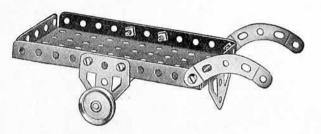


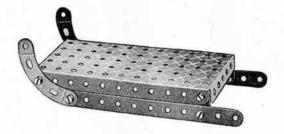
O.1 HAND CART



Parts required

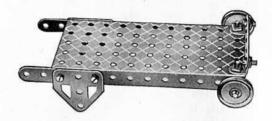
1 of No. 16	1 of No. 52	2 of No.126a
2 " " 22	2 " " 90a	2 " "155a
9 37	1 126	

O.2 SLEDGE



	Parts required	
2 of No. 2	8 of No. 37	2 of No. 90a
2 10	1 52	

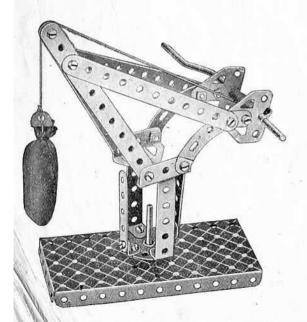
O.3 FLAT TRUCK



Parts required

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

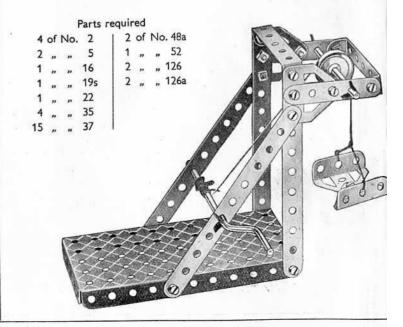
O.4 DOCKSIDE CRANE



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

O.5 SWING Parts required 4 of No. 2 2 ,, , 5 18 ,, , 37 2 ,, , 38 1 ,, , 48a 1 ,, , 52 2 ,, , 126 2 ,, , 126a

O.6 ELEVATOR

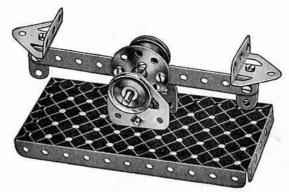


O.7 GARDEN SEAT



Parts required 4 of No. 2 2 , , 5 10 , , 37 2 , , 48a 1 , , 52

O.8 COUNTER SCALES



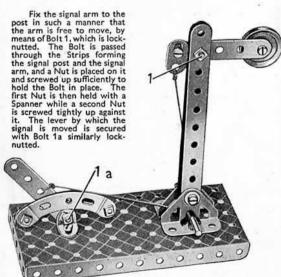
Parts required

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

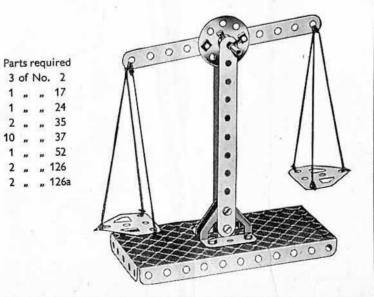
O.9 COSTER'S BARROW Parts required 4 of No. 2 | 2 of No. 22 | 2 of No. 90a | 2 m, 126 | 2 m, 126 | 3 m, 126

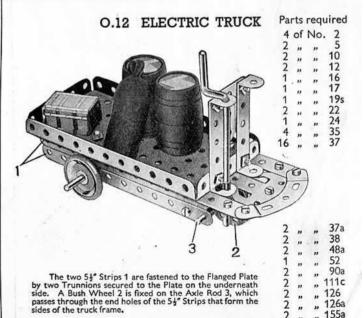
O.10 SIGNAL



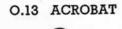


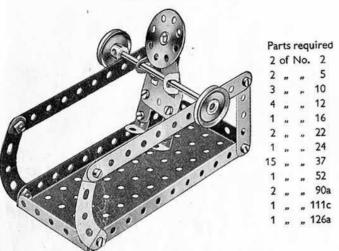
O.11 SCALES

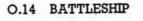


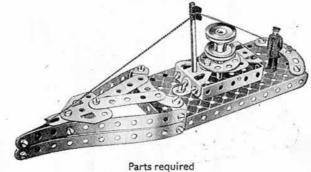


These Models can be built with MECCANO No. O Outfit



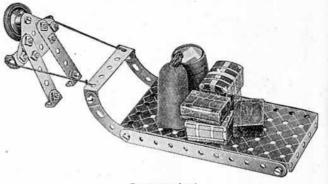






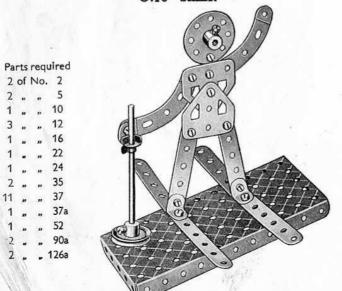
	Parts required	*
4 of No. 2 2 " " 5 3 " " 10 4 " " 12 1 " " 16 1 " " 17	2 of No. 22 1 " 24 3 " 35 18 " 37 1 " 37a 2 " 48a	1 of No. 52 2 " 90a 1 " 111c 2 " 126 2 " 126a

O.15 ESKIMO BOY AND SLEDGE

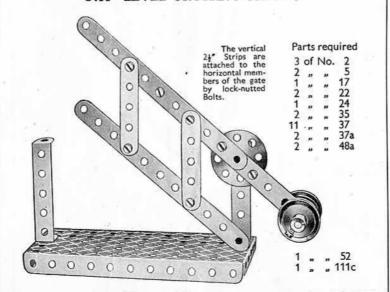


	Parts required	
2 of No. 2 I	1 of No. 22	2 of No. 90a
2 5	14 37	1 " "111c
2 - 10	1 " " 48a	1 " "126a
4 " " 12	1 " " 52	1 " "155a

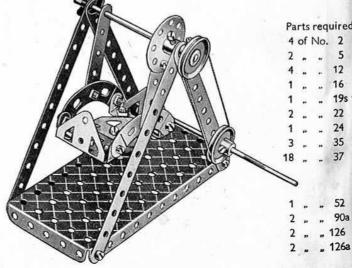
O.16 SKIER



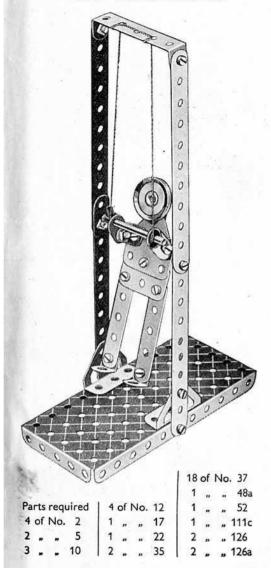
O.17 LEVEL CROSSING BARRIER

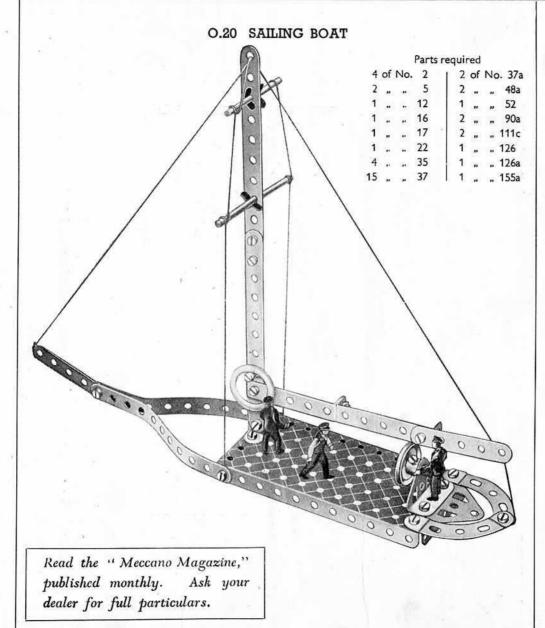


O.18 SWING-BOAT

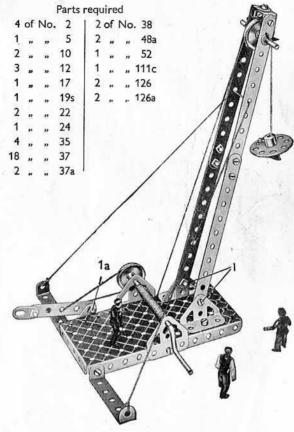


O.19 TRAPEZE ARTIST



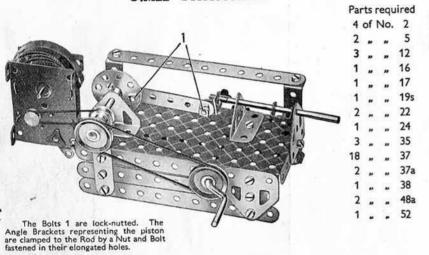


O.21 DERRICK CRANE



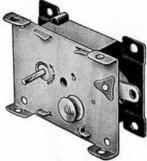
The construction of the model is commenced by bolting the Trunnions and Flat Trunnions that support the jib and Crank Handle respectively to the 5½" × 2½" Flanged Plate that forms the base of the model. The jib is then assembled and fastened to the Trunnions by means of the lock-nutted Bolts 1. The brake lever is a 2½" Strip extended by a Flat Bracket and is fastened to a second Flat Bracket bolted to the Flanged Plate, by means of a lock-nutted Bolt 1a. A length of Cord is fastened to the lever and then passed round the 1" Pulley on the Crank Handle.

O.M22 STATIONARY STEAM ENGINE



2 of No.126 2 . " 126a Magic Motor Parts required 3 of No. 2

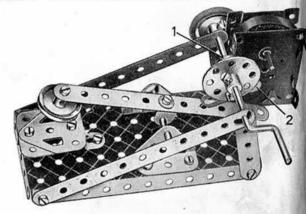
THE MECCANO MAGIC MOTOR



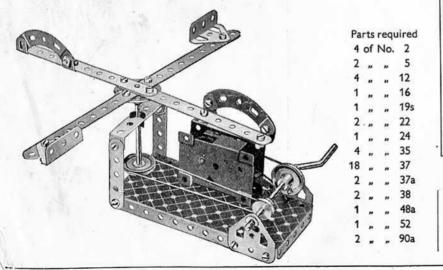
The greatest thrill in Meccano model-building is experienced when a model is set to work by means of a Meccano Magic Motor. The illustrations on this page show how the Magic Motor can be fitted without any difficulty to No. O Outfit models of various types. Fit the model you have just built with one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

2 of No.111c 2 " " 126 2 " "126a Magic Motor 1 of No. 52 2 , , 126 2 . " 126a

O.M23 MECHANICAL HAMMER



The 4" fast Pulley 1 is driven from the pulle 2 on the Magic Motor by the Driving Band supplie with the Motor.



O.M24 MERRY-GO-ROUND

O.M25 WINDMILL A Driving Band connects the pulley of the Magic Motor to a 1" Pulley fastened on the Crank Handle. The Crank Handle carries also a \$ "Pulley, which is connected by a second Driving Band with a further 1" Pulley fixed to the Rod on which the sails are mounted. 4 of No. 2

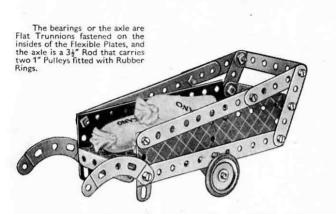
Parts required

1 of No. 10

" 111c 2 126 2 " "126a 1 " "155a Magic Motor

Magic Motor

1.1 PORTER'S TRUCK



Parts required

4 of No. 2 4 ,, ,, 5 2 ,, ,, 10 1 ,, ,, 16 2 ,, ,, 22

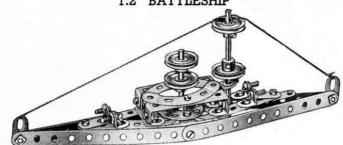
" " 22 " " 37 " " 38 " " 48a

1 ,, ,, 52 2 ,, ,, 90a 2 ,, ,, 126

2 " " 155a 2 " " 189

Parts required

1.2 BATTLESHIP



Parts required

4	of	No.	2	1 1	of	No.	17	-1	4	of	No.	. 37a	1	4	of N	10.	1110	
4	,,	,,	5	4	,,	,,	22		2	,,	,,	38	-1	1	,,	,,	125	
4	,,	,,	10	1	.,	,,	24	-	1	,,	,,	40		2	,,	,,	126	
8	,,	,,	12	3	,,	,,	35	- 1	2	,,	,,	48a	- 1	2	,,	,,	126a	
1	,,	**	16	24	"	"	37		2	"	,,	90a						

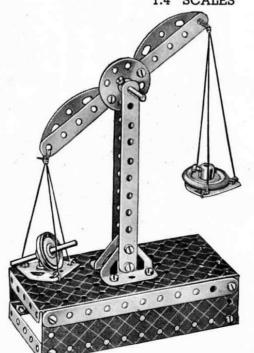
1.3 WINDMILL

4	of	No	. 2	
4	,,	'n	5	
1	,,	,,	10	
4	,,	,,	12	
1	,,	,,	16	
1	,,	,,	19s	
4	,,	,,	22	
1	,,	,,	24	
3	,,	,,	35	
24	,,	,,	37	
4	,,	,,	38	
1	,,	,,	40	
2	,,	,,	48a	
1	,,	,,	52	
2	,,	,,	90a	
2	,,	,,	126	
2	,,		126a	

1 " "155a

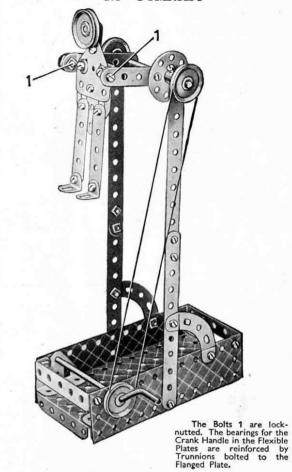
The sails are gripped on the 3½" Rod by the 1" Pulley (with tyre) at the front and another 1" Pulley at the back of the sails. The Pulleys are pressed against the faces of the sails and locked on the Rod.

1.4 SCALES



Parts required
4 of No. 2
2 " " 5
2 " " 17
2 " 22
1 " 24
19 " 37
1 " 38
1 " 40
2 " 48a
1 " 52
2 " 90a
1 " 111c
2 " 126
2 " 126a
1 " 155a
2 " 189

1.5 GYMNAST



Parts required

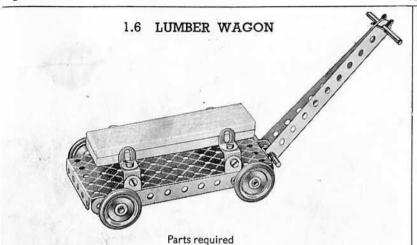
4 of No. 2		1 1	1 of No. 24				1 of No. 52				
4	,,	,,	5	2	"	,,	35	2	,,	,,	90a
1	,,,	,,	10	24	,,	,,	37	4	,,	" 1	11c
4	,,	,,	12	4	,,	,,	37a	2	,,	" 1	26
1	,,,	,,	16	4	,,	,,	38	2	,,	" 1	26a
1	,,	,,	19s	1	,,	,,	40	2	,,	-	
4	,,	,,	22	2	,,	"	48a	S			

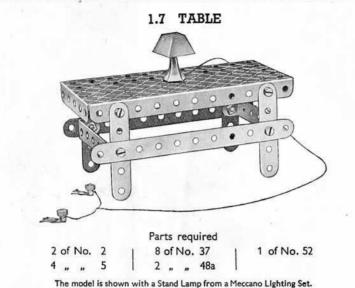
4 of No. 2

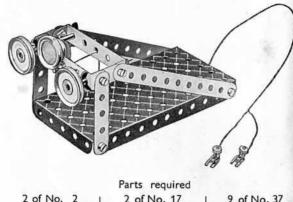
4 . . 10

2 of No. 2

These Models can be built with MECCANO No. 1 Outfit







1.8 BUFFER STOPS

2 of No. 2 2 of No. 17 9 of No. 37 2 " " 22

The model is fitted with a Spotlight from a Meccano Lighting Set.



4 of No. 35

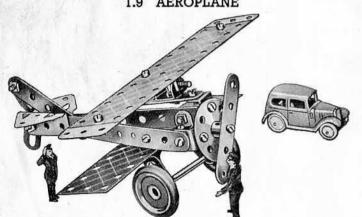
14 " " 37

1 of No. 52

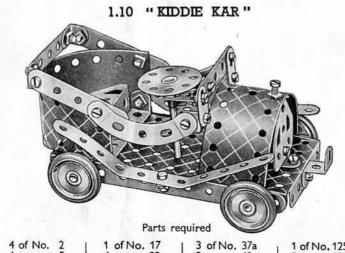
4 " "155a

2 of No. 16

2 " " 17



Parts	required	
1 of No. 17	2 of No. 37a	2 of No.126
2 " " 22	1 " " 38	2 " "126a
1 " " 24	3 " "111c	2 " "155a
17 " " 37	1 " " 125	2 " "189



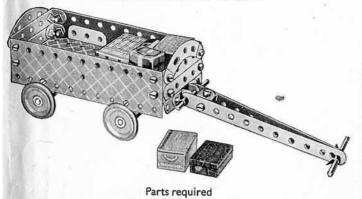
4 of No. 2	1 of No. 17	1 3 of No. 37a	1 of No. 125
4 " " 5	4 " " 22	2 " " 48a	2 126
3 " " 10	1 " " 24	1 " " 52	1 " " 126a
7 " " 12	1 " " 35	2 " " 90a	4 " "155a
2 " " 16	24 " " 37	2 " "111c	2 " "189

Two Trunnions overlapped one hole, and fastened to the Flanged Plate by an Angle Bracket, form the seat.



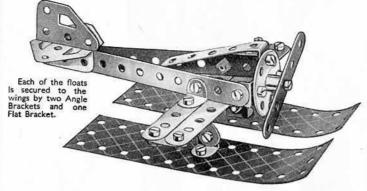
A good example of the use of the Meccano Lighting Set.

1.12 BAGGAGE TRUCK



of N	Vo.	2	1 4	of	No	. 35	1 2 0	f No. 90a
27	,,	5	24	,,	,,	37	1 .	111c
"	,,	12	1	,,	,,	37a	2 .	126
,,,	,,	16	2	,,	"	38	2 ,	" 126a
**	,,	17	2	,,,	,,,	48a	4 ,,	" 155a
,,		22	1	-	2007	52	2	189

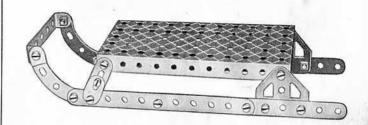
1.13 RACING SEAPLANE



Parts required

3	of	No	. 2	1	1	of	No	. 24	1 2	of N	No	:111
3	,,,	,,,	5	- 1	19	22	22	37	2	,,	,,	126
4	,,	"	10	- 1	1	,,	**	37a	1	,,,	,,	126
8	,,	22	12	- 1	1	20	*	48a	2	,,	,,,	189

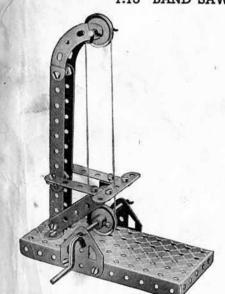
1.14 SLEDGE



Parts required

4	of	No.	2	- 1	1	of I	No.	48a	2 of No.126a
4	,,	,,	10		1	,,	,,	52	
20	,,	,,	37		2	,,	,,	90a	/

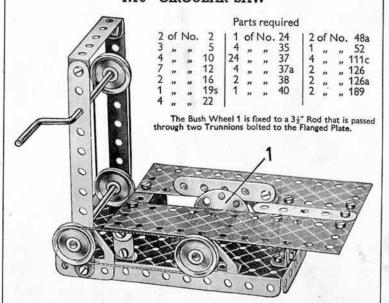
1.15 BAND SAW



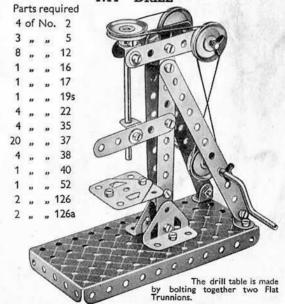
Parts required 2 of No. 2

2 " "126a

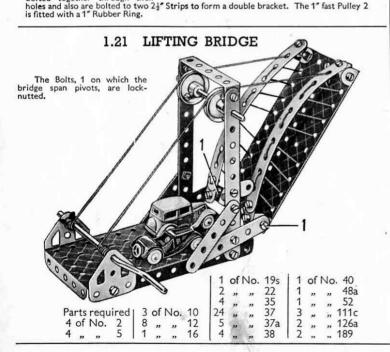
1.16 CIRCULAR SAW



1.17 DRILL

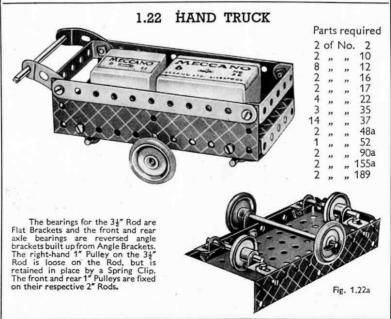


1.18 TRIP HAMMER Parts required 4 of No. 2 | 17 of No. 37 3 , ", 5 | 1 , ", 48a 2 , ", 12 | 1 , ", 52 1 , ", 17 | 2 , ", 111c 1 , ", 19s | 1 , ", 125 4 , ", 22 | 2 , ", 126a 4 , ", 35 | 1 , ", 155a 1 , ", 189 Two Angle Brackets 1 are bolted together through their

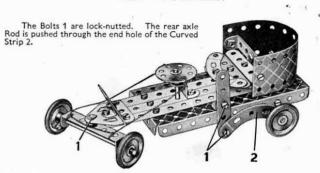


The top of the deck-house consists of three 2½" Strips bolted first to Flat Brackets and then to a Trunnion. The near side is held in place by an Angle Bracket. The other side consists of a 2½" X½" Double Angle Strip bolted to the Trunnion. Parts required

3 of No. 2 | 4 of No. 22 | 1 of No. 52 | 2 of No.126a 4 ,, , , 5 | 4 ,, , 35 | 1 ,, , 57c | 2 ,, , 189 8 ,, , 10 | 23 ,, , 37 | 2 ,, , , 90a 8 ,, , 12 | 4 ,, , 38 | 2 ,, , , 111c | 1 ,, , 16 | 1 ,, , 40 | 1 ,, , 125 | 2 ,, , , 17 | 2 ,, , , 48a | 2 ,, , , 126

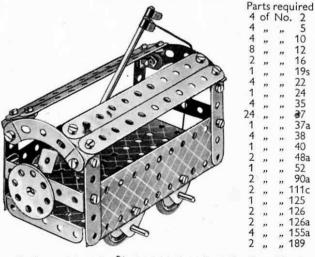


1.20 COASTER



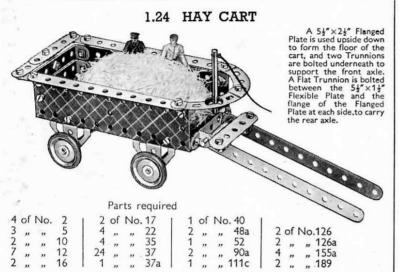
			Pa	irts	req	uired	+5			
of I	No.	2	1 1	of	No.	35	1 2	of	No. 90a	1
,,	,,	5	20	,,	,,	37	2	,,	" 1110	
,,	,,	12	4	,,	,,	37a	1	,,	" 125	
,,	,,	16	4	,,	,,	38	2	,,	,, 126	
"	,,	1/	1 1	,,	,,	40	1 2	,,	" 126a	
"	"	22 24	1 1	"	"	48a	1 4	"	" 155a	ı
"	"	27	1 1	27	,,,	52	1 1	"	" 189	

1.23 TROLLEY BUS



The Reversed Angle Bracket that holds the trolley is fixed in position by a Bolt passed through the slot in the Bracket, then through two Washers, and into the boss of the Bush Wheel.

These Models can be built with MECCANO No. 1 Outfit



1.25 MOTOR LORRY



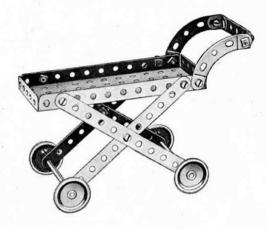
The $2\frac{1}{2}$ " Curved Strips representing the rear mudguards are each fastened to the sides by a $\frac{3}{8}$ " Bolt and Nut, with a Spring Clip between the mudguards and the $5\frac{1}{2}$ " Strip to form a distance piece.

Parts required

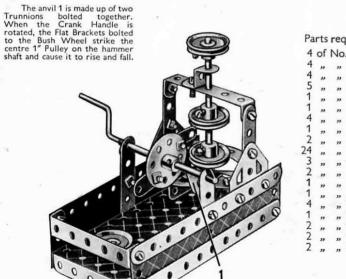
4	of	No.	2	1	of	No	. 17	119	of	No	. 37	12	of	No. 90a	2	of	No	.126a
4			5	4			22	4		-	37a	13		111c	4			155a
3	,,	,,	12	1	,,	,,	24	2	,,	,,	48a	1	,,	" 125 " 126	2	,,	,,	189
2	,,	,,	16	2	,,	,,	35	1	,,	,,	52	2	,,	,, 126				

1.26 HOSPITAL TROLLEY

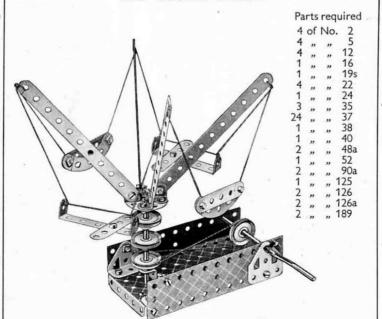




1.27 STAMPING MILL

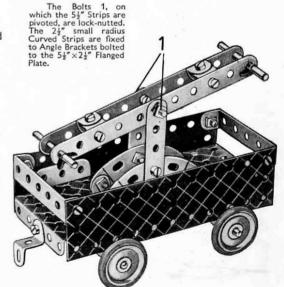


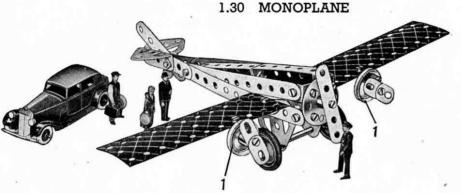
1.28 FLYING BOATS



1.29 HAND CAR







The fast Pulleys 1 are fixed to Angle Brackets fastened to the wing by * Bolts, which are passed through the Angle Brackets, and held in the bosses of the Pulleys. The set screws of the Pulleys hold also a second Bolt on which the propellers are mounted.

Parts required 4 of No. 2 4 " " 5 4 " " 10 8 " " 12 1 " " 16 4 " " 22 1 " " 24 2 " " 35 20 " " 37 3 " " 37a 2 " 48a 1 " 57c 4 " " 111c 2 " 126 2 " " 126a 2 " " 155a 2 " " 189

1.31 FLOATING CRANE

		F	arts re	quired
4	of	No.	2 1	2 of No. 90a
4			5	3 ,, ,, 111c
4	,,	,,,	10	1 , , , 125
ż	"	,,,	12	2 " " 126
'n	"	,,,	16	2 " " 126a 2
2	"	"	17	3
1	"	"	19s	
1	,,	"	22	
4	,,	"		000
- 1	,,,	**	24	The Cord 1 passes over the Rod at the jib
-4	,,,	"	35	head and is fastened to the Crank Handle 2. The
24	,,	,,	3/	other Cord 3 passes over a Rod mounted about
4	,,		37a	halfway along the jib, and is secured to Rod 4, which has a 1" Pulley at the other end to form a
4	,,	,,	38	handle. The Cord tied to the # Bolt in the
1			40	Trunnions is taken around the 3\frac{1}{2} Rod journalled
2			48a	above the Crank Handle, and is used for luffing
1			52	the jib by turning the 1" Pulley at the rear end of the Rod. Two Angle Brackets and a Flat Bracket
1	,,	"	57c	form the hook on Cord 3.

Parts required 4 of No. 2 4 " " 5

4 of No. 2
4 " " 5
1 " 10
6 " " 12
1 " 16
1 " " 17
1 " 17
1 " 24
3 " 35
24 " " 37
5 " 37a
1 " 40
2 " 48a
1 " 52
2 " 90a
4 " 111c
1 " 125
2 " 126a
1 " 155a
2 " 189

The Bolts 1 are lock-nutted, and the Angle Bracket at the lower end of the 2‡" Strip has a 4‡" Rod in its elongated hole, where it is held by means of two Spring Clips.

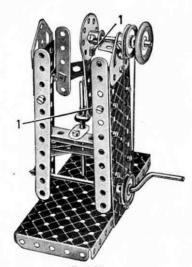
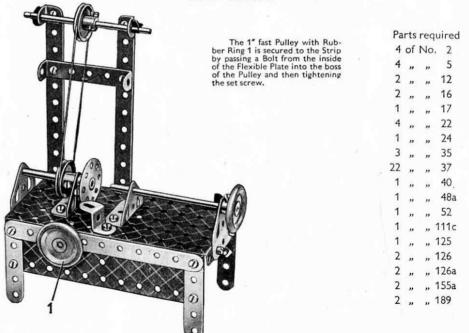
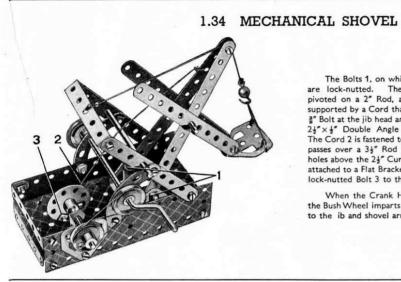


Fig. 1.32a

1.33 LATHE

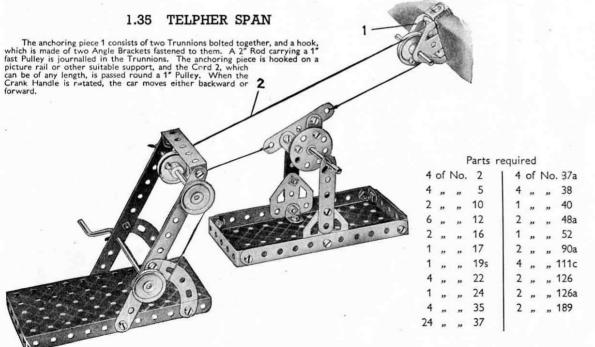


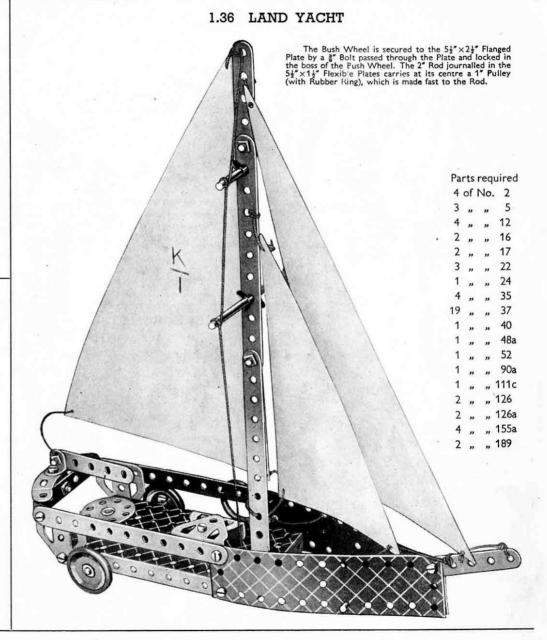


The Bolts 1, on which the jib pivots, are lock-nutted. The shovel arm is pivoted on a 2" Rod, and the shovel is supported by a Cord that passes over the #" Bolt at the jib head and is fastened to a 24"x4" Double Angle Strip as shown. The Cord 2 is fastened to the jib and then passes over a 34" Rod journalled in the holes above the 24" Curved Strips, and is attached to a Flat Bracket fastened by the lock-nutted Bolt 3 to the Bush Wheel.

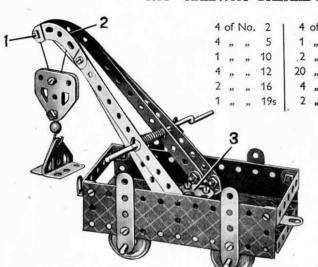
When the Crank Handle is rotated, the Bush Wheel imparts a digging motion to the ib and shovel arm.

4	,,	,,	uirec . 2 5 10 12 16 17 19s 22 24 35 37 37a 38 40 48a 52 57c 90a 111c 125 126a 125a 126a 125a 126a 125a 126a 127a 1
1	,,	,,	10
2	,,	,,	12
	,,	,,	16
2	,,	,,	17
	,,	"	19s
3	,,	,,	22
1	,,	,,	24
4	,,	,,	35
+	,,	,,	37
1	,,	,,	37a
1	"	,,	38
١.	,,	,,	40
2	,,	,,	48a
1	,,	,,	52
1	,,	,,	57c
2	,,	,,	90a
4	,,	,,	111c
1	,,	,,	125
2	,,	,,	126
2	,,	"	126a
1	,,	,,	155a
2	,,	,,	189





1.37 RAILWAY BREAKDOWN CRANE



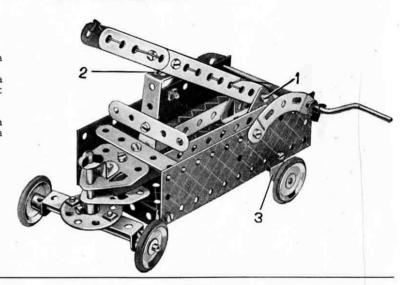
The hoisting cord is secured to the Crank Handle, and then led over the $\frac{a}{a}$ " Bolt 1. It is then passed through the pulley block and fastened to the jib at 2. The jib is attached to the Bush Wheel 3 by means of Angle Brackets and the complete unit is pivoted as follows. A $\frac{a}{a}$ " Bolt is passed through the $5\frac{1}{2}$ " $\times 2\frac{1}{2}$ " Flanged Plate, and is secured in the boss of the Bush Wheel by its set screw.

1.38 FIRE ENGINE

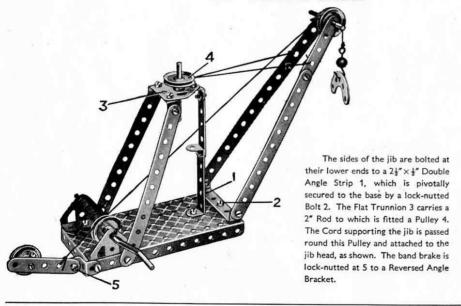
Parts required

4	of	No.	2	1 2	of	No	. 38
4	,,	,,	5	1	,,	,,	40
4 3 5 2 1 1	,,	,,	10	2	,,	,,	488
5	,,	,,	12	1	,,	,,	52
2	,,	,,	16	1 2 2 2	,,	,,	908
1	,,	,,,	17	2	,,	,,	1110
	,,	,,	19s	1	,,	,,	125
4	**	.,	22	2	,,	,,	126
1	**	,,	24	2	,,	,,	126
4	,,	,,	35	2 2 4 2	,,	,,	1552
24	"	,,	37	2	,,	,,	189
4	,,	,,	37a .				

Bolts 1 are lock-nutted. The sides of the ladder are held together by two Angle Brackets 2, which are bolted together to form a double bracket. The rear axle bearings 3 are Flat Brackets bolted inside the flange of the Flanged Plate. The Cord from the Crank Handle is tied in the fourth hole up the ladder so that when the Handle is turned it causes the ladder to lift.



1.39 DERRICK CRANE



Parts required
4 of No. 2
4 " " 5
3 " 12
2 " 17
1 " 19s
4 " 22
4 " 35
19 " 37
4 " 37a
1 " 40
2 " 48a
1 " 52
1 " 57c
2 " 90a
1 " 111c
1 " 125
2 " 126
1 " 126a

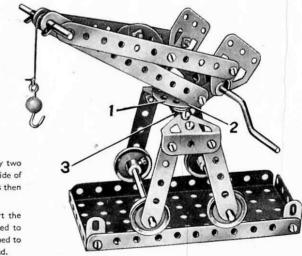
Parts required

4	of	No.	2	20	of	No	. 37	
4	,,	,,	5	4	,,	,,	38	
4	,,	,,	10	1	,,	,,	40	
2	,,	,,	12	1	,,	,,	48a	
2	,,	,,	16	1	,,	,,	52	
1	,,	,,	17	1	,,	,,	57c	
1	,,	,,	19s	2	,,	,,	90a	
4	,,	,,	22	1	,,	,,	111c	
1	,,	,,	24	2	"	,,	126	
4			35	2	1120		126a	

The sides of the jib are secured to the Bush Wheel 1 by two Angle Brackets 2. A $\frac{a}{a}$ " Bolt is passed from the underneath side of Strip 3 into the boss of the Bush Wheel 1 and the set screw is then tightened.

The Flat Trunnions at the lower end of the jib support the Crank Handle, which also passes through Flat Brackets bolted to the Angle Brackets 2 on the Bush Wheel 1. The Cord is fastened to the Crank Handle, and passes over the 2" Rod at the jib head.

1.40 TRAVELLING CRANE

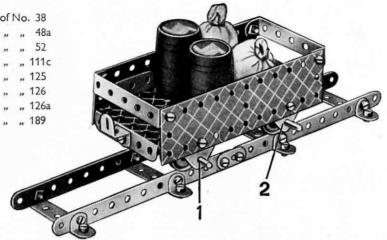


1.41 RAILWAY TRUCK

Parts required

4	of	No	. 2	4	of	No	. 38
4	,,	,,	5	2	,,	,,	48a
2	,,	,,	10	1	,,	,,	52
8	,,	,,	12	4	,,	,,	111c
2	,,	,,	16	1	,,	,,	125
4	,,	,,	22	2	,,	,,	126
24	,,	,,	37	2	,,	,,	126a
4	"	,,	37a	2	,,	,,	189

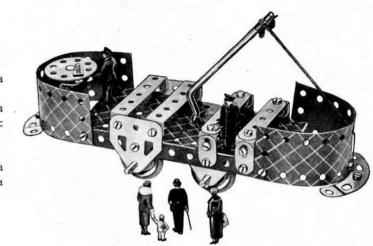
The axle bearings 1 are Flat Trunnions, and Trunnions are used for the bearings 2, which fit underneath the Flanged Plate in the manner shown in the underneath view of the model Side Tipping Wagon (1.M46).



1.42 OPEN TRAMCAR

Parts required

				, cquii,			
2	of	No.	5	1 1	of	No.	40
4	"	.,	10	2	,,	,,	48a
7	,,	**	12	1	,,	,,	
2	,,	,,	16			.,	
1	,,	,,	19s	4	.,	,,	1110
4	,,	,,	22	1	,,	,,	125
1	,,	,,	24	2	,,	,,	126
4	,,	,,	35	2	,,	,,	126a
24	,,	,,	37	4	,,	,,	155a
3	,,	,,	37a	2	,,	.,	189



1.43 PITHEAD GEAR

Parts required

4	of	No.	2	1	4	of	No	. 38	
4	,,	,,	5		1	,,	,,	40	
4	,,	,,	10		2	,,	,,	48a	
2	,,	,,	12		1	,,	,,	52	
1	,,	,,	16		1	,,	,,	90a	
1	,,	,,	19s		4	,,	"	111c	
4	,,	,,	22		2	,,,	,,	126	
4	,,	,,	35		2	,,,	,,	126a	
20	,,	"	37	*	2	,,	,,	189	
4	,,	,,	37a						

A Cord is taken from each side of the lift cage over the 1° Pulleys and secured to each end of the Crank Handle. The Cords must both be the same length otherwise the lift will tilt.

The two guides for the lift consist of two pieces of Cord fastened to the Washers 1. The Cords are then passed through holes in the Double Angle Strip, through two corresponding holes in the lift cage 2, and then through the two corresponding holes in the Flanged Plate. Two more Washers are tied to the Cords beneath the Flanged Plate to keep the Cords tight. The lift cage 2 is made up of two Trunnions.

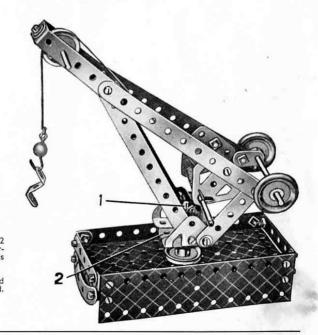
1.44 DOCKSIDE CRANE

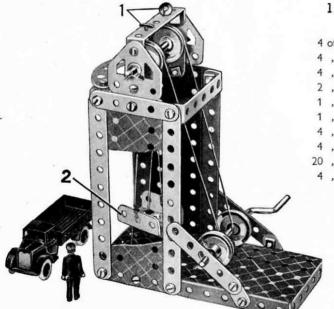
Parts required

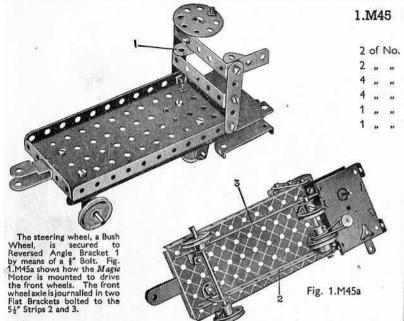
						-		
4	of	No.	2	1	4	of	No	. 38
4	,,	,,	5		1	,,	,,	40
2	,,	,,	10		2	,,	,,	48a
4	,,	,,	12		1	,,	,,	52
1	,,	,,	16		1	,,	,,	57c
2	,,	,,	17		2	,,	,,	90a
1	,,	,,	19s	1	4	,,	,,	111c
4	,,	,,	22		1	,,	,,	125
1	,,	,,	24		2	,,	,,	126
4	,,	,,	35		2	,,	,,,	126a
24	,,	,,	37		2	,,	,,	155a
4	,,	,,	37a	1	2	,,	,,	189

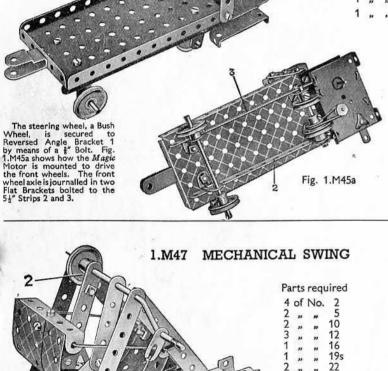
The Rod 1 passes through the bosses of the Bush Wheel 2 and the 1" Pulley, and is held in position by a Spring Clip underneath the Flanged Plate. The set screw of the Bush Wheel 2 is tightened on the Rod.

The $5\frac{1}{2}$ " Strips that form the jib are extended at the head by $2\frac{1}{2}$ " $\times \frac{1}{2}$ " Double Angle Strips, in which a 2" Rod is journalled.









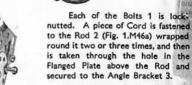


Parts required

			oqu.		-		
of	No.	2	1 .	1	of	Vo	. 22
,,	,,	5	1	1	**	**	24
,,	,,	10	18	3	,,	,,	37
,,	,,	12		2	,,	,,	48a
,,	,,,	16		١	,,	**	52
,,	,,	17		1		,,	111c
				1		,,	125
				1	,,,	,,	126
				1	Ma	gic	Motor

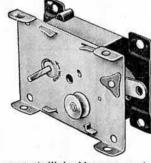
1.M46 SIDE TIPPING WAGON

Parts required 2 of No. 90a " " 111c " 126a " 155a " 189 1 Magic Motor



By turning the Bush Wheel the container is tipped sideways.

THE MECCANO MAGIC MOTOR

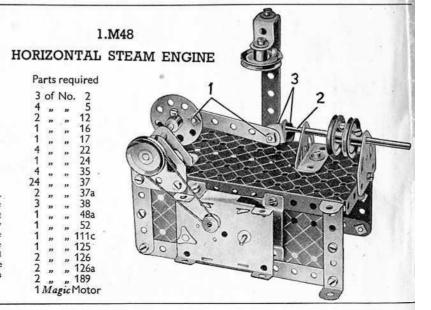


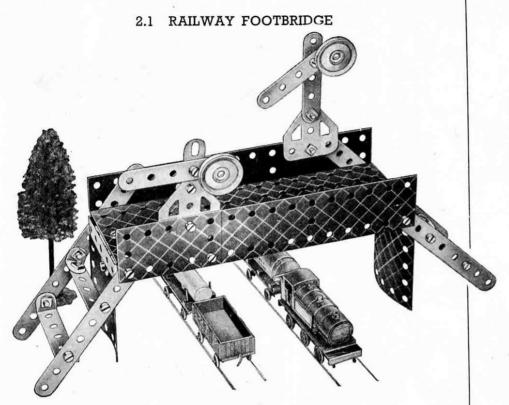
The greatest thrill in Meccano model-building is experienced when a model is set to work by means of a Meccano Magic Motor. The illustrations on this page show how the Magic Motor can be fitted without any difficulty to No. 1 Outfit models of various types. Fit the model you have just built with one of these wonderful Motors, and enjoy the fun of watching it work just like the real thing!

The left-hand 21" Strip that supports the swing is connected to the Crank Handle by passing the set screw of the 1" Pulley Wheel 2 through the hole in an Angle Bracket bolted to the Strip and then into the boss of the Pulley, Bolt 1 on the Bush Wheel is fitted with lock-

1 Magic Motor

The Bolts 1 are lock-nutted. The Rod 2 is secured to an Angle Bracket by means of two Spring Clips 3. The model is driven by a Magic Motor bolted to the 5½"×2½" Flanged Plate. The pulley of the Motor is connected to a 1" fast Pulley on the crankshaft of the engine by a Driving Band.





Parts required

4	of	No.	2	2	of I	No.	22	1	of I	Vo	. 52	2	of N	10.	188
											111c				
2	,,	,,	10	2	,,	,,	37a	2	,,	,,	126	1	,,	,,	190
6	,,	,,	12	2	,,	,,	48a	2	,,	,,	126a	2	,,	,,	200

The span of the bridge is a $5\frac{1}{2}"\times2\frac{1}{2}"$ Flanged Plate, extended by a $2\frac{1}{2}"\times2\frac{1}{2}"$ Flexible Plate. Trunnions are bolted to each end of the span, and have $1\frac{1}{12}"$ radius Curved Plates fastened to them. The sides of the approach stairways are $5\frac{1}{2}"$ Strips. They are joined across by $2\frac{1}{2}"\times\frac{1}{2}"$ Double Angle Strips and $2\frac{1}{2}"$ Strips fitted with Angle Brackets at each end.

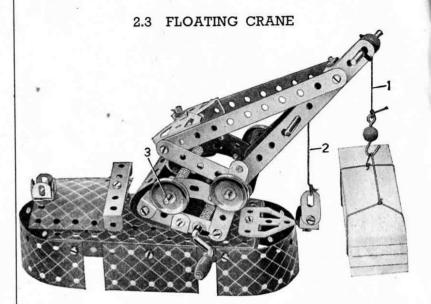
The signals are supported on Flat Trunnions bolted to the sides of the bridge. The smaller of the two signal posts is formed by two Flat Brackets, and the larger one is a 2½" Strip. The signal arms are 2½" Strips bolted to the posts in the second holes from one end. They are fitted at their shorter ends with 1" Pulleys, representing the spectacles, which are held in place by a Bolts passed through the Strips and inserted in their bosses.

2.2 LAWN MOWER

The "cutter" is made by bolting an Angle Bracket at each end of a Reversed Angle Bracket and then sliding an Axle Rod through the three holes of the Brackets. The two Pulleys 2 are fixed to the Rod and pushed tightly against the "cutter" to make it revolve with the Rod as the wheels revolve. The wheels are 1" Pulleys fitted with Rubber Rings.

Parts required

o. 2	1 20	of N	0.	
,, 5	1	,,	,,	125
,, 10	2	29	,,	126
,, 12	2	,,	,,	155a
,	2	"	"	200
,, 22	1			
,, 3/				
,, 38				
	o. 2 , 5 , 10 , 12 , 16 , 22 , 37 , 38	, 5 1 , 10 2 , 12 2 , 16 2	, 5 1 , , 10 2 , , 12 2 , , 16 2 ,	, 5 1 , , , , , , , , , , , , , , , , , ,

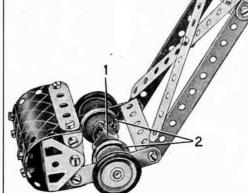


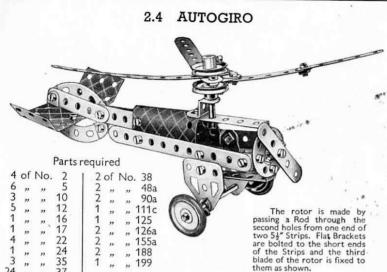
Parts required

4	of	No.	2	, 4	of	No.	22	2	of I	Vo.	48a	11	of N	10.	1268
6	,,	,,	5	1	,,	,,	24	1	,,	,,	52	1	,,	,,	176
3	,,	,,	10	4	,,	,,	35	1	,,	,,	57c	2	,,	"	188
8	,,	,,	12	29	,,	,,	37	2	,,	,,	90a	2	,,	,,	189
2	,,	,,	16	4	,,	,,	37a	4	,,	,,	111c	1	"	"	199
2	,,	,,	17	4	,,	,,	38	1	"	,,	125	1	"	"	200
1	,,	,,	19g	1	"	22	40	2	"	"	126				

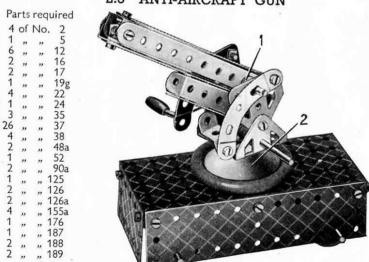
The jib consists of $5\frac{1}{2}$ " Strips and $2\frac{1}{2}$ " Strips. At its upper end these are joined across by Angle Brackets, and at its lower end by Trunnions. Each side of the Jower part of the crane consists of $2\frac{1}{2}$ " Strips and small radius Curved Strips, the two sides being connected by $2\frac{1}{2}$ " $\times\frac{1}{2}$ " Double Angle Strips. The jib is pivoted to this structure by means of a $3\frac{1}{2}$ " Rod, which carries at each end a 1" Pulley. The Cord 1 fitted with a Loaded Hook, is passed over a 2" Rod held in place in the jib by means of Spring Clips, and is then wound round the Crank Handle.

The Cord 2 passes over a Rod held in place in the jib by an Anchoring Spring, and is then wound round the Rod that forms the pivot for the jib. A third Cord is tied to a Bolt fastened in the two Trunnions at the base of the jib, and is wound round Rod 3. This Cord controls the luffing motion of the crane. A 3" Bolt passes through the Flanged Plate and is held by a set screw in the boss of the Bush Wheel to which the jib is fastened. The Bush Wheel is bolted to the Double Angle Strip below the Rod 3. The roof of the cabin is bolted to a ½" Reversed Angle Bracket fixed to the Flanged Plate.



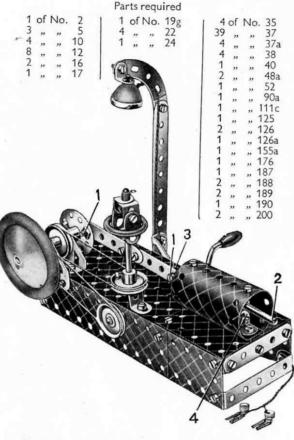


2.5 ANTI-AIRCRAFT GUN



One end of a piece of Cord is fastened to the Crank Handle. It is wound round the Handle a few times and its other end is then fastened to the end of the gun. The two Trunnions are bolted to a Bush Wheel fixed on a 2" Rod that passes through the Road Wheel 2 and the Flanged Plate and is held in place by an Anchoring Spring. The Spring Clips at 1 space the gun barrel from the Flat Trunnions.

2.6 GAS ENGINE



The bearings for the Rod representing the crankshaft are a Flat Trunnion and a Trunnion. The crankshaft carries a Road Wheel and a 1" Pulley at one end, a second 1" Pulley between the bearings, and a Bush Wheel at its other end.

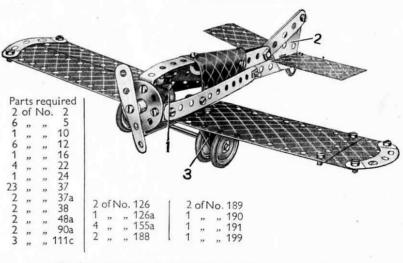
The connecting rod is fastened to the Bush Wheel and to an Angle Bracket by a lock-nutted Bolt 1. The Rod 2 is held in the Angle Bracket 3 by means of Spring Clips, one on each side. An Angle Bracket 4, carrying a Flat Bracket, is bolted inside the cylinder and a similar arrangement is fitted at the other end. These form bearings for the Rod 2.

The model is operated by the Crank Handle, which carries also a 1" Pulley connected to one of the 1" Pulleys on the crankshaft by a belt of Cord. A second Cord drives the governor, which is mounted on a $3\frac{1}{2}$ " Rod journalled in the $5\frac{1}{2}$ " × $2\frac{1}{4}$ " Flanged Plate and a Reversed Angle Bracket.

The model is fitted with a Spotlight from the Meccano Lighting Set, current being supplied by a 4.5-volt pocket-lamp battery housed in the base of the model.

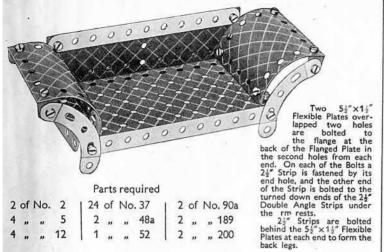


2.8 LOW WING MONOPLANE

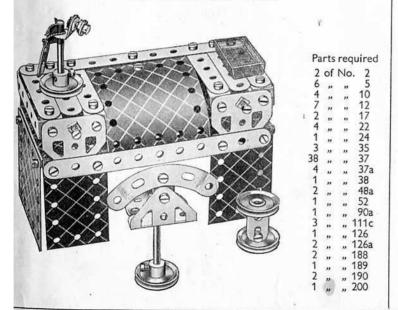


The pilot 1 (Aeroplane Constructor Part No. P100) is not included in the Outfit, but may be bought separately. The fin 2 is a Flat Trunnion, and it is clamped between the two 2½" Strips. The bearings 3 for the axle of the landing wheels are Trunnions, bolted to the wings. The wings are attached to the fuselage by Angle Brackets.

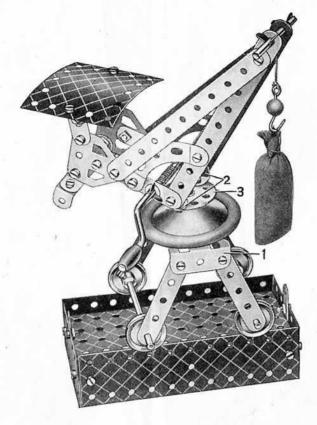
2.9 SETTEE



2.10 ROLL TOP DESK



2.11 TRAVELLING CRANE

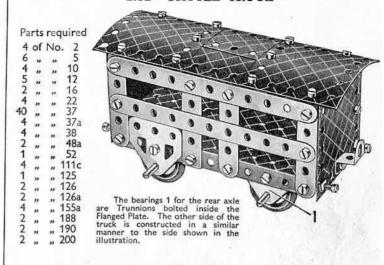


Parts required

4	of	No.	2	1 1	of	No	. 19g	1 3	of	No.	38	1 2	of	No	.111c
6	,,	,,	5	4	,,	,,	22	1	,,	,,	40	2	,,	,,	126
4	,,	,,	10	1	,,	,,	24	2	,,	,,	48a	2	,,	21	126a
6	,,	,,	12	4	"		35	1	,,	,,	52	1	,,		176
2	n	"	16	38	,,,	n	37	1	,,	20	57c	1	"	"	187
2	.,,	- 10	1/	1 2	n	n	3/a	2	,,		90a		"	n	188
				2 01	N	0. 1	89	1	1	of N	lo. 20	0			

A 2" Rod is secured in the boss of the Bush Wheel 3. It then passes through the Road Wheel and through the centre of a $2\frac{1}{2}$ " \times $\frac{1}{2}$ " Double Angle Strip bolted between the two Trunnions 1. A Washer and a Cord Anchoring Spring are pushed on to the Rod to hold it in position. The crane jib is attached to the Bush Wheel by the Angle Brackets 2.

2.12 CATTLE TRUCK

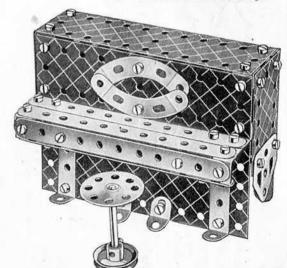


2.13 PIANO

Parts required

1 ,, ,, 190

A $5\frac{1}{2}$ " $\times 2\frac{1}{2}$ " Flanged Plate is used for the upper part of the back and to each end of this a $2\frac{1}{2}$ " Strip is bolted to form the rear legs.



155a

2.14 MOTOR VAN Each of the side members of the chassis consists of two $5\frac{1}{2}$ " Strips overlapped, and they are joined across at the centre by two $2\frac{1}{2}$ " Strips, one of which is shown at 2, and a $2\frac{1}{2}$ " $2\frac{1}{2}$ " Double Angle Strip. The $2\frac{1}{2}$ " Strip 2 and the Double Angle Strip are bolted to a Flat Trunnion, and between them is a second $2\frac{1}{2}$ " Strip, which is fastened at each end to the chassis by means of Angle Brackets.

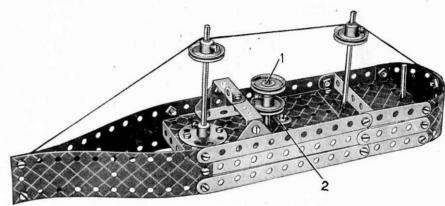
The Plate 1 is fastened to an Angle Bracket that is bolted to Strip 2. The body is fixed to the chassis by a Double Angle Strip and an Angle Bracket.

	140	0. 2
,,	,,	5
,,	,,	10
,,	,,	12
,,	,,	16
,,	,,	22
,,	,,	35
,,	,,	37
,,	,,	38
,,	,,	48a
,,	,,	52
,,	,,	90a
,,	,,	126
,,	,,	126a
,,	,,	155a
,,	,,	188
,,		189
		190
		191
	" " " " " " " " " " "	" " " " " " " " " " " " " " " " " " "

Parts required 4 of No. 2

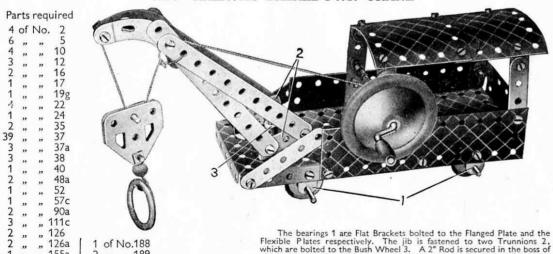
1 " "190

2.16 STEAMSHIP

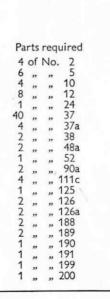


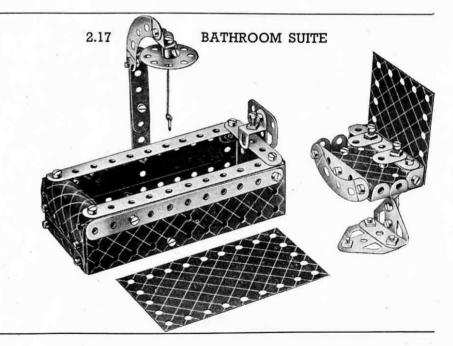
The deck of the model is a $5\frac{1}{2}$ " × $2\frac{1}{2}$ " Flanged Plate extended by a $2\frac{1}{2}$ " × $2\frac{1}{2}$ " Flexible Plate. A $2\frac{1}{2}$ " × $\frac{1}{2}$ " Double Angle Strip fitted with an Angle Bracket represents the bridge, and it is supported by two Trunnions bolted to the deck. The funnel consists of a Rod 1 fitted with two 1" fast Pulleys. The Rod passes through the hole in a Reversed Angle Bracket 2 and then through the Flanged Plate.

2.15 RAILWAY BREAKDOWN CRANE



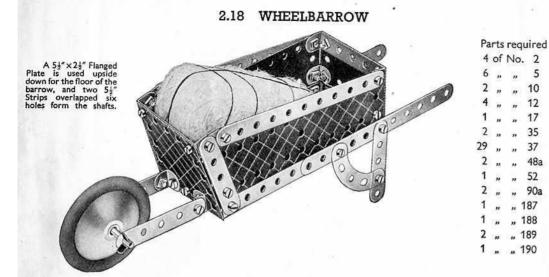
the Bush Wheel 3. It then passes through a hole in the Flanged Plate, and is held in position by a Spring Clip underneath the Plate.

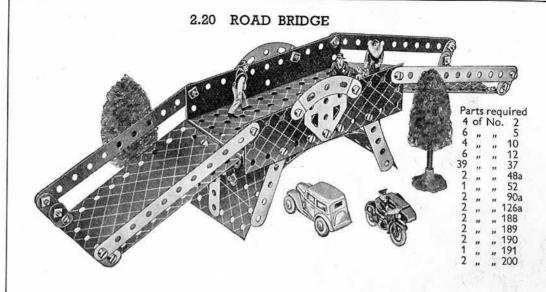




4 of No. 2

" 187



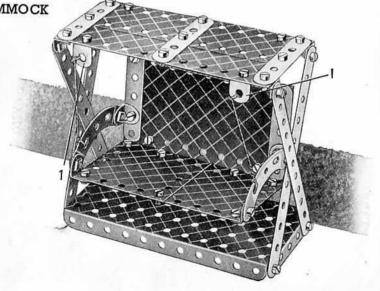


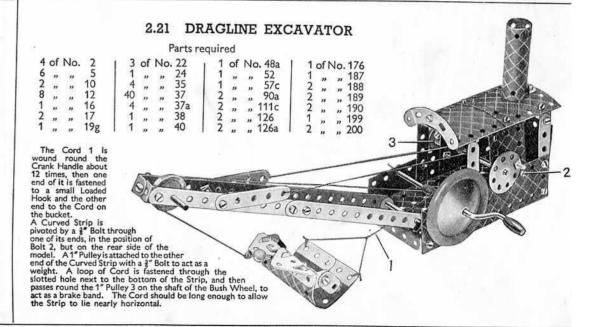


The Cord by which the back of the hammock is suspended is tied to the rear ends of the Double Angle Strips 1. The seat, which consists of two 2½" X2½" Flexible Plates, is attached to the back of the hammock by two Trunnions.

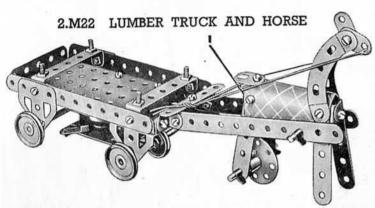
Parts required

				37.75			
4	of	No.	2	1 1	of	No	5. 52
5	,,,	,,	5	2	n	,,	90
8	2)	,,	12 -	2	,,	n	126
38	,,	,,	37	2	,,	,,	189
1	,,,	,,	40	2	,,	,,	190
2			40-	1			101





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 No. 2 Outfit models of various types. Fit the model you have just built with one of these wonderful Motors, and enjoy the fun of watching it work just like the real thing.



Parts required

4	of	No.	2	14	of	No.	. 37a
5	,,	,,	5	2	,,	,,	48a
5	,,	,,	10	1	,,	,,	52
5	,,	,,	12	2	,,	,,	90a
2 4	,,	,,	16	4	,,		111c
2	,,	,,	17	2	,,		126
	,,	,,	22	2	,,		126a
1	,,	,,	24	4	,,		155a
4	,,	,,	35	11	"		199
23	,,,	,,	37	11	Ma	gic	Moto

A Magic Motor is mounted beneath the cart and the Driving Band is taken from the pulley on the Motor to a $\frac{1}{2}$ " fixed Pulley (supplied with the Motor) fastened on the $3\frac{1}{2}$ " Rod that forms the front axle.

.The forelegs of the horse are held together by means of two Angle Brackets bolted in the positions shown. This construction is duplicated at 1 for the hind-legs. The forelegs of the horse are held clear of the ground by means of the reins.



2.M23 DRILLING MACHINE Parts required 2 of No. 2 24 35 37 37a 52 111c " 126 " 126a 190 1 Magic Motor

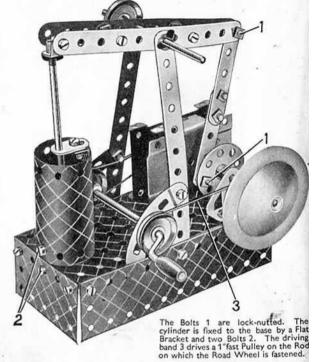
The drive is taken from the Motor to the 1" Pulley on the lower shaft. A second Driving Band passes round the ½" fixed Pulley supplied with the Motor, round the two Pulleys at 3, and finally round the 1" Pulley fastened on the vertical drill shaft.

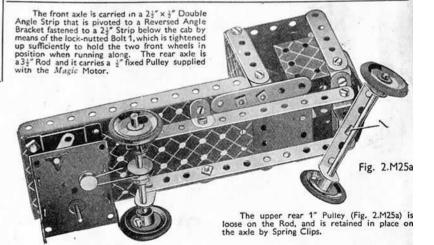
2.M25 STEAM WAGON

	Parts required	
2 of No. 2	1 4 of No. 35	2 of No. 126
6 " " 5	31 " " 37	4 " " 155a
2 " " 10	1 " " 37a	1 " " 188
8 " " 12	4 " " 38	1 " " 189
2 " " 16	2 " " 48a	1 " " 190
1 ,, ,, 17	1 " " 52	1 " " 200
4 " " 22	1 " " 90a	1 Magic Motor
1 24	1 125	*

2.M24 BEAM **ENGINE**

Parts required of No. 16 17 37 38 52 90a 126 126a " 176 187 189 191 1 Magic Motor





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.



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 \(\frac{1}{2} \) fast Pulley and three pairs of Driving Bands of different lengths. It is capable of driving all light models built with the smaller Outfits.



No. 1 Clockwork Motor

This strongly built and efficient Motor is fitted with a powerful spring that gives a long and steady run, and is exceptionally smooth in action. The Motor is provided with a conveniently-placed brake lever by means of which it can be started and stopped. The Motor is of the non-reversing type.



No. 2 Clockwork Motor.

No. la Clockwork Motor

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

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.

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. El Electric Motor (6 volt)

This is a highly efficient Motor (nonreversing) that will give excellent service. It can be operated through a 9-volt Meccano Transformer from the mains, providing that the supply is attenating 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.



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.

Ask your dealer for the latest Meccano Price Lists.

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.



No. T20A Transformer



No. T6 Transformer

FOR 20-volt ELECTRIC MOTORS

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

No. T20 TRANSFORMER (Output 20 VA at 20 volts). Has one 20-volt circuit controlled by a 5-stud speed regulator.

No. T20M TRANSFORMER (Output 20 VA at 20 volts). This Transformer is provided with one 20-volt circuit, but is not fitted with speed regulator.

FOR 6-volt ELECTRIC MOTORS

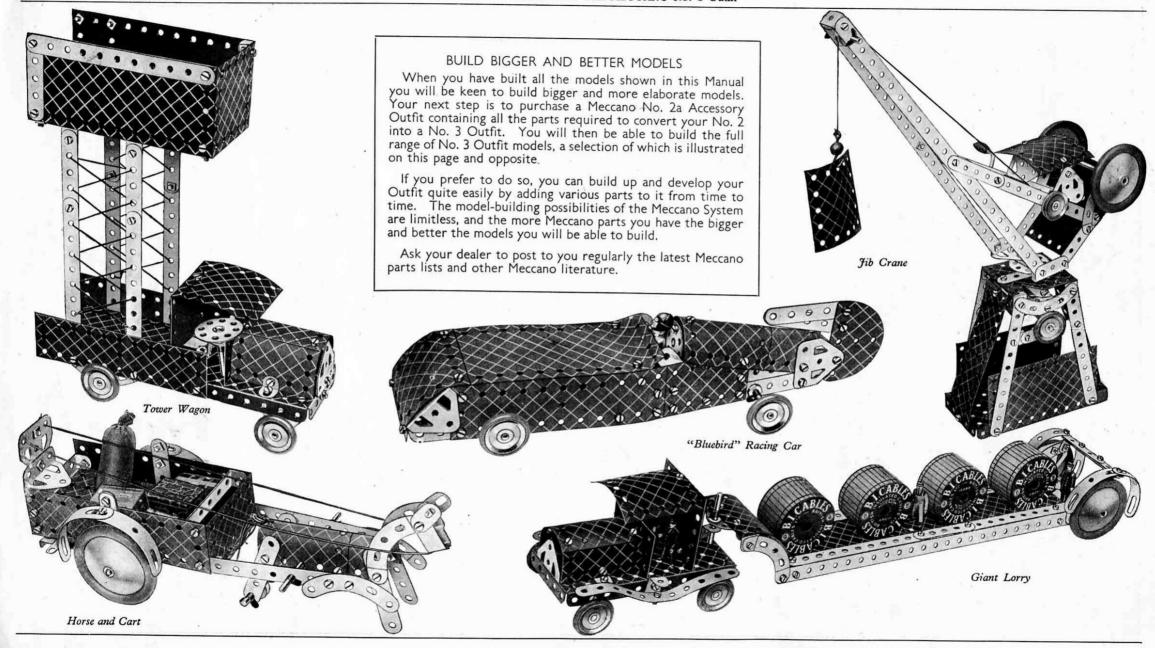
No. T6A TRANSFORMER (Output 40 VA at 9/3½ volts). Has two separate circuits at 9 volts, one of which is controlled by a 5-stud speed regulator, and a third circuit at 3½ volts for lighting up to 18 lamps.

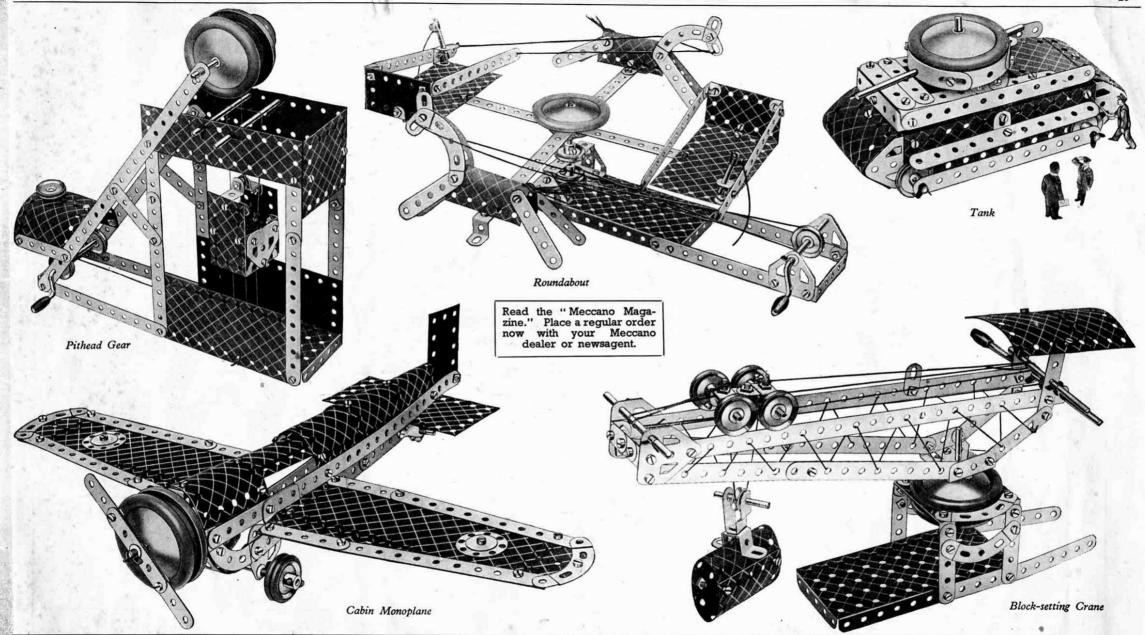
No. T6 TRANSFORMER (Output 25 VA at 9 volts). Has one 9-volt circuit and is fitted with a 5-stud speed regulator.

No. T6M TRANSFORMER (Output 25 VA at 9 volts). Has one 9-volt circuit, but is not fitted with a speed regulator.

Resistance Controllers

These Controllers allow the speed of Meccano 6-volt and 20-volt Motors to be regulated as desired.





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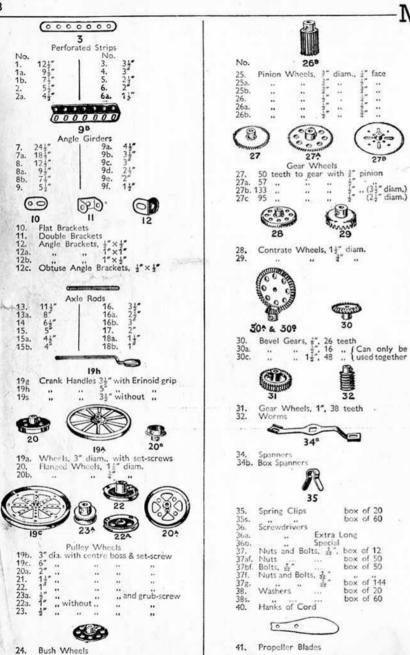
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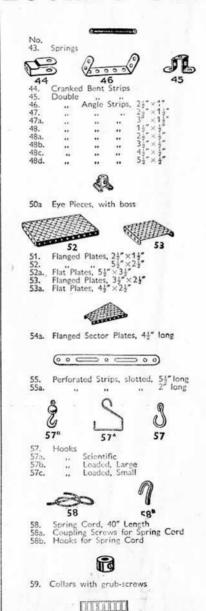
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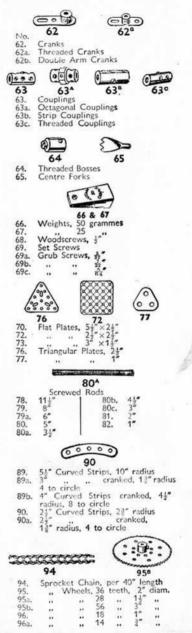
NEW MECCANO PARTS FOR OLD

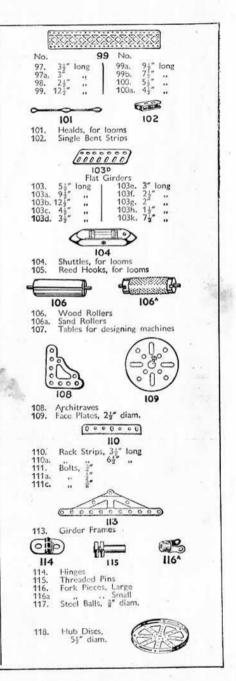
Every Meccano boy should know of the wonderful Meccano Part Exchange Scheme, in order to take advantage of it. Meccano Ltd. undertake to exchange any damaged Meccano parts for similar new parts at half the current list price, no matter how old or damaged the parts are. Just send them to the Service Department, Meccano Limited, Binns Road. Liverpool 13, together with a remittance covering half the cost of the new parts. The remittance should include postage on the new parts and this will be the same as that you pay on the parcel of old parts you send in. It is very important that you enclose your own name and address written in plain characters.

MECCANO PARTS



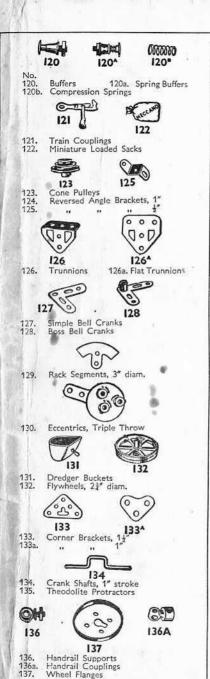


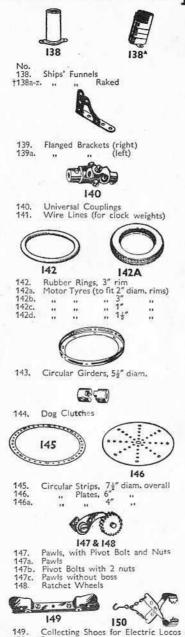




61. Windmill Sails

MECCANO PARTS





150.

Crane Grabs

