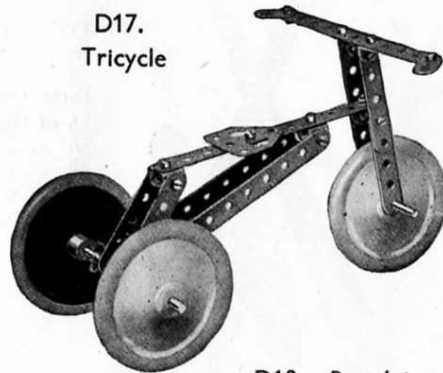
Parts required	
7 of No. 2	
2 " " 3	
6 " " 5	
1 " " 6a	
3 " " 10	
1 " " 11	
10 " " 12	
2 " " 12a	
2 " " 15	
1 " " 16	
1 " " 17	
1 " " 18a	
1 " " 19b	
4 " " 22	
2 " " 22a	
1 " " 23	
1 " " 24	
5 " " 35	
50 " " 37	
8 " " 37a	
8 " " 38	
1 " " 45	
7 " " 48a	
1 " " 51	
1 " " 52	
2 " " 54a	
1 " " 62	
4 " " 90a	
3 " " 111c	
1 " " 115	
1 " " 125	
1 " " 126a	
1 " " 176	
1 " " 186	
1 " " 187	
1 " " 190	
1 " " 195	

The base, a $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flanged Plate, carries two $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strips, each of which supports a Flanged Sector Plate. The upper ends of these two Plates are coupled together by $5\frac{1}{2}''$ Strips, further Strips and Plates being secured to these by $\frac{1}{2}'' \times \frac{1}{2}''$ Angle Brackets. The sewing machine frame is built up on two vertical standards, each of which is constructed from two $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strips. One of these standards is secured to a transverse $2\frac{1}{2}''$ Strip and the other to a $1'' \times 1''$ Angle Bracket.

Three $5\frac{1}{2}''$ Strips are now arranged across the top of the two standards as shown, and immediately below these are fitted two $3\frac{1}{2}''$ Strips and two Flat Brackets. Four $2\frac{1}{2}''$ small radius Curved Strips complete the structure. The vertical needle holder is journalled at its upper end in one of the $5\frac{1}{2}''$ Strips mentioned earlier and its lower end in a $1'' \times 1''$ Angle Bracket, attached to the machine by a Flat Bracket and $\frac{1}{2}''$ Reversed Angle Bracket.

A $1''$ fast Pulley on the needle holder is caused to vibrate by a $\frac{1}{2}'' \times \frac{1}{2}''$ Angle Bracket secured to a Bush Wheel that is carried on a $5''$ Axle Rod. The opposite end of this Rod is fitted with a $1''$ fast Pulley and Road Wheel, the $1''$ Pulley being connected by a Driving Band to a similar Pulley on the crank shaft. The treadle and its method of operation will be seen clearly from the illustration.

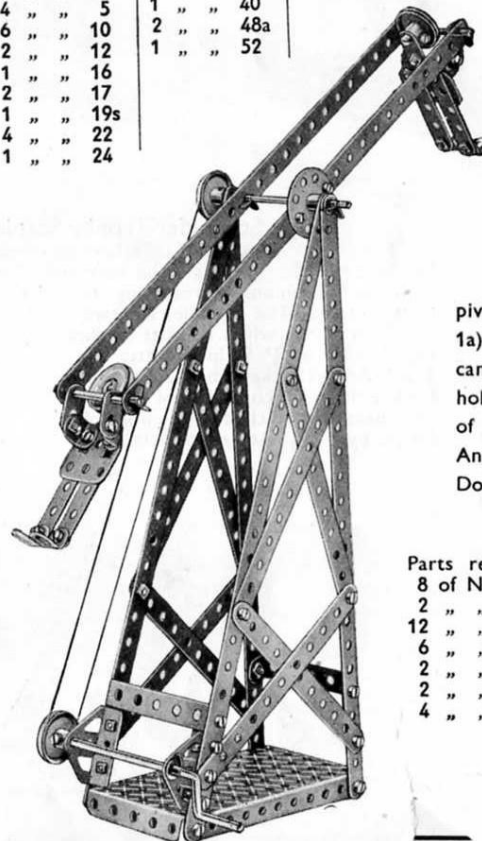
D17. Tricycle



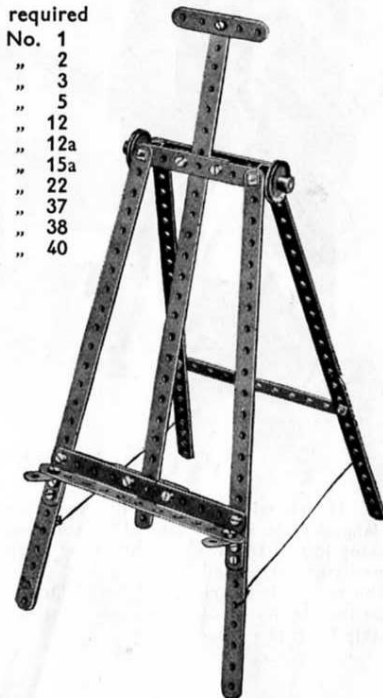
Parts required	
4 of No. 2	
6 " " 5	
2 " " 10	
3 " " 11	
2 " " 12	
1 " " 16	
1 " " 18a	
2 " " 35	
15 " " 37	
2 " " 37a	
1 " " 111c	
1 " " 126a	
3 " " 187	

D18. Revolving Meccanitions

Parts required		8 of No. 35	2 of No. 111c
6 of No. 1	42 " " 37	2 " " 126	
8 " " 2	1 " " 38	2 " " 126a	
4 " " 5	1 " " 40		
6 " " 10	2 " " 48a		
12 " " 12	1 " " 52		
1 " " 16			
2 " " 17			
1 " " 19s			
4 " " 22			
1 " " 24			



D19. Easel

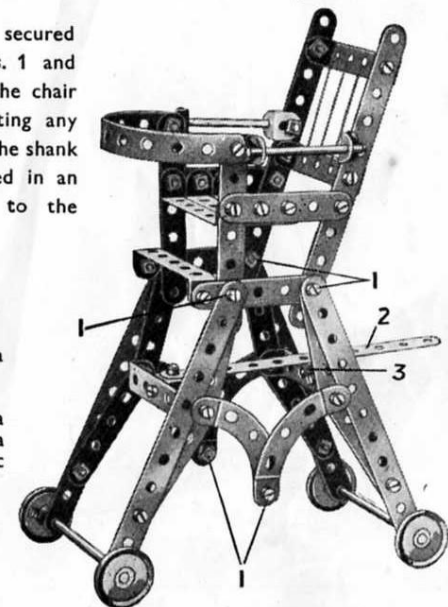


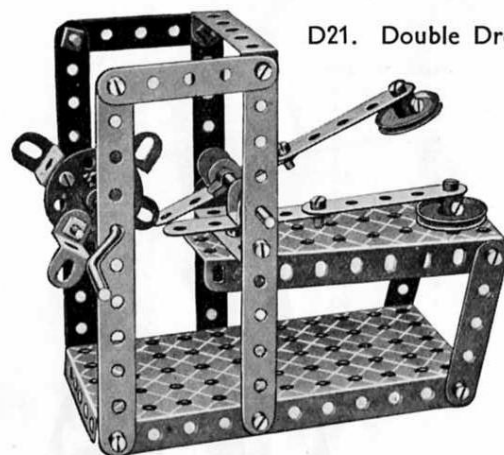
Parts required	
5 of No. 1	
3 " " 2	
2 " " 3	
3 " " 5	
4 " " 12	
2 " " 12a	
1 " " 15a	
2 " " 22	
19 " " 37	
4 " " 38	
1 " " 40	

D20. Baby Chair

The Bolts 1 are all secured pivotally (see S.M. Nos. 1 and 1a), and the height of the chair can be adjusted by fitting any hole in the Strip 2 over the shank of a Bolt that is secured in an Angle Bracket bolted to the Double Angle Strip 3.

Parts required		4 of No. 35	35 " " 37
8 of No. 2	2 " " 3	2 " " 37a	
12 " " 5	4 " " 38		
6 " " 12	1 " " 40		
2 " " 16	8 " " 48a		
2 " " 17	4 " " 90a		
4 " " 22	1 " " 111c		





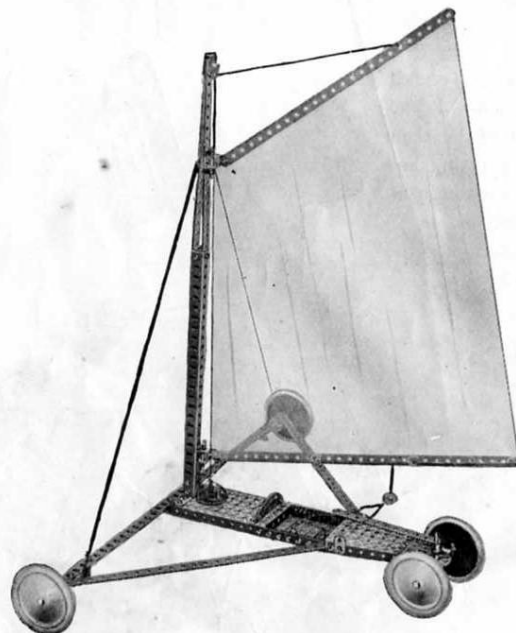
D21. Double Drop Hammer

Parts required

4	of	No.	2
8	"	"	5
2	"	"	11
1	"	"	16
1	"	"	19s
2	"	"	22
1	"	"	24
6	"	"	35
23	"	"	37
2	"	"	48a
1	"	"	52
1	"	"	54a
4	"	"	125

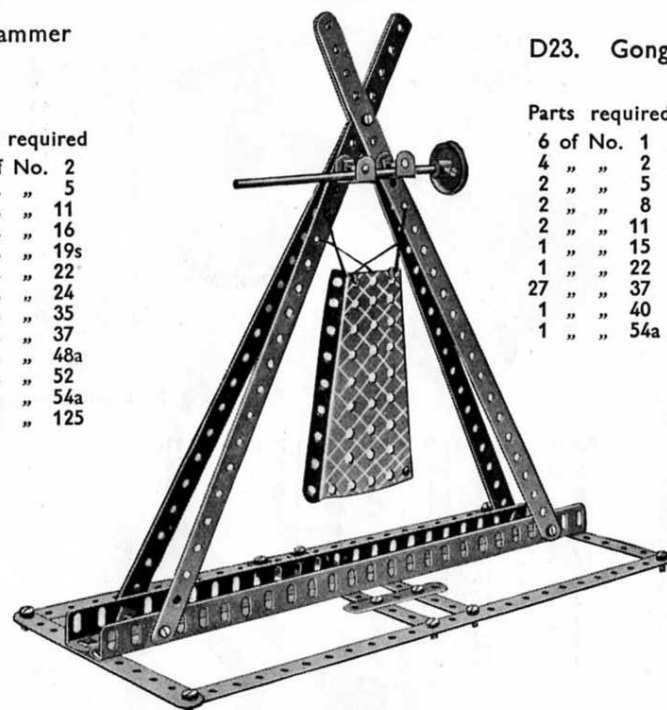
D22. Land Yacht

The chassis of the model is represented by a $5\frac{1}{2}" \times 2\frac{1}{2}"$ Flanged Plate and a Flanged Sector Plate, the two parts being joined together as shown by Strips, and the intermediate space filled in by $2\frac{1}{2}" \times \frac{1}{2}"$ Double Angle Strips. The rear axle bearing, a $2\frac{1}{2}" \times \frac{1}{2}"$ Double Angle Strip, is secured to its pivot by a Bush Wheel. A Crank and $5\frac{1}{2}"$ Strip form the tiller.



Parts required

8	of	No.	1
2	"	"	2
1	"	"	5
4	"	"	8
4	"	"	10
4	"	"	11
2	"	"	12
2	"	"	12a
3	"	"	16
1	"	"	17
2	"	"	18a
1	"	"	23
1	"	"	24
12	"	"	35
60	"	"	37
9	"	"	38
1	"	"	40
8	"	"	48a
1	"	"	52
1	"	"	54a
1	"	"	62
1	"	"	90a
4	"	"	115
1	"	"	125
1	"	"	126
2	"	"	126a
4	"	"	187



D23. Gong

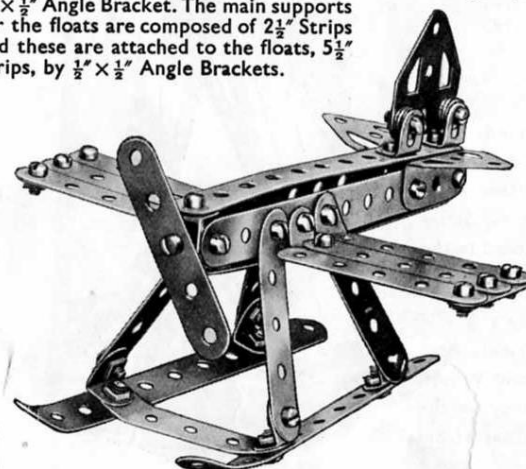
Parts required

6	of	No.	1
4	"	"	2
2	"	"	5
2	"	"	8
2	"	"	11
1	"	"	15
1	"	"	22
27	"	"	37
1	"	"	40
1	"	"	54a

D24. Schneider Trophy Seaplane

Four $5\frac{1}{2}"$ Strips held together by means of Double Brackets form the fuselage, the rear end of which is fitted with two Trunnions representing tail planes. The fin is built up from a Flat Trunnion and two $\frac{1}{2}" \times \frac{1}{2}"$ Angle Brackets.

Each of the wings consists of three $2\frac{1}{2}"$ Strips secured together by a $1\frac{1}{2}"$ Strip and attached to the fuselage by a $\frac{1}{2}" \times \frac{1}{2}"$ Angle Bracket. The main supports for the floats are composed of $2\frac{1}{2}"$ Strips and these are attached to the floats, $5\frac{1}{2}"$ Strips, by $\frac{1}{2}" \times \frac{1}{2}"$ Angle Brackets.



Parts required

6	of	No.	2
12	"	"	5
2	"	"	6a
2	"	"	11
12	"	"	12
34	"	"	37
3	"	"	37a
6	"	"	38
2	"	"	111c
2	"	"	126
1	"	"	126a

D25. "Try-Your-Strength" Machine

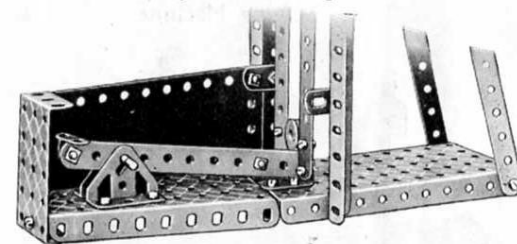


Fig. D25a

The striker (Fig. D25b), a Bush Wheel mounted on a $2"$ Rod, is allowed to rest at its lower end on one end of the lever forming the link between the striker and the weight (Fig. D25a). The weight is represented by a $\frac{1}{2}"$ loose Pulley, and slides vertically between two lengths of Strips.

Parts required

6	of	No.	1
6	"	"	2
1	"	"	3
4	of	No.	5
2	"	"	6a
4	"	"	8
4	"	"	10
3	"	"	12
2	"	"	12a
1	"	"	17
1	"	"	18a
1	"	"	23
1	"	"	24
2	"	"	35
66	"	"	37
5	"	"	37a
2	"	"	38
1	"	"	45
1	"	"	48a
1	"	"	51
1	"	"	52
2	"	"	54a
3	"	"	90a
5	"	"	111c
2	"	"	126
1	"	"	176
2	"	"	195

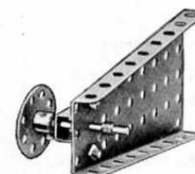
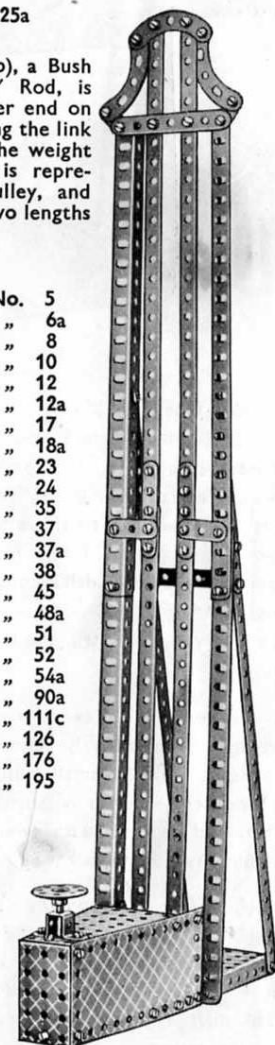
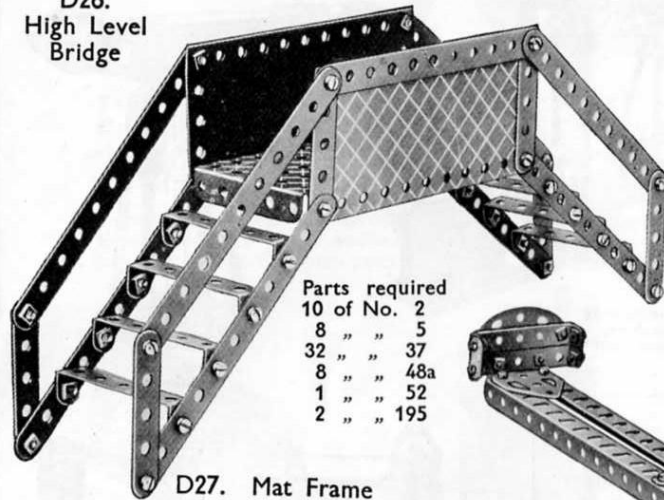


Fig. D25b

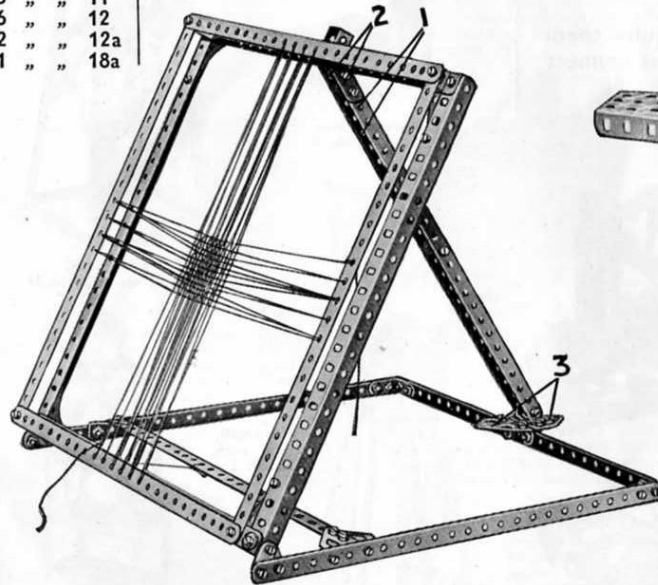


D26.
High Level
Bridge

Parts required
10 of No. 2
8 " " 5
32 " " 37
8 " " 48a
1 " " 52
2 " " 195

D27. Mat Frame

Parts required	54 of No. 37	2 of No. 62	4 of No. 125
10 of No. 1	2 " " 37a	4 " " 90a	2 " " 126
4 " " 8	2 " " 38	2 " " 111c	2 " " 126a
4 " " 10	1 " " 45	1 " " 115	
3 " " 11			
6 " " 12			
2 " " 12a			
1 " " 18a			



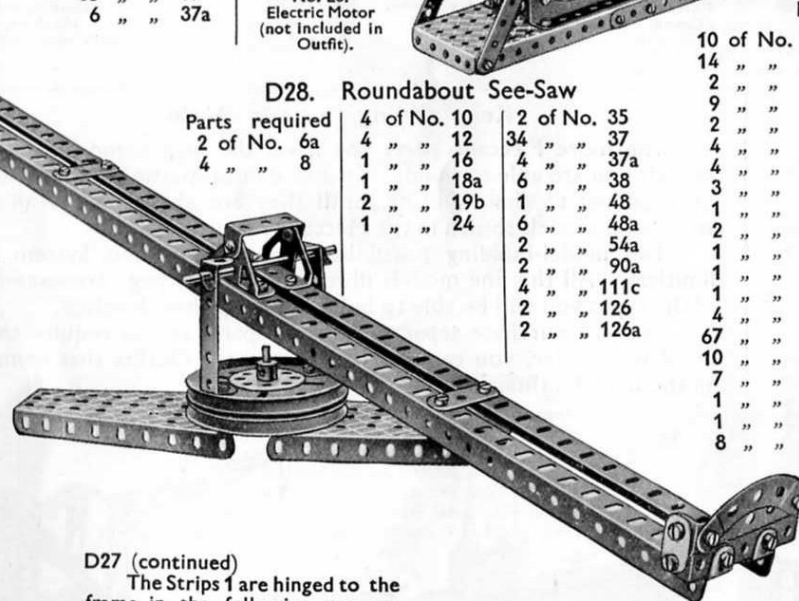
Parts required
8 of No. 1
14 " " 2
2 " " 3
8 " " 5
2 " " 6a
4 " " 8
6 " " 12
4 " " 16
2 " " 19b
3 " " 22
1 " " 24
5 " " 35
65 " " 37
6 " " 37a

6 of No. 38
1 " " 40
1 " " 44
8 " " 48a
1 " " 52
2 " " 54a
4 " " 90a
5 " " 111c
2 " " 126a
1 " " 176
3 " " 190
2 " " 191

No. E6.
Electric Motor
(not included in
Outfit).

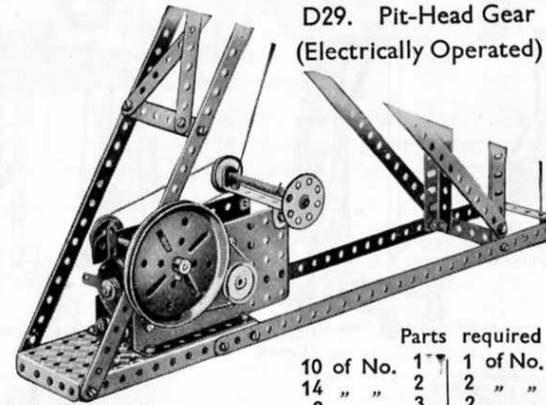
D28. Roundabout See-Saw

Parts required	4 of No. 10	2 of No. 35
2 of No. 6a	4 " " 12	34 " " 37
4 " " 8	1 " " 16	4 " " 37a
	1 " " 18a	6 " " 38
	2 " " 19b	1 " " 48
	1 " " 24	6 " " 48a
		2 " " 54a
		2 " " 90a
		4 " " 111c
		2 " " 126
		2 " " 126a



D27 (continued)

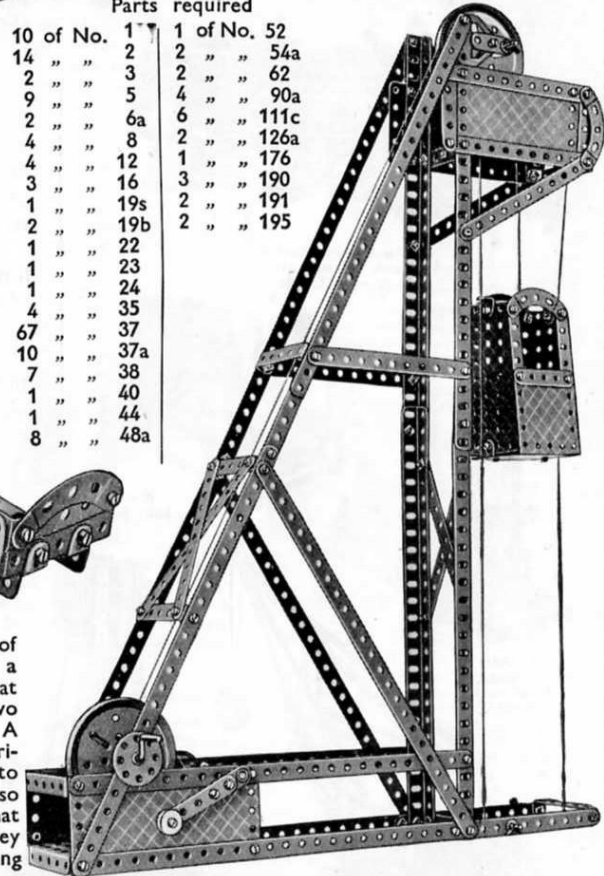
The Strips 1 are hinged to the frame in the following manner. Two Cranks 2 with their bosses facing inward are bolted to the Strips 1 and two Angle Brackets are secured to the frame. A Rod is then pushed through the holes in the Angle Brackets and secured in the bosses of the Cranks. A Double Bracket fastened to the ends of the Strips 1 carries a Threaded Pin, which fits in the holes in the Flat Trunnions 3. By removing this Pin, the frame can be folded flat.

D29. Pit-Head Gear
(Electrically Operated)

The Motor is carried on a $5\frac{1}{2} \times 2\frac{1}{2}$ " Flanged Plate, and supports on its armature shaft a 1" fast Pulley. This is connected by a short length of cord to a 3" Pulley that in turn rotates a second 1" fast Pulley. This is coupled to a third similar Pulley on the hoisting shaft. The head of the model is similar to that of model D30.

D30. Pit-Head Gear
(Hand Operated)

Parts required	10 of No. 1	1 of No. 52
14 " " 2	2 " " 54a	
2 " " 3	2 " " 62	
9 " " 5	4 " " 90a	
2 " " 6a	6 " " 111c	
4 " " 8	2 " " 126a	
4 " " 12	1 " " 176	
3 " " 16	3 " " 190	
1 " " 19s	2 " " 191	
2 " " 19b	2 " " 195	
1 " " 22		
1 " " 23		
1 " " 24		
4 " " 35		
67 " " 37		
10 " " 37a		
7 " " 38		
1 " " 40		
1 " " 44		
8 " " 48a		



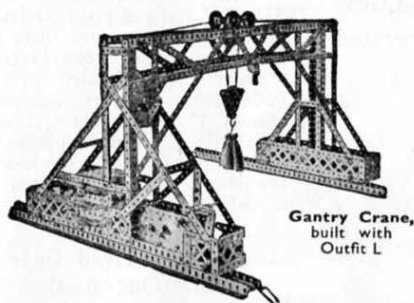
D30 (continued)

The rear of the base of this model is fitted with a $5\frac{1}{2} \times 2\frac{1}{2}$ " Flanged Plate that carries at its sides two $5\frac{1}{2} \times 2\frac{1}{2}$ " Strip Plates. A $12\frac{1}{2}$ " Strip secured horizontally to each of these to form a strengthener, also carries the brake that operates on a 3" Pulley mounted on the winding handle.

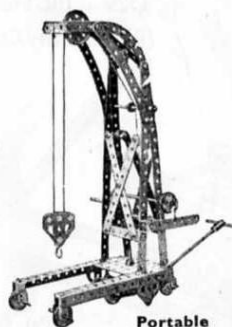
HOW TO CONTINUE

This completes our examples of models that can be made with MECCANO Outfit D (or C and Ca). 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 Da Accessory Outfit, which can be obtained from any Meccano Dealer.

Build Bigger and Better Models



Gantry Crane,
built with
Outfit L



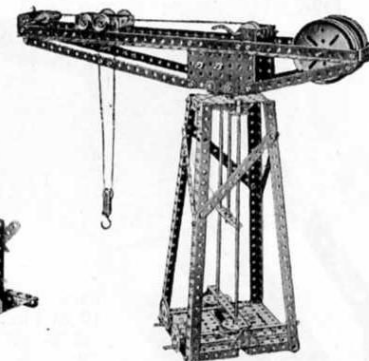
Portable
Crane,
built with
Outfit K



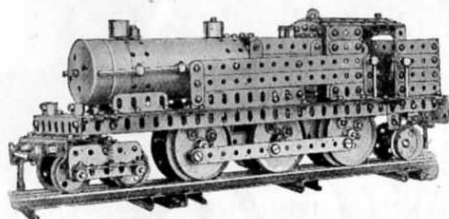
Gantry Crane,
built with
Outfit H



Stone Sawing
Machine,
built with Outfit K



Girder Crane,
built with
Outfit G



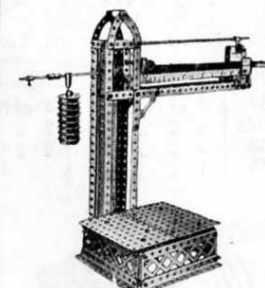
Clockwork Pacific
Tank Locomotive,
built with Outfit L

Keep adding to your Outfit

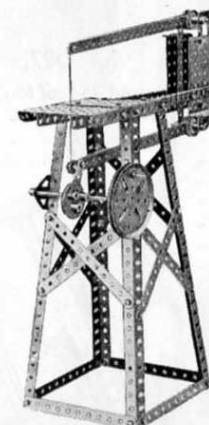
The more Meccano parts you have, the bigger and better the models you are able to build. Keen and enthusiastic model-builders keep adding to their Outfits, until they are able to build all the wonderful models shown in the Meccano Manuals.

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

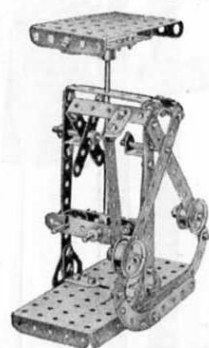
You can purchase separate Meccano parts as you require them or, if you prefer, you can purchase Accessory Outfits that connect all the main Outfits.



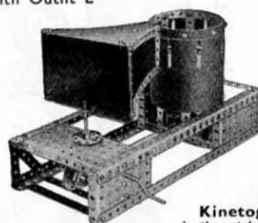
Platform Scales,
built with Outfit K



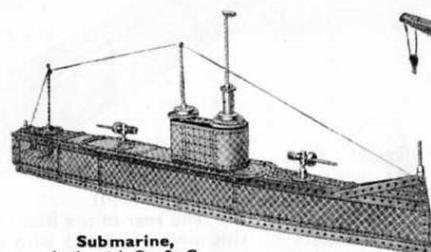
Fret Saw,
built with Outfit H



Letter
Balance,
built with
Outfit E



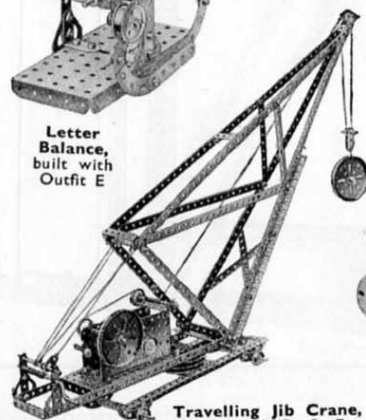
Kinetograph,
built with Outfit F



Submarine,
built with Outfit G



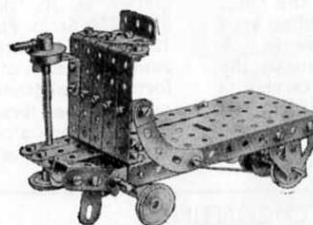
Pontoon Crane,
built with Outfit L



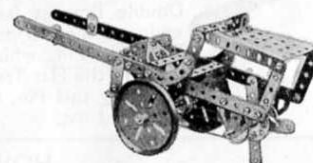
Travelling Jib Crane,
built with Outfit E



Vertical
Marine Engine,
built with Outfit H



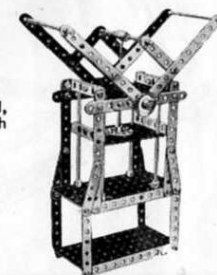
Electric Truck,
built with Outfit E



Hay Tedder,
built with Outfit E



Windmill,
built with
Outfit E



Bale Press,
built with Outfit G

MECCANO

MOTORS FOR OPERATING MECCANO MODELS

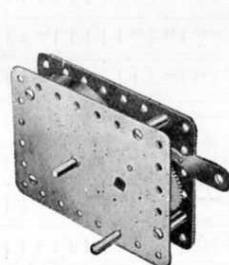
If you want to obtain the fullest enjoyment from the Meccano hobby you should operate your models by means of one of the Meccano motors described on this page. You push over the control lever of the clockwork or electric

motor and immediately your Crane, Motor Car, Ship Coaler or Windmill commences to work in exactly the same manner as its prototype in real life. Each motor is pierced with the standard Meccano equidistant holes.

MECCANO CLOCKWORK MOTORS

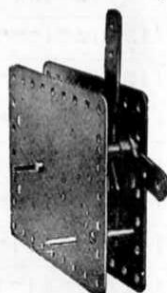
These are the finest Clockwork motors obtainable for model driving. They have exceptional power and length of run and their gears are cut with such precision as to make them perfectly smooth and steady in operation.

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



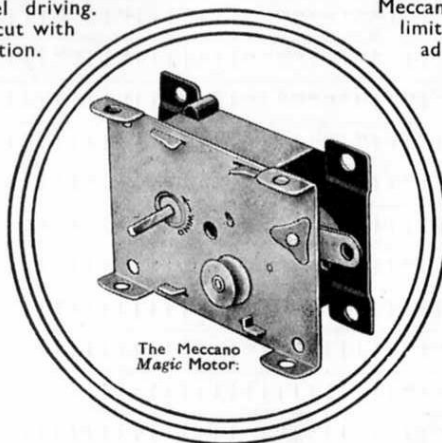
No. 1 Clockwork Motor

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



No. 1a Clockwork Motor

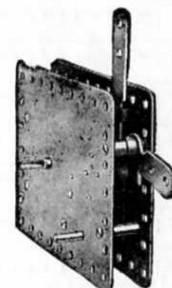
This Motor is more powerful than the No. 1 Motor and is fitted with reversing motion. It has brake and reverse levers.



The Meccano Magic Motor

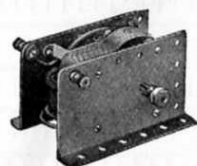
The Meccano Magic Motor

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



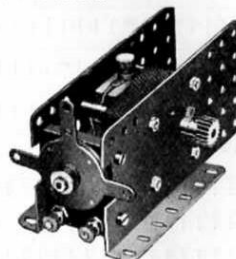
No. 2 Clockwork Motor

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



No. E1 Electric Motor (6 volt)

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

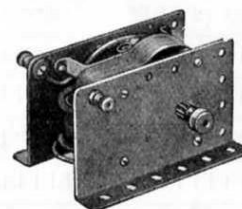


No. E6 Electric Motor (6 volt)

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

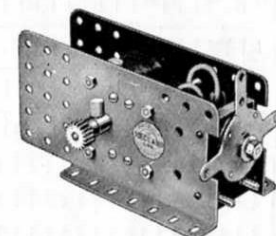
MECCANO ELECTRIC MOTORS

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



No. E120 Electric Motor (20 volt)

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



No. E20b Electric Motor (20 volt)

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

MECCANO TRANSFORMERS

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

Resistance Controllers

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



No. T20a Transformer

No. T20a TRANSFORMER (Output 35 VA at 20/3½ volts) for 20-volt Electric Motors. Has two separate circuits at 20 volts, one controlled by a 5-stud speed regulator; and a third circuit at 3½ volts for lighting up to 14 lamps.

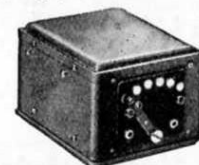
No. T6a TRANSFORMER (Output 40 VA at 9/3½ volts) for 6-volt Electric Motors. Has two separate circuits at 9 volts, one controlled by a 5-stud speed regulator, and a third circuit at 3½ volts for lighting up to 18 lamps.

No. T20m TRANSFORMER (Output 20 VA at 20 volts) for 20-volt Electric Motors. This is similar to the No. T20 Transformer, but is not fitted with speed regulator.

No. T6m TRANSFORMER (Output 25 VA at 9 volts) for 6-volt Electric Motors. This is similar to the No. T6 Transformer, but is not fitted with speed regulator.

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

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



No. T20 Transformer

Ask your dealer for a complete price list.

No.	Description.	O	Os	A	B	Ba	C	Ca	D	Da	E	Ea	F	Fa	G	Ga	H	Ha	K	Ka	L
1	Perforated Strips, 12"	—	—	—	2	2	4	6	10	—	10	—	10	—	10	6	16	14	30	8	38
1a	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
1b	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
2	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
2a	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
2b	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
3	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
4	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
5	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
6	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
7	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
8	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
9	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
10	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
11	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
12	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
13	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
14	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
15	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
16	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
17	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
18	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
19	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
20	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
21	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
22	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
23	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
24	"	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	6	10	16
25	"	—	—	—	2	2	—	—													

FOR ILLUSTRATIONS OF MECCANO PARTS REFER TO PAGE III OF COVER

No.	Description.	O	Qa	A	Aa	B	Ba	C	Ca	D	Da	E	Ea	F	Fa	G	Ga	H	Ha	K	L	Ka
146	Circular Plates, 6" diam.																				2	2
146a	" with pivot bolt and nuts																				2	2
147	Pawls																				2	2
147a	Pawl Bolt with 2 Nuts																				2	2
147b	Pawl, without Boss																				2	2
147c	Ratchet Wheels																				2	2
148	Collector Shoes for Locos																				2	2
149	Crane Grabs																				2	2
150	Pulley Blocks, 1 Sheave																				2	2
151	" 2 Sheaves																				2	2
152	" 3																				2	2
153	Corner Angle Brackets, R.H.																				2	2
154	" L.H.																				2	2
154a	Rubber Rings, 8"																				2	2
155	Pointers, 2 1/2" with boss																				2	2
156	Fans 2" diam.																				2	2
157	Signal Arms, Home																				2	2
158a	Channel Bearings, 1 1/2" x 1" x 1/2"																				2	2
158b	Girder Brackets, 2" x 1" x 1/2"																				2	2
160	Boiler with ends, complete																				2	2
161	Boiler Ends																				2	2
162	Boilers without Ends																				2	2
162a	Sleeve Pieces																				2	2
162b	Chimney Adaptors																				2	2
163	Swivel Bearings																				2	2
164	End Bearings																				2	2
165	Gear Roller Bearings																				2	2
166	Roller Races, Gearing, 192 teeth																				2	2
167a	Ring Frames for Rollers																				2	2
167b	Pinions 16-teeth																				2	2
167c	Ball Bearings, 4" diam.																				2	2
168	Ball Races, Flanged Disc																				2	2
168a	" Toothed																				2	2
168b	Ball Casings complete with Balls																				2	2
168c	Big Buckets																				2	2
169	Eccentric 1/2" throw																				2	2
170	Socket Couplings																				2	2
171	Pendulum Connections																				2	2
172	Rail Adaptors																				2	2
173	Grease Cups																				2	2
174	Grease Cups																				2	2
175	Flexible Coupling Units																				2	2
176	Anchoring Springs for Cord																				2	2
177	Shifting Standard, Large																				2	2
178	" Small																				2	2
179	Rod Socket																				2	2
180	Gear Ring 3 1/2"																				2	2
181	Bobbins																				2	2
182	Insulating Bushes																				2	2
182a	Insulating Washers																				2	2
183	Lamp Holders																				2	2
184	Lamps, 2 1/2" volt																				2	2
184a	" 6																				2	2
184b	" 10																				2	2
184c	" 20																				2	2
184d	" 20																				2	2
184e	Steering Wheel 1 1/2" diam.																				2	2
185	Driving Bands																				2	2
186	Road Wheels																				2	2
187	Flexible Plates, 2 1/2" x 1 1/2"																				2	2
188	" 2 1/2" x 1 1/2"																				2	2
189	" 2 1/2" x 1 1/2"																				2	2
190	" 2 1/2" x 1 1/2"																				2	2
191	" 2 1/2" x 1 1/2"																				2	2
192	" 2 1/2" x 1 1/2"																				2	2
193	" 2 1/2" x 1 1/2"																				2	2
194	" 2 1/2" x 1 1/2"																				2	2
195	" 2 1/2" x 1 1/2"																				2	2
196	" 2 1/2" x 1 1/2"																				2	2
197	" 2 1/2" x 1 1/2"																				2	2
198	" 2 1/2" x 1 1/2"																				2	2
199	Hinged Flat Plates, 4 1/2" x 2 1/2"																				2	2
199a	Curved Plates, U Section 2 1/2" x 2 1/2" radius																				2	2
200	" 2 1/2" x 2 1/2" radius																				2	2
201	Lamps with Flex																				2	2
202	Angle Brackets (for Headlamps)																				2	2
203	Headlamps																				2	2
203a	Headlamp Rim																				2	2
203b	" Body																				2	2
204	" Nuts																				2	2
205	" Glasses (Green, Plain or Red)																				2	2
206	Lampshades																				2	2
207	Lamp Bases																				2	2
207a	Stands with Lamp and Flex																				2	2
208	Battery Tags and Stud																				2	2
208a	Washers for Battery Stud																				2	2
209	Nuts																				2	2
210	Helical Gear 1 1/2" (Can only be																				2	2
211a	Terminals ...																				2	2
1563	6 B.A. Screws																				2	2
1575	C.B.A. Nuts																				2	2
1583	Clockwork Motor No. 2																				2	2
	Electric Motor No. E6 (6 volt)																				2	2

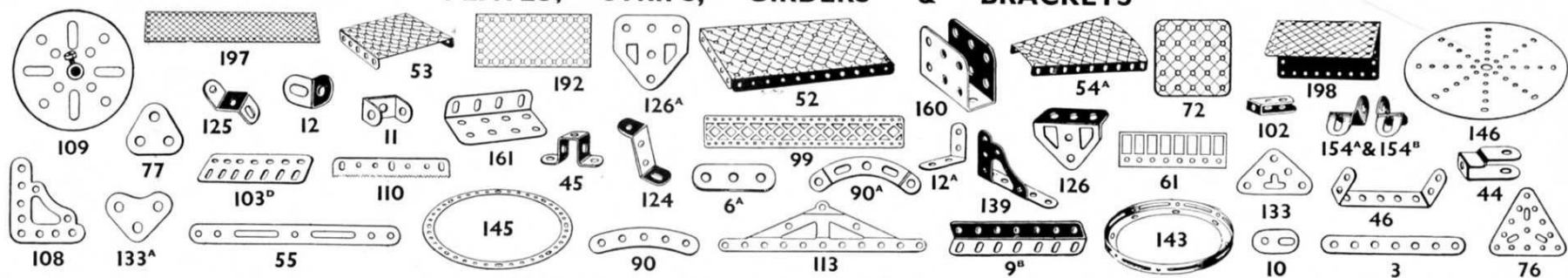
SPECIAL INSTRUCTION LEAFLETS

No. 1a—Motor Chassis	No. 12—Stone-sawing Machine	No. 24—Travelling Gantry Crane
" 2—High-speed Ship-Cooler	" 13—Mecanograph	" 25—Hydraulic Crane
" 5—Dredger	" 14a—New Grandfather Clock	" 28—Pontoon Crane
" 6—Suff Leg Derrick	" 18—Revolving Crane	" 29—Hammerhead Crane
" 7—Platform Scales	" 19—Stream Shovel	" 30—Breakdown Crane
" 9—Bagtelle Table	" 20—Electric Mobile Crane	" 31—Warehouse
" 10—Log Saw	" 21—Transporter Bridge	" 35—Automatic Grabbing Crane
" 11a—Horizontal Engine	" 22—Traction Engine	

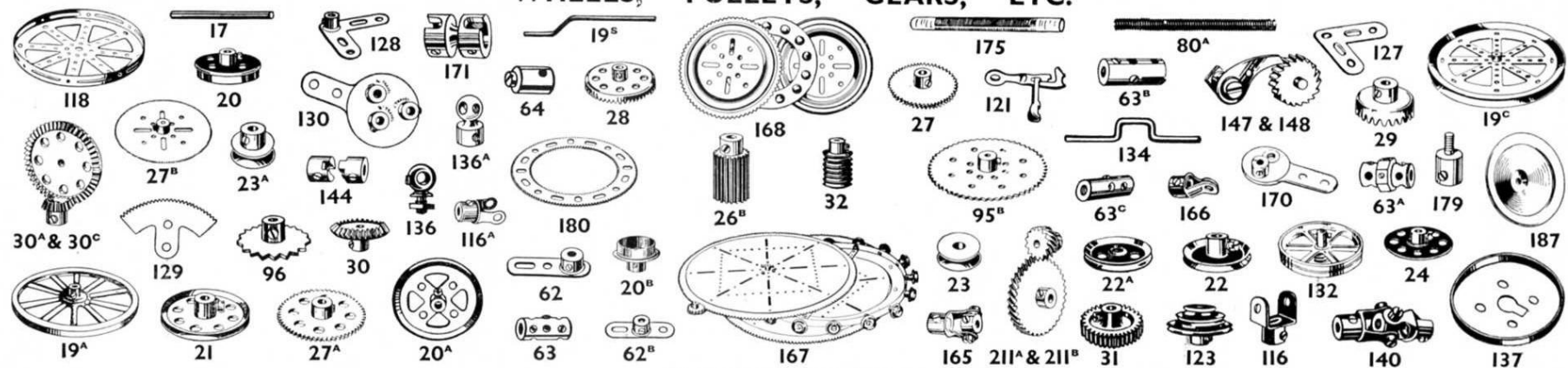
Outfits Ha and K contain Special Instruction Leaflets Nos. 7, 9, 10, 11a and 12.
Outfit Ka contains Special Instruction Leaflets Nos. 1a, 2, 5, 6, 13, 14a, 18, 19, 20, 21, 22, 24, 25, 28, 29, 30, 31 and 35.
Outfit L contains a copy of each of the 23 Special Instruction Leaflets listed above.

MECCANO PARTS & ACCESSORIES

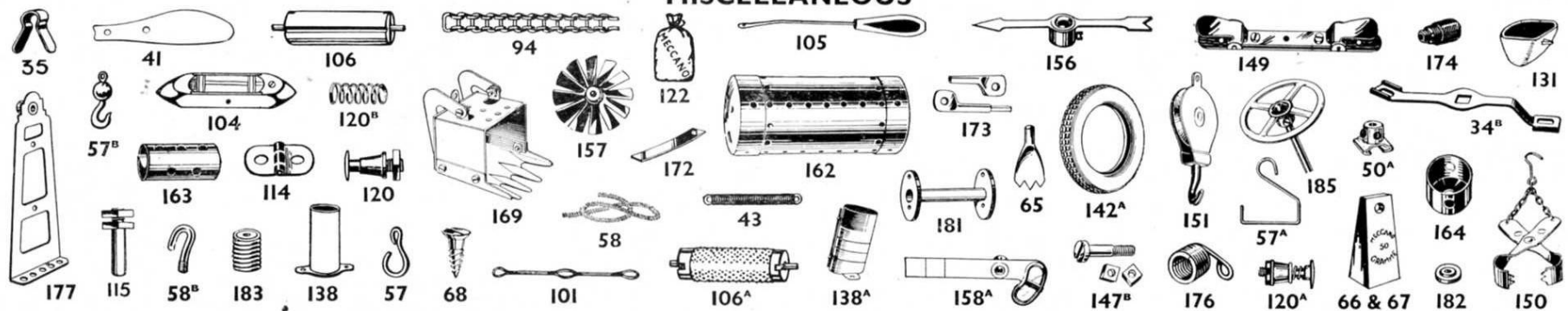
PLATES, STRIPS, GIRDERS & BRACKETS



WHEELS, PULLEYS, GEARS, ETC.

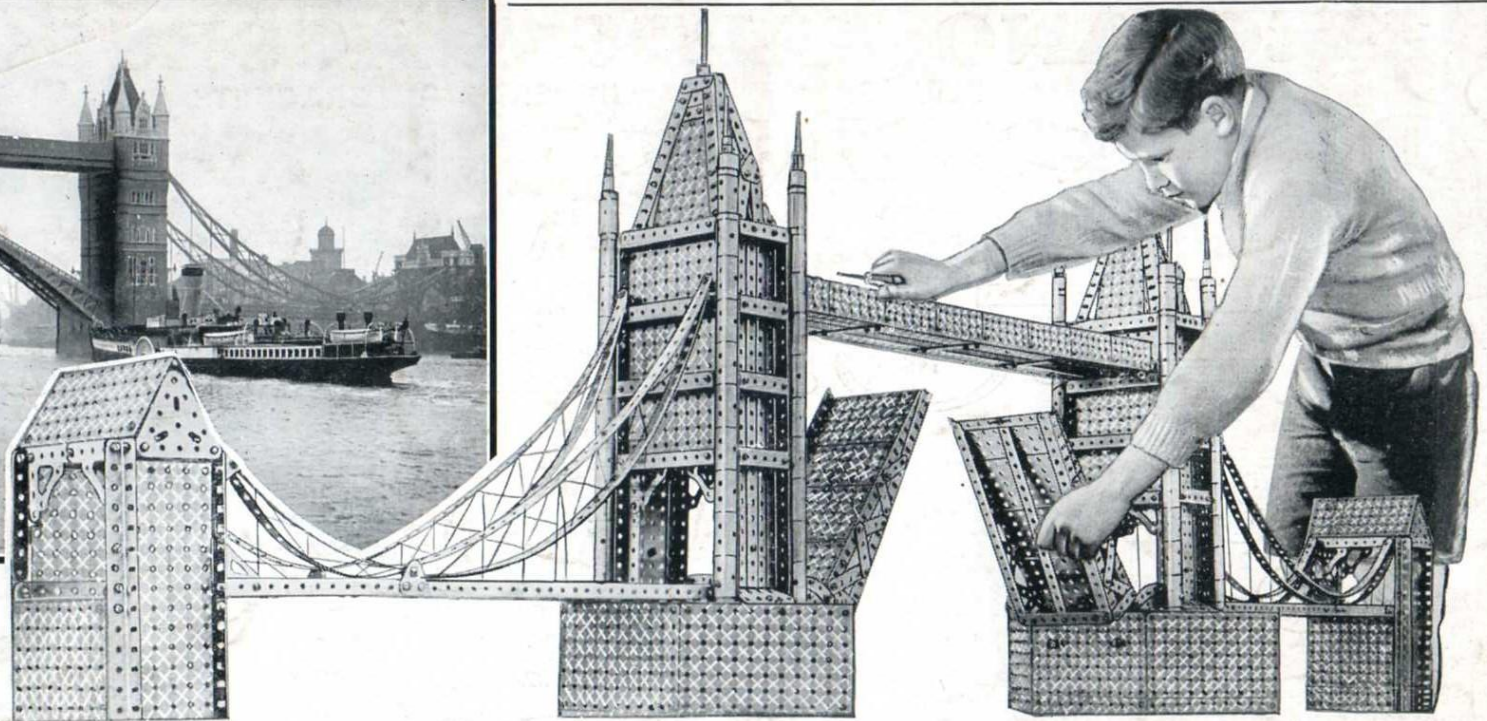


MISCELLANEOUS





The famous Tower Bridge, London, a strikingly realistic Meccano Model of which is shown on the right.



*Meccano
is the
finest
hobby
in the
world
for boys*

Meccano is more than a toy

It is important to remember that when a boy is playing with Meccano he is using engineering parts in miniature, and that these parts act in precisely the same way as the corresponding engineering elements would do in actual practice. No other system of model construction could, therefore, be correct. Other toys that attempt the same object by other methods must avail themselves of other constructive elements which are not correct engineering elements. Consequently, though a boy may succeed in building playthings with them, they are merely toys, and nothing else, and his mind, as regards proper mechanical construction and methods, is distorted instead of instructed. He learns wrong principles, and when his ambition tempts him to invent or construct more elaborate models he will be stopped by the deficiencies of his non-mechanical system.

MECCANO