

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, Aeroplanes, 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.

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

HOW TO BUILD UP YOUR OUTFIT

Meccano is sold in 11 different Outfits, ranging from No. O to No. 10. Each Outfit can be converted into the next larger by the purchase of an Accessory Outfit. Thus Meccano No. O Outfit can be converted into No. 1 Outfit by adding to it a No. Oa Accessory Outfit. No. 1a Outfit would then convert it into a No. 2 and so on. In this way, no matter with which Outfit you begin, you can build it up by degrees until you have a No. 10 Outfit.

All Meccano parts are of the same high quality and finish, but the larger Outfits contain a greater quantity and variety, making possible the construction of more elaborate models.

THE "MECCANO MAGAZINE"

The "Meccano Magazine" is published specially for Meccano boys. Every month it describes and illustrates new Meccano models, and deals with suggestions from readers for new Meccano parts and for new methods of using the existing parts.

There are model-building competitions specially planned to give an equal chance to the owners of small and large Outfits. In addition, there are splendid articles on such subjects as Railways, Famous Engineers and Inventors, Electricity, Bridges, Cranes and Aeroplanes, and special sections dealing with the latest Engineering, Aviation, Motoring

and Shipping News. Other pages deal with Stamp Collecting, and Books of interest to boys; and a feature of outstanding popularity is the section devoted to short articles from readers.

If you are not already a reader write to the Editor for particulars and a specimen copy. You can order the Magazine from your Meccano dealer, or from any newsagent.

THE MECCANO GUILD

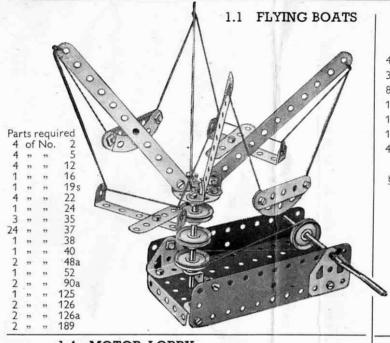
Every owner of a Meccano Outfit should join the Meccano Guild. This is a world-wide organisation, started at the request of Meccano boys. Its primary object is to bring boys together and to make them feel that they are all members of a great brotherhood, each trying to help others to get the very best out of life. Its members are in constant touch with Headquarters, giving news of their activities and being guided in their hobbies and interests. Write for full particulars and an application form to the Secretary, Meccano Guild, Binns Road, Liverpool 13.

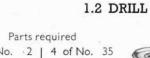
Clubs founded and established under the guidance of the Guild Secretary provide Meccano boys with opportunities of enjoying to the utmost the fun of model-building. Each has its Leader, Secretary, Treasurer and other officials. With the exception of the Leader, all the officials are boys, and as far as possible the proceedings of the clubs are conducted by boys.

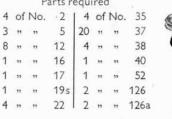
MECCANO SERVICE

The service of Meccano does not end with selling an Outfit and a Book of Instructions. If ever you are in any difficulty with your models, or if you want advice on anything connected with this great hobby, write to us. We receive hundreds of letters from boys in all parts of the world, and each of these is answered personally by one of our experts.

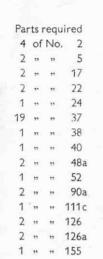
Whatever your problem may be, write to us about it. We shall be delighted to help you in any way possible. Address your letters to *Information Service*, Meccano Ltd, Binns Road, Liverpool 13.



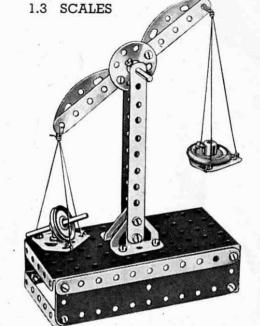




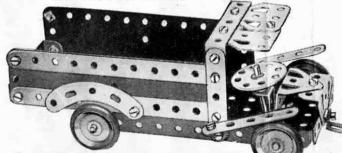
The drill table is made by bolting together two Flat Trunnions.



2 " " 189



1.4 MOTOR LORRY

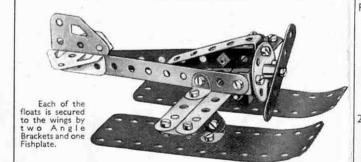


The $2\frac{1}{2}$ " Curved Strips representing the rear mudguards are each fastened to the sides by a $\frac{1}{8}$ " Bolt and nut, with a Spring Clip between the mudguards and the $5\frac{1}{2}$ " Strip to form a distance piece.

Parts required

											Comment of the Commen						
4	of	No.	2	1	of	No.	17	119	of	No.	37	12	of	No. 90a	2	of	No. 126a
4	22	71	5	4	33	12	22	4	12	22	37a	13	27	" 111c	4	22	,, 155
3	22	22	12	1	**	**	24	2	**	22	48a	11	22	" 125	2	22	, 189
2	55	11	16	2	22	**	35	1	22	**	52	2	**	·· 126			

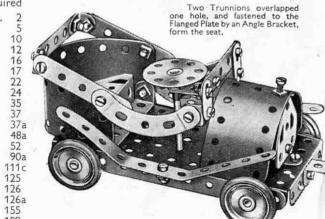
1.5 RACING SEAPLANE



Parts required

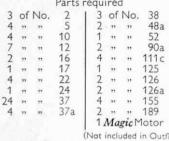
3	of	No.	2	1 1	of	No.	24	2	of	No	. 111c
3	59	**	5	19	22	22	37	2	22	22	126
4	"	59	10	1	22	22	37a	1	99	**	126a
8	"	"					48a				

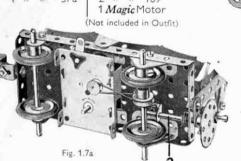
1.6 KIDDIE CAR



Parts required 4 of No. 125







Each of the Bolts 1 is lock-nutted. A piece of Cord is fastened to the Rod 2 (Fig. 1.7a) wrapped round it two or three times, and then is taken through the hole in the Flanged Plate above the Rod and secured to the Angle Bracket 3.

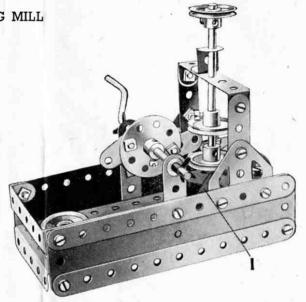
By turning the Bush Wheel the container is tipped sideways.

1.8 STAMPING MILL

The anvil 1 is made up of two Trunnions bolted together. When the Crank Handle is rotated, the Fishplates bolted to the Bush Wheel strike the centre 1" Pulley on the hammer shaft and cause it to rise and fall.

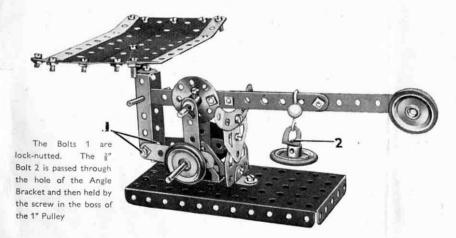
Parts required

			1 661 60	100	MII.		
4	of	No.	2	3	of	No.	37a
4	**	"	5	2	"	**	38
4	,,	**	10	2	22	**	48a
4	22	**	12	1	**	**	52
1	**	**	16	1	"	**	90a
1	**	**	19s	4	,,	**	111c
4	17	**	22	1	**	"	125
1	,,	39	24	2	**	**	126
2	**	**	35	2	**	**	126a
24	"	77	37	2	,,	"	189

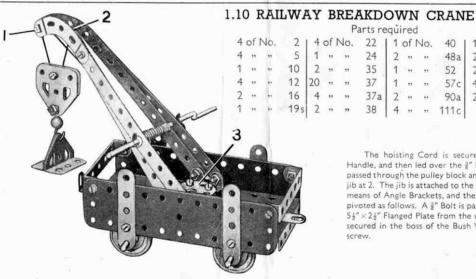


Parts required

1.9 LETTER BALANCE

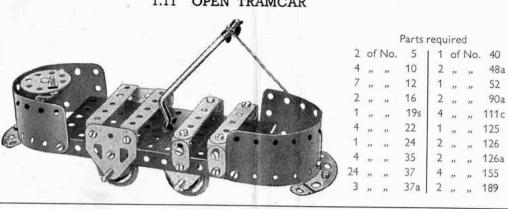


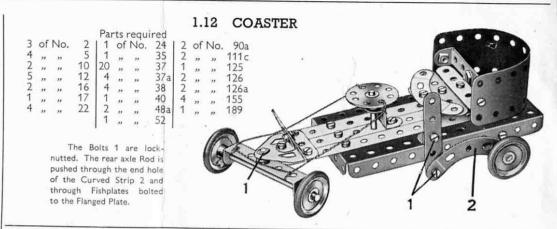
4	of	No.	2
4	22	21	5
4	"	**	10
2	**	77	12
1	22	55	16
2	"	72	17
4	11	22	22
1	**	**	24
1 4 24	22	22	35
24	"	22	37
4	**	**	37a
4	77	**	38
2	,,	22	48a
1	**	39	52
1	17	22	57 c
1	11	22	90a
4	,,	**	111c
1	**	**	125
2	"	**	126
2	11	22	126a
2	**	**	155
2	**	**	189

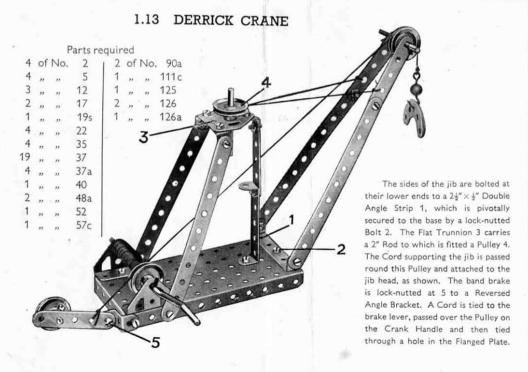


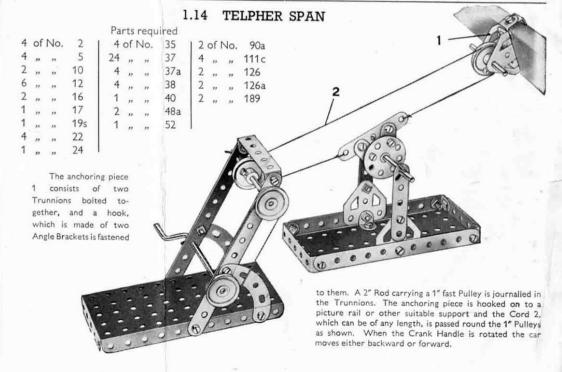
The hoisting Cord is secured to the Crank Handle, and then led over the #" Bolt 1. It is then passed through the pulley block and fastened to the jib at 2. The jib is attached to the Bush Wheel 3 by means of Angle Brackets, and the complete unit is pivoted as follows. A &" Bolt is passed through the 54" × 24" Flanged Plate from the underside, and is secured in the boss of the Bush Wheel by its set

1.11 OPEN TRAMCAR



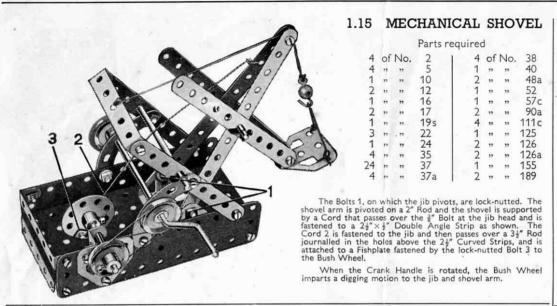


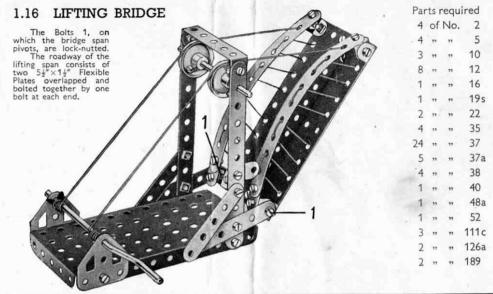




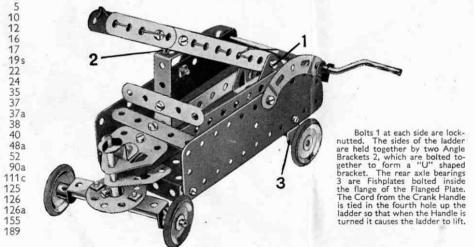
Parts required

4 of No.







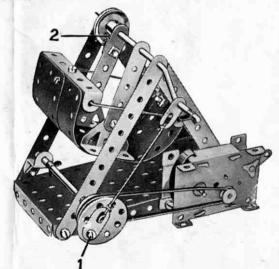


1.18 MECHANICAL SWING

The left-hand 2½" Strip that supports the swing is connected to the Crank Handle by passing the set screw of the 1" Pulley 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-nuts.

Parts required

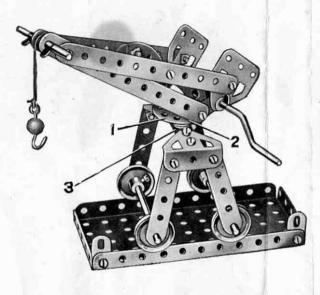
4	of	No.	2	- 1	4	of	No.	38
2	15	22	5		1	**	**	40
2	"	**	10		2	"	27	48a
3	,,,	**	12		1	**	22	52
1	77	"	16		1	"	17	111c
1	"	**	19s	8	1	"	"	125
2	11	"	22		2	22	"	126
1	**	**	24		2	11	***	189
4	"	"	35	4.	1 7	Ma	aic N	1otor
15	33	37	37					
2	"	**	37a	1	(no		nclud utfit)	ed in



1.19 TRAVELLING CRANE

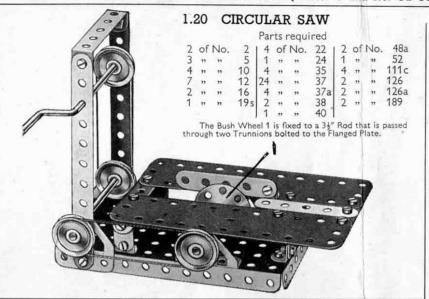
The sides of the jib are secured to the Bush Wheel 1 by two Angle Brackets 2, one on each side. A \(\frac{1}{8}\)" Bolt is passed from the underneath side of Double Angle Strip 3 into the boss of the Bush Wheel 1 and the set screw is then tightened.

The Flat Trunnions at the lower end of the jib support the Crank Handle, which also passes through Fishplates 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.

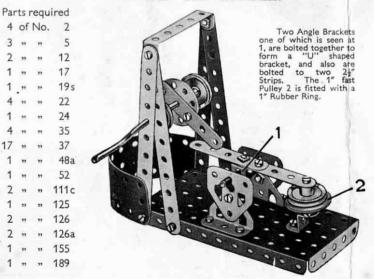


Parts required

				Pa	arts	requ	uired				
4	of	No.	2	4	of	No.	22	1	of	No.	52
4	**	"	5	1	25	22	24	1	"	22	57c
4	"	77	10	4	37	"	35	2	**	**	90a
2	22	**	12	20	37	"	37	1	27	"	111c
2	11	99	16	4	,,	"	38	2	"	77	126
1	"	79	17	1	"	39	40	2	"	77	126a
1	1420	25	10-	1	0.00		40-				



1.21 TRIP HAMMER

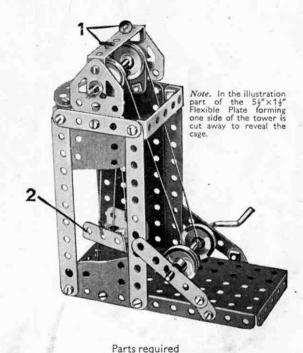


1.22 PITHEAD GEAR

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 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.

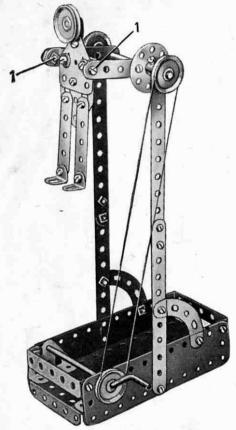


f	No.	2	1 4	of	No.	22	1 1	of	No.	52
,	**	5	2000			35	1	29	"	90a
,	11	10	20	**	"	37	4	22	"	111c
	22	12	4	29	"	37a	- 2	"	"	126
,	**	16	4	**	**	38	2	"	"	126a

" " 12 4 " " 3/a 2 " " 1.
" " 16 4 " " 38 2 " " 1.
" " 19s 1 " " 40 2 " " 1.

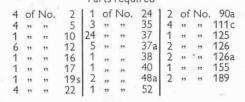
1.23 GYMNAST

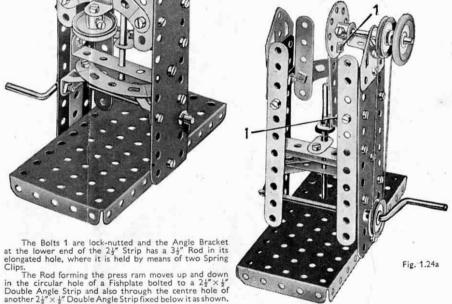
The Bolts 1 are lock-nutted. The bearings for the Crank Handle in the Flexible Plates are reinforced by Trunnions bolted to the Flanged Plate.



				Pa	rts	requ	ired				
4	of	No.	2	11	of	No.	24 1	1	of	No.	52
4	22	22	5	2	22	**	35	2	22	25	90a
1	22	22	10	24	11	,,	37	4	22	27	111c
4	22	22	12	5	11	22	37a	2	22	22	126
1	22	"	16	4	**	**	38	2	22	33	126a
1	32	**	19s	1	**	**	40	2	22	22	189
4	22	22	22	12	**	**	48a				

1.24 POWER PRESS Parts required





BUILD BIGGER AND BETTER MODELS

The Bolts 1 are lock-nutted and the Angle Bracket at the lower end of the 2½" Strip has a 3½" Rod in its elongated hole, where it is held by means of two Spring

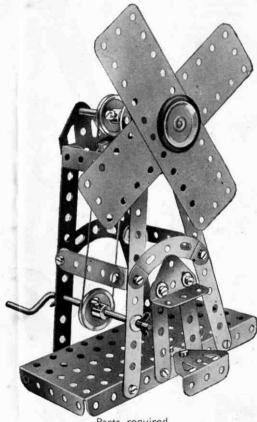
When you have built all the models shown in this Book of Instructions, you will be keen to build bigger and more elaborate models. Your next step is to purchase a Meccano No. 1a Accessory Outfit containing all the parts required to convert your No. 1 into a No. 2 Outfit. You will then be able to build the full range of No. 2 Outfit models.

If you prefer to do so, you can build up and develop your Outfit quite easily by adding various parts to it from time to time. The model-building possibilities of the Meccano System are unlimited, and the more Meccano parts you have the bigger and better the models you will be able to build.

MECCANO LIMITED - LIVERPOOL - ENGLAND

1.25 WINDMILL

The sails are gripped on the $3\frac{1}{2}$ " Rod by the 1" Pulley (with Rubber Ring) 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.



						requ					
4	of	No.	2	1 1	of	No.	24	2	of	No.	90a 126 126a
4	**	**	5	3	22	.,,	35	2	**	**	126
1	**	**	10	24	12	11	37	2	**	22	126a
4	11	***	12	4	11	**	38	1	**	**	155
1	25	99	16	1	22	.55	40	2	**	**	189
1	22	**	19s	2	**	**	48a				
4	. 22	**	22	11	22	**	52				