

MECCANO

TRADE MARKS 296321, 501113, 76, 12633, 10274, 55/13476, 569/13, 884/25, 2913, 80, 124, 936, 4174, 91637, 83171, 157149, 32822, 200639, 209733, 214061, 214062, 12802, 29084, 83316, 1818, 16737, 388/13, 5848, 50204, 10/12288, 22826, 18982, 20063/925, 9048, 5549, 2189, 16900, 72286, 2389, 41812, 5403, 7315, 18066, 139420, 494933-4-5-6, 29041, 26877, 5595, 404718, 410379, 55096, 12240, 41234, 8223

HORNBY'S ORIGINAL SYSTEM-FIRST PATENTED 1901

INSTRUCTIONS

FOR OUTFITS

00 to 1



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No. 31.1

ENGLISH EDITION

MECCANO

The Finest Hobby in the World for Boys

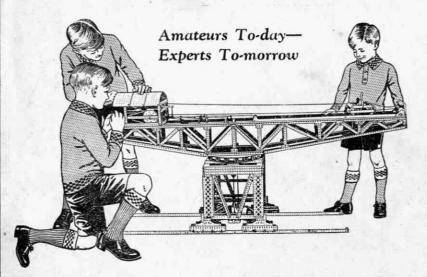
The Meccano system is composed of over two hundred and fifty different parts, mostly made of steel or brass, each one of which has a definite mechanical purpose. These parts combine to form a complete miniature engineering system with which practically any mechanical movement may be reproduced in model form. More can be accomplished with Meccano than with any other constructional toy, for no other system has such possibilities. The genius is in the parts and you can commence to build models as soon as you get your Outfit home. A screwdriver, provided in the Outfit, is the only tool necessary.

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. The most wonderful feature about the system is that it is real engineering in miniature; it is fascinating and delightful and

it gives you a satisfaction beyond anything that you have ever previously experienced.

The "Meccano Magazine"

The Meccano Magazine is the Meccano boy's own newspaper. It tells him 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, 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.



Model-Building with Meccano

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

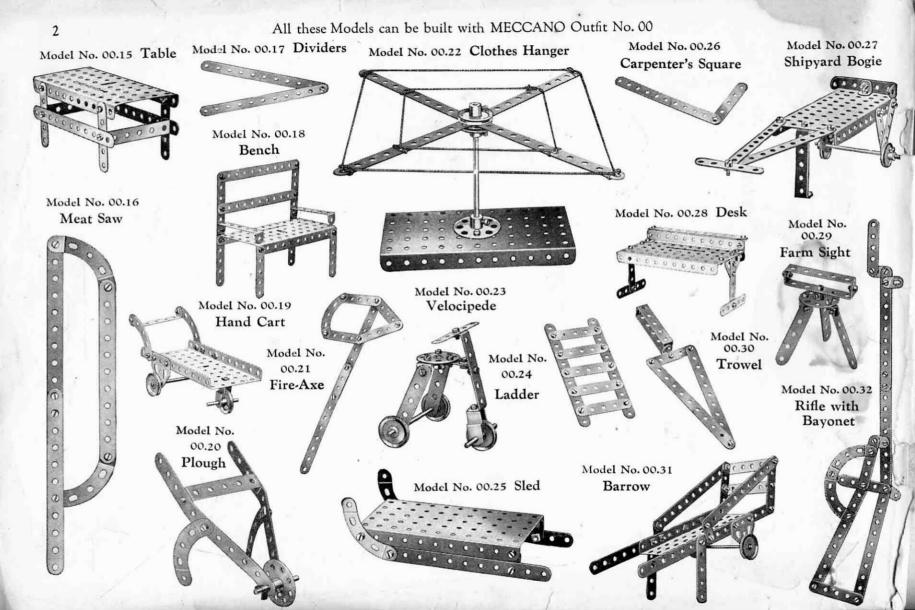
models will be strong and firm when they are completed.

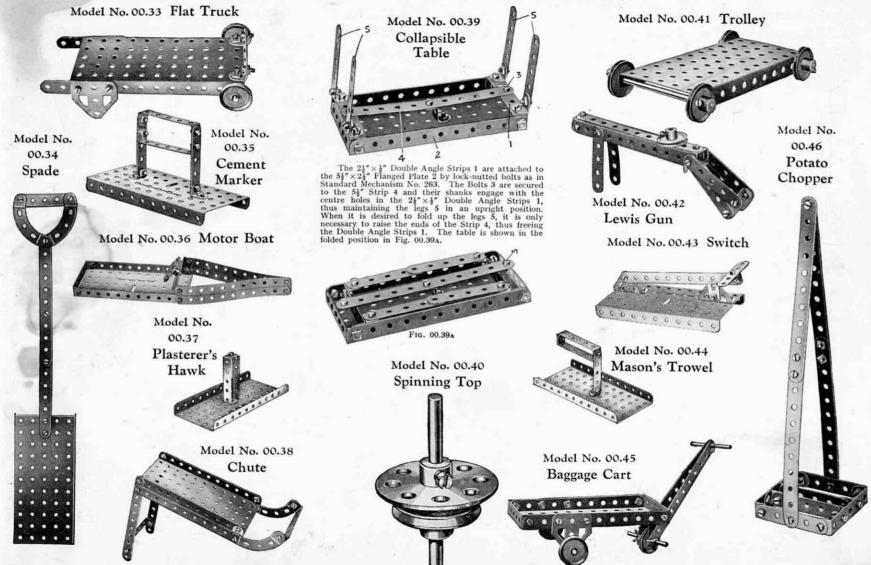
Every keen and inventive Meccano model-builder should obtain copies of the special Manuals "How to use Meccano Parts" and "Meccano Standard Mechanisms." In the former the principal uses of Meccano parts are outlined, while the latter shows a large number of real engineering mechanisms, built of Meccano parts, that can be incorporated in various models. You can obtain copies of these Manuals from your dealer, or direct from Meccano Ltd., Old Swan, Liverpool.

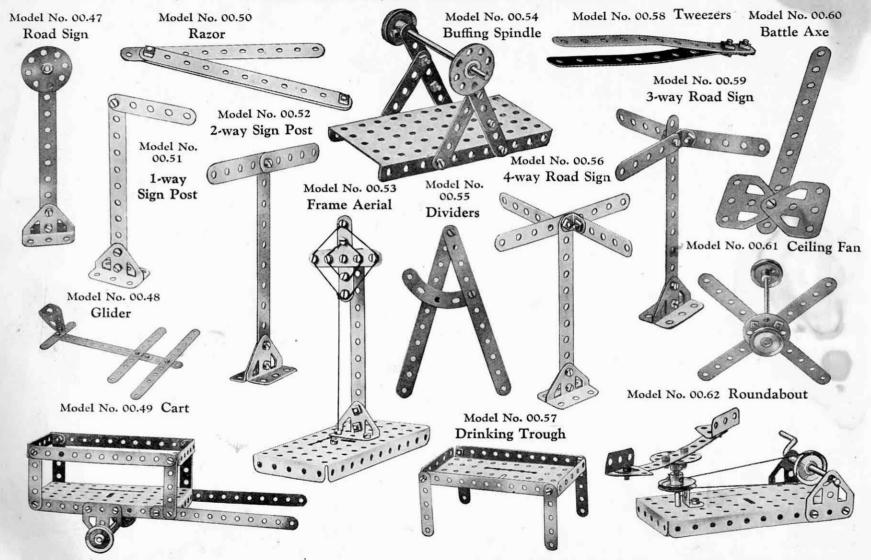
How to Build up Your Outfit

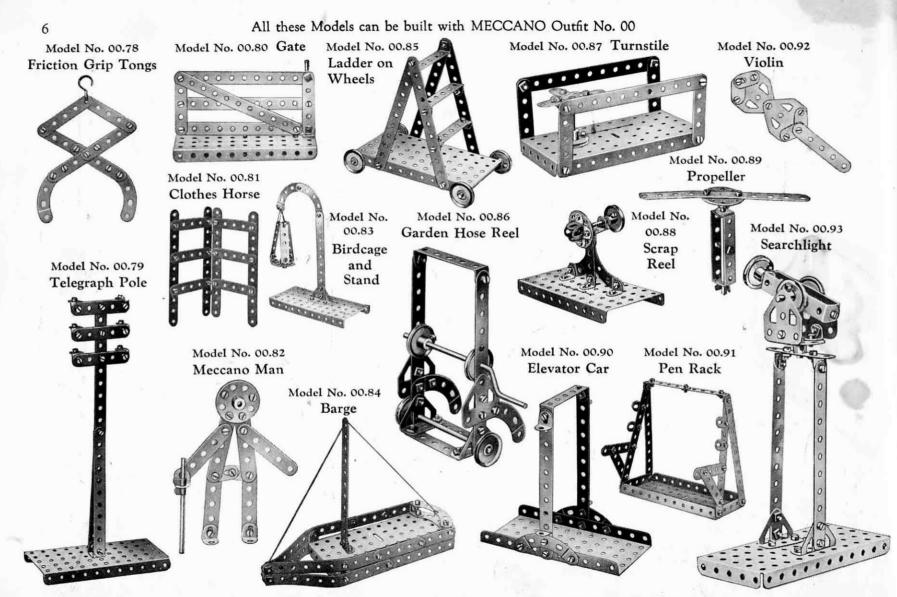
Meccano is sold in ten different Outfits, numbered 000 to 7. All Meccano parts are of the same high quality and finish, but the larger Outfits contain a greater quantity and variety of parts, making possible the construction of more elaborate models. Each Outfit from No. 00 upwards may be converted into the one next higher by the purchase of an Accessory Outfit. Thus, a No. 00 may be converted into a No. 0 by adding to it a No. 00A. A No. 0A would then convert it into a No. 1, and so on. In this way, no matter with which Outfit you commence, you may build it up by degrees until you possess a No. 7 Outfit. It is important to remember that Meccano Parts may be bought separately at any time in any quantity from your Meccano dealer.

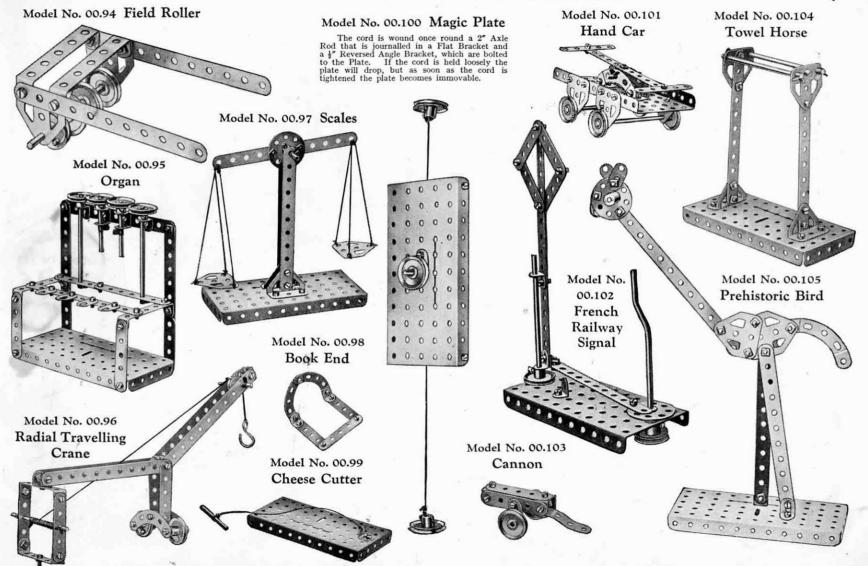
All these Models can be built with MECCANO Outfit No. 00 Model No. Coat Model No. 00.6 Roulette Wheel 000000 00.9 Hanger 30 Model No. 00.1 Axe Model No. 00.3 Horse Model No. 00.10 Roman Balance Model No. 00.2 Fork Model No. 00.11 Grill Model No. Cut out a circular piece of cardboard and mark as shown to form scoring board. This is clamped between two 1" Pulley Wheels. The pointer revolves freely on the upright spindle and is held in position by another 1" Pulley Wheel. 00.13 Hoe Model No. 00.7 Pulley Shafting Model No. 00.5 Lumber Truck Model No. 00.12 Trolley Model No. 00.14 Planing Bench Model No. 00.4 Bogie Truck Model No. 00.8 Two-Hand Saw

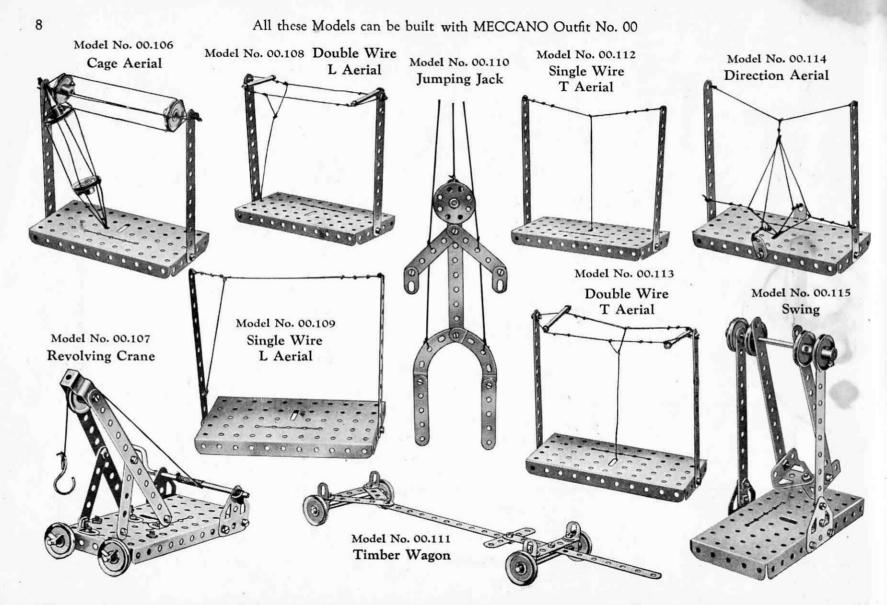


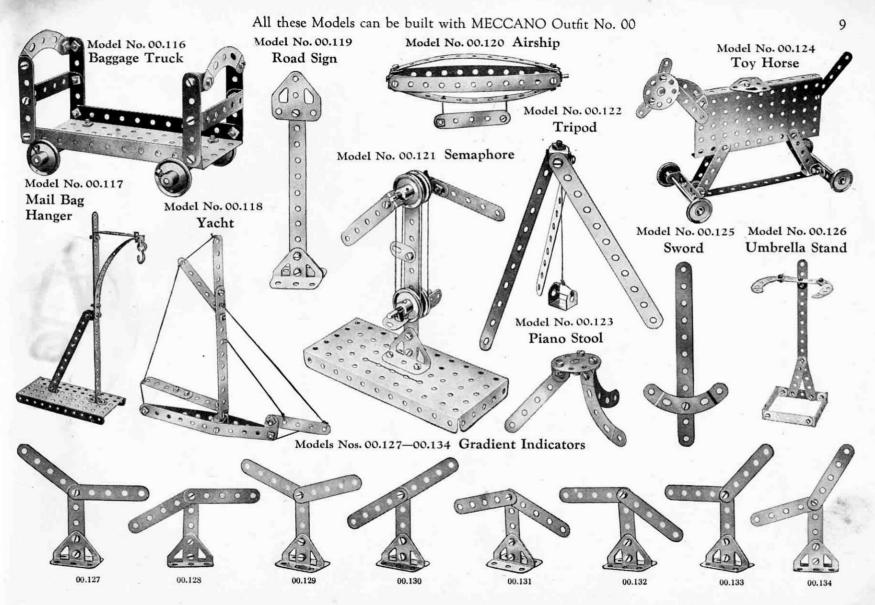


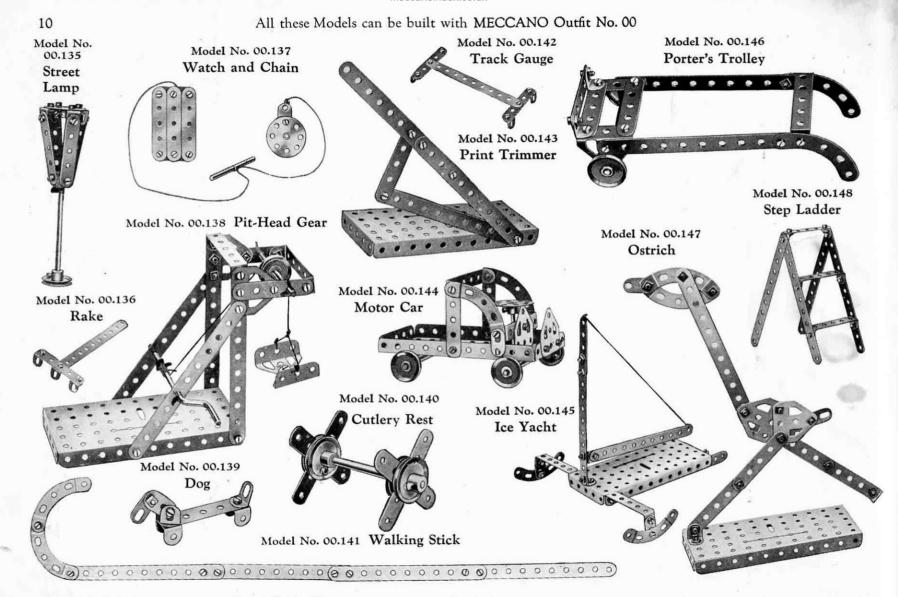


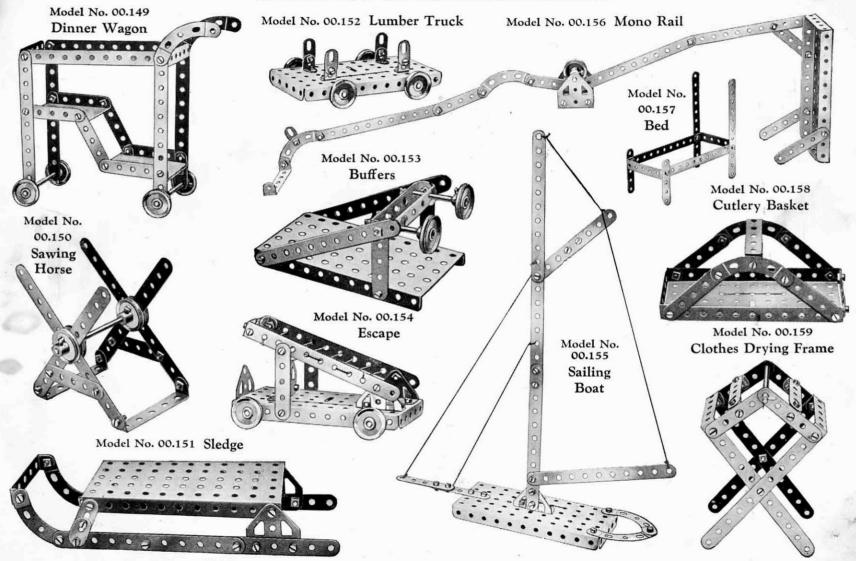


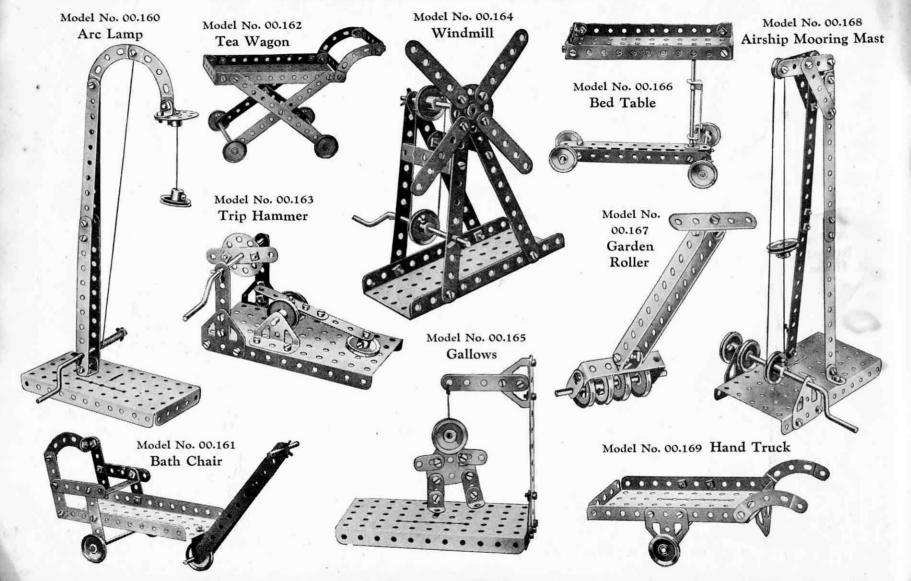


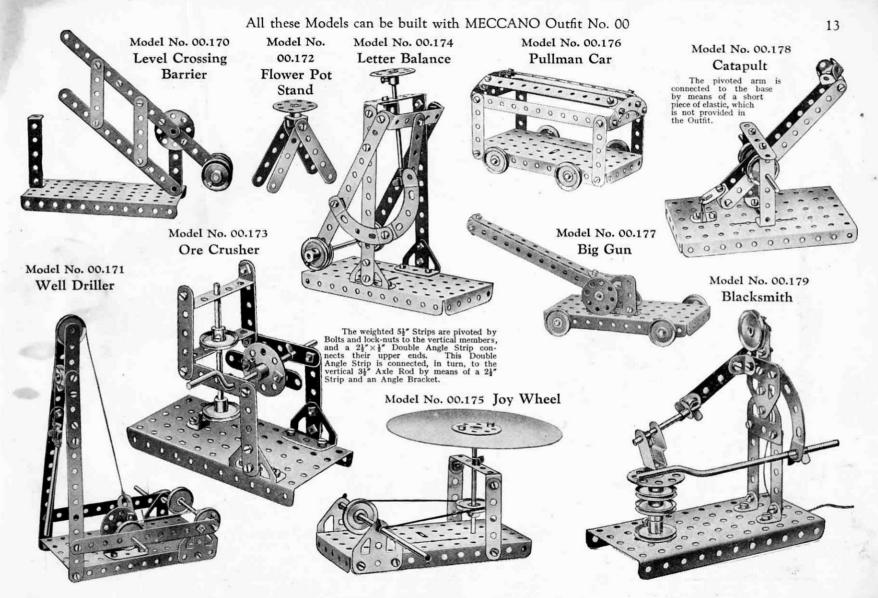


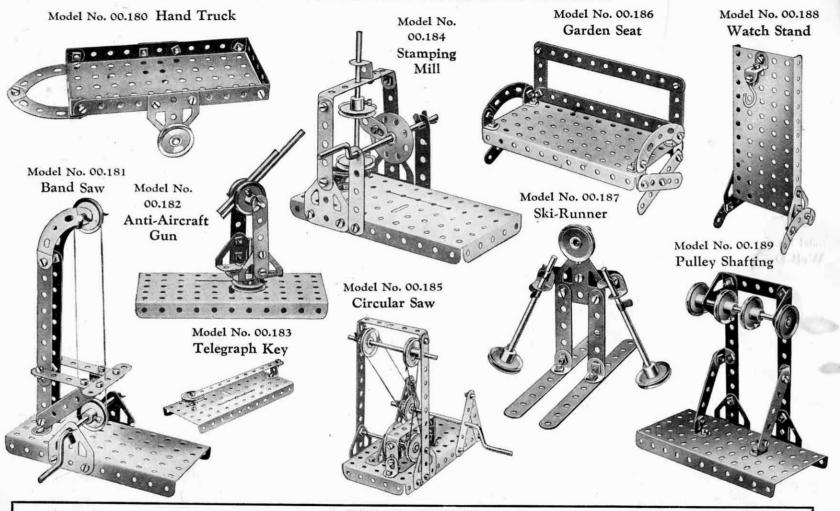






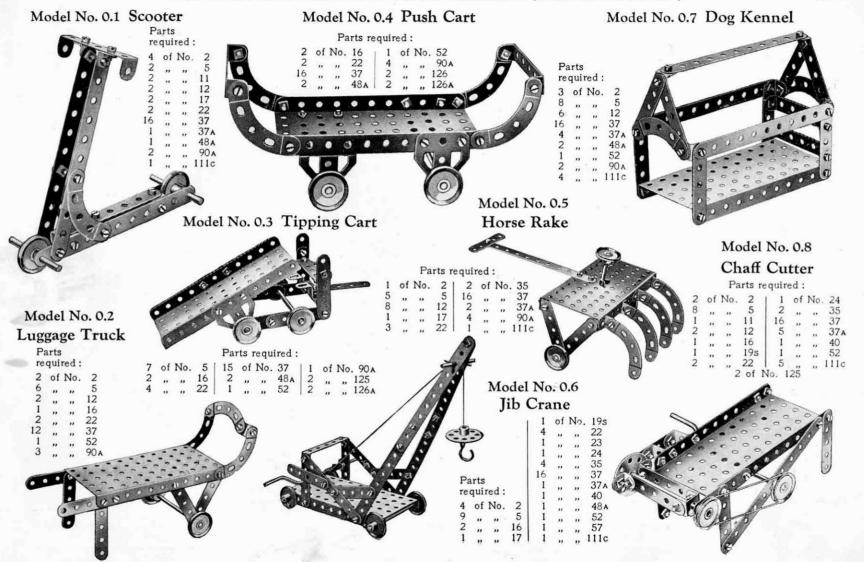


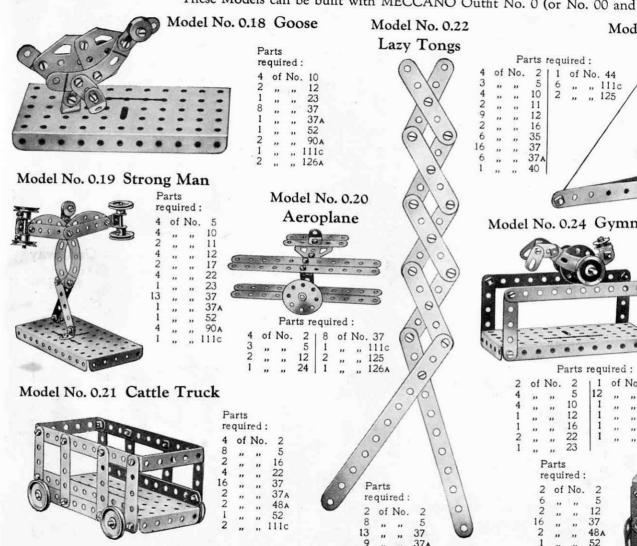




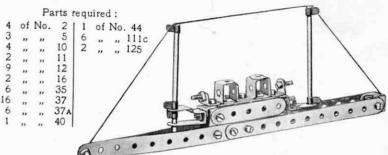
HOW TO CONTINUE

This completes our examples of models that may be made with MECCANO Outfit No. 00. 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 No. 00A Accessory Outfit, the price of which may be obtained from any Meccano dealer.



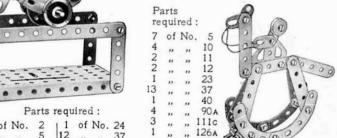


Model No. 0.23 Battleship



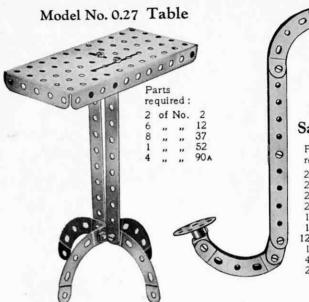
Model No. 0.24 Gymnast

Model No. 0.25 Rocking Horse



Model No. 0.26



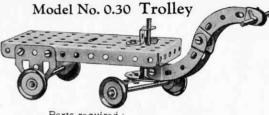


Model No. 0.28 Crocodile Parts required: 4 of No. 2 | 6 of No. 12

16 " " 37 6 " " 37 6 " " 111c

Model No. 0.29 Savonhone

Sa	X	Pri	OHC
	arts		
re	qui	red:	
2	of	No.	2
2	,,	,,	10
2	,,	33	11
2	,,	,,	12
1		**	23
1	,,	**	24
12	,,	**	37
1	,,	,,	37A
4	,,	,,	90 A
2	,,	**	111c



Parts required

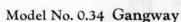
1	of	No.	11	4	of	No.	35	4	of	No. 90a ,, 125 ,, 126a	
2	,,	**	16	12	,,	**	37	1	,,	,, 125	
2	,,	,,	17	1	,,	,,	48A	2	,,	" 126A	
1	,,	,,	24	1	.,	**	52				

Model No. 0.31 Field Gun and Carriage



Parts required:

										No. 44
2	,,	,,	10	4	,,	,,	22	1	,,	" 111c " 125
2	,,	,,	11	13	,,	**	37	1	,,	,, 125
6			12	1			37A	l l		

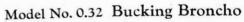


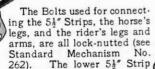
Model No. 0.33 Ape

Parts required:

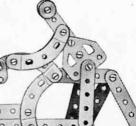
Parts required:

4	of	No.	2	16	of	No.	. 37	
2	,,	,,	5	2	,,	,,	37 A	
2	,,	,,	10	1	,,	,,	40	
2	**	**	12	2	,,	"	48A	
1	**	**	19s	1	,,	,,	52	
1	,,	"	23	1	,,	,,	111c	
2			25					

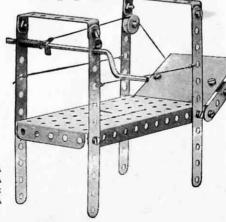




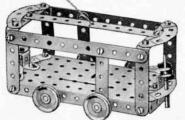
262). The lower $5\frac{1}{2}$ Strip should be held rigidly and the upper one jerked forward; the horse will then throw its rider completely over its head.



Parts required: of No. 2



Model No. 0.35 Tramway Car



		Par	rts re	equir	ed	1	
3	of	No.	2	16	of	No.	37
6	,,	,,	5	6	,,	,,	37A
2	,,	,,	10	2	,,	,,	48A
2	**	"	16	1	,,	,,	52
	,,	,,	17	4	21		90A
4	,,	,,	22	6	"	,,	111c
6	,,	,,	35	2	,,	,,,	125

Model No. 0.36 Motor Boat

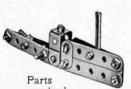


2	of	No.	2	1	of	No.	23
2	,,,	,,,	5	7	,,	,,	3/
3	,,	,,,	10 11	1	"	,,	37A
1			11	1		-	111c

Model No. 0.37



Model No	. 0.38
Torpedo	Boa
	. 61



re	qui	red	:
2	of	No.	
2	,,	,,	5
3	,,	,,	10
2	,,	"	11
2	"	"	12
. 1	,,	**	17
11	12	n	37
4	,,	,,,	37A
5	**	"	111c

Model No. 0.40 Gramophone

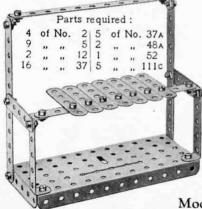
2 of	No.						4	,,	No.
1 ,	, ,,	22 23					8	,,	.,
Ι,	, ,,			-	2		16	,,	**
1 ,	,,,	24		16	2/1		4	"	
3 ,	"	37		0			1		"
1 ,,		37A			KOI		2	,,	***
1 ,,	,,	52			0		1	**	"
2 ,,	,,	90A	_	50	101		1	**	**
3 ,,		111c	60	30	0 10		7	**	"
	"		6	,	ABA.	-	4	32	10
		-	C= :		- C-	4	-		

Model No. 0.43 Prehistoric Armadillo



Model No. 0.44 Motor Cycle and Side Car

Model No. 0.39 Piano Model No. 0.41 Milk Maid



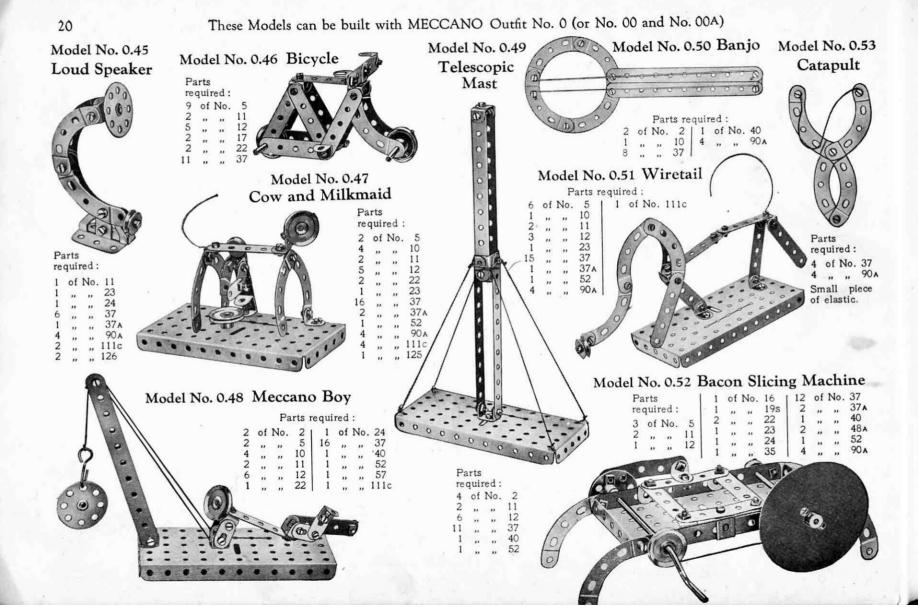
							(
	arts qui	red:			1			0	-0	5 0
5	of	No.	5		1	Mail	1	V.N		
5 3 2 4 2	,,	,,	10		1			0	1	
2			11		1			0	1	
4	**		12		1		0.0	0 7	1	
2	,,	,,	22		1			. 1		Œ
1	.,	,,,	22 23 37	(4)	DIS.					
14	,,	,,,	37	9				18	1	A
1	,,	,,	37A					100	1	A
1	,,	,,	40					M		風
1	,,	,,	52		-		760	10		遇
1	**	,,	90 A		-				1	
1	**	,, 1	111c	1	"					•

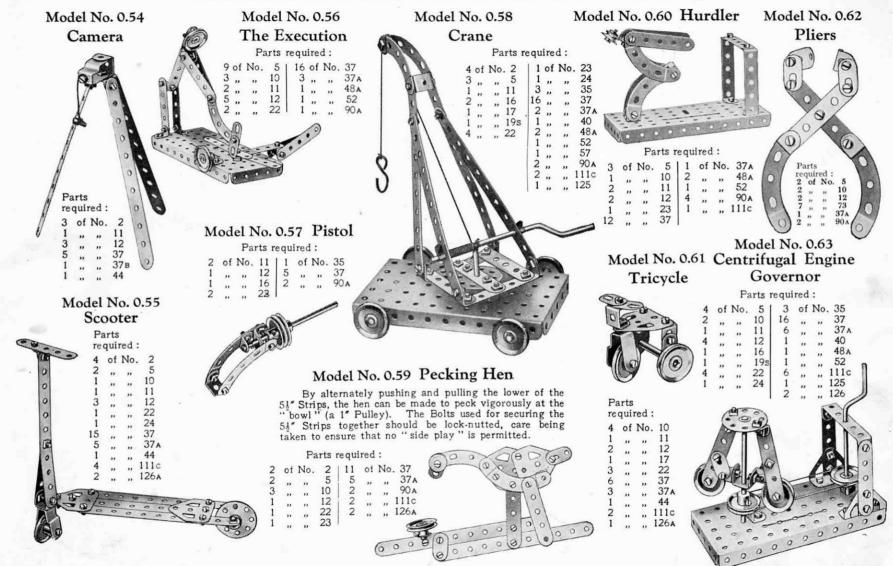
of	No.	5	10	of	No.	37
,,	,,	10	1	,,	,,	37A
,,	**	11	1	**	**	44
"	,,	12	3	**	**	90 A
,,	,,	16	1	- 22	,,	111c
,,	**	22	1	,,	,,	125
,,	,,	23	1	,,	,,	126 A

Model No. 0.42 Sword

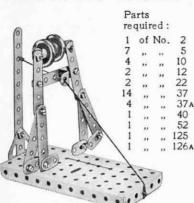




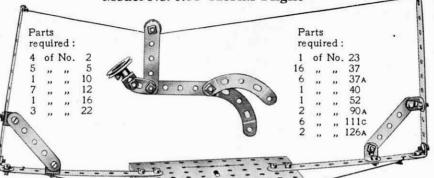




Model No. 0.64 Wrestlers



Model No. 0.66 Aerial Flight



Model No. 0.70 The Missing Link

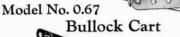
	rts		
re	qui	red:	
4	of	No.	5
4	,,	,,	10
8	,,	,,	12
1	,,	,,	24
16	,,	,,	37
6	,,	,,	37A
1	,,	,,	52
4		,,	90 A
6			111c

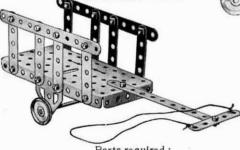


Model No. 0.65 A Chase

Parts required:

1	of	No.	5	16	of	No.	37
1	,,		10	1			37A
2	,,		11	1		,,	52
7	**	.,	12	4	,,	,,	90 A
1	,,	**	22	2	,,	**	111c
1	,,	**	23	2	,,	,,	126A





Galvanometer

1	of	No.	12			70	67
1	,,		17			- 1	飘
1 5 4	,,	.,	37			P.	1
4	,,	.,	37A			- 6	8
1	,,	.,	40			É	0
1		.,	52			1	0
1 4 2	,,		90 A		1		0
2	,,	,,	111c	4	B.		

Model No. 0.71 Steeple-chaser

Parts required:



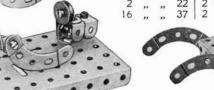
3	of	No.	2	12	of	No.	37A	
9	,,	,,	5	1	,,	,,	40	
1	,,	,,	16	1	,,	,,	52	
2	,,	,,	22	2	,,,		111c	
16	,,	,,	37	2	,,	_"	126A	

Model No. 0.69 Coster's Barrow



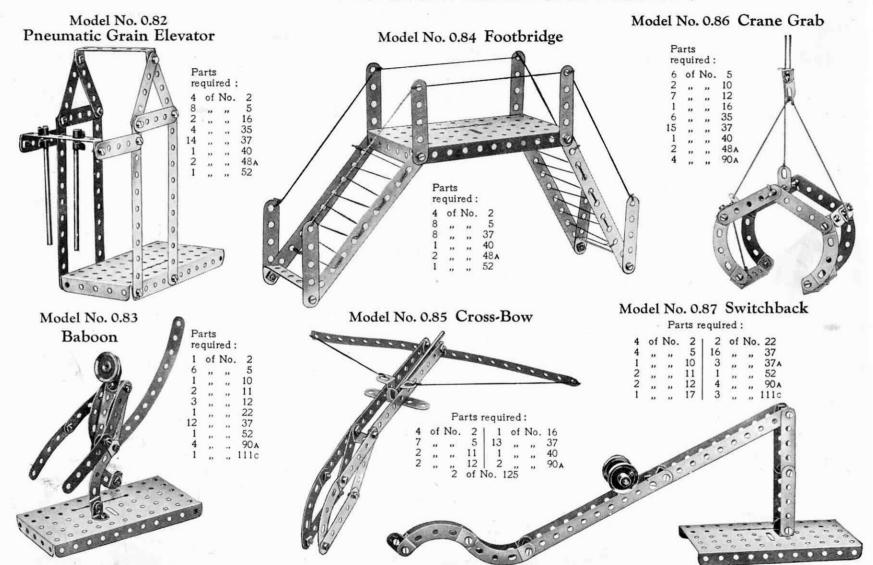
Parts required:

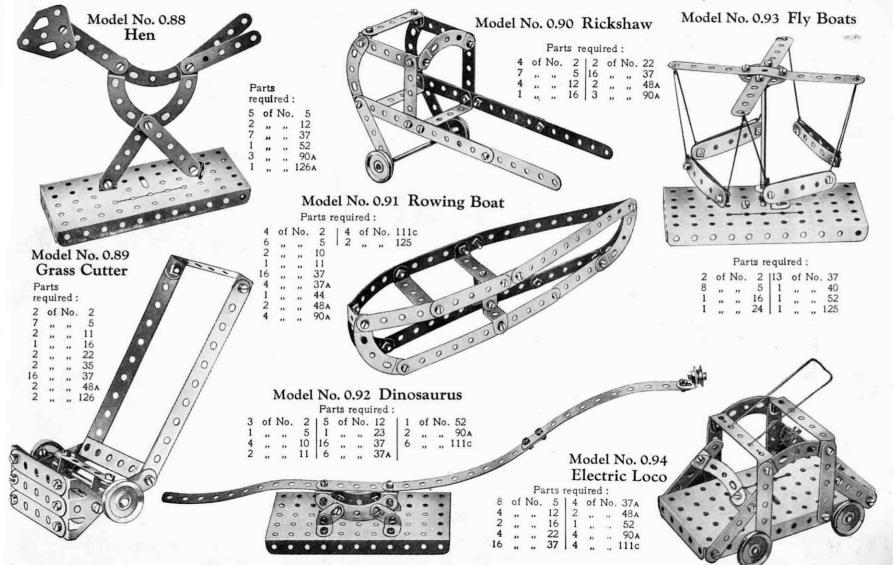
2	of	No.	5	113	of	No.	37
1	,,	,,	11	1	,,	,,	52
1	,,	,,	17	4	**		90 A
1	,,	**	24	2	,,	**	126A



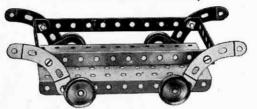
These Models can be built with MECCANO Outfit No. 0 (or No. 00 and No. 00A) 23 Model No. 0.72 Pen Rack Model No. 0.76 Coast Guard Model No. 0.78 Snake Parts required: 1 of No. 5 Model No. 0.79 8 of No. 37 Clock Parts required: 3 of No. 12 | 1 of No. 37A " 111c ,, 37 4 ,, 1 of No. 111c Model No. 0.73 Boxer required: Model No. 0.80 Windmill Model Parts 2 of No. 11 No. 0.75 required: Fan Parts Model No. 0.77 required: Break-Down Crane Parts required: Parts required: 9 of No. 5 | 2 of No. 37A 1 of No. 111c Model No. 0.74 Horseman's Fall Parts Model No. 0.81 Frog required: Parts required: 10 of No. 37

111c





Model No. 0.95 Trolley



Parts required:

2	of	No.	2	18	of	No.	37
2	,,	,,	16	8 2 1	,,	,,	48A
4	,,	,,	22	1	,,	,,	52
		4	of	No.	90.	A	

Model No. 0.96 Pen Rack

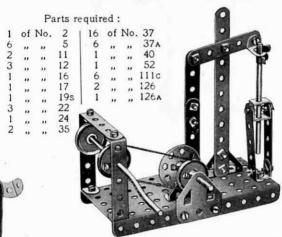


Model No. 0.97 Walking Man

Parts required:

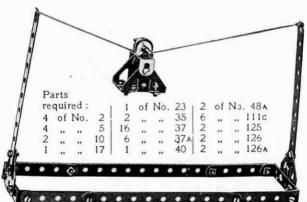
5	of	No.	5
3	,,	,,	10
2	,,	**	12
1	,,	.,,	22
7	,,		37
3	**	**	90

Model No. 0.98 Pump

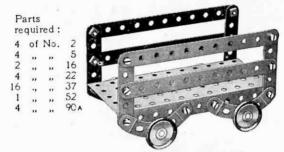


The connecting Strip is pivoted by Bolts and Nuts at one end to the Bush Wheel and at the other end to the cross beam. The latter is pivoted by the same means to the upright.

Model No. 0.99 Aerial Ropeway



Model No. 0.100 Luggage Truck



Model No. 0.101 Drafting Table



Model No. 0.102 Arm Chair

Parts required:

2 of No. 2

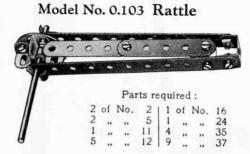
4 " " 5

12 " " 37

1 " " 48/
1 " " 52

3 " 90/

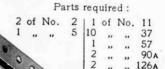


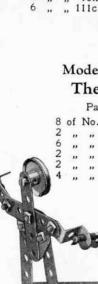


Model No. 0.104 Shearing Machine



Model No. 0.105 Anchor





Model No. 0.106 Portal

4	of	No.	2
2	,,,	,,	11
8	"	,,	12
1	"	"	22
16	"	"	37
2	"	"	37A 48A
1	"	"	52
4	"	"	90A
6	"	"	111c

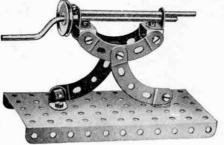
Model No. 0.107 The Fencers

Parts required:

2 ,, ,, 10 4 ,, ,, 37A	
6 ,, ,, 12 1 ,, ,, 52	
	60
2 " " 16 4 " " 111c 2 " " 22 2 " " 125 4 " " 35 2 " " 126A	A
4 ,, ,, 35 2 ,, ,, 126A	11
200	
	DO CO
	00
10	
N.M.	
	P

Parts

Model No. 0.108 Machine Gun



Parts required:

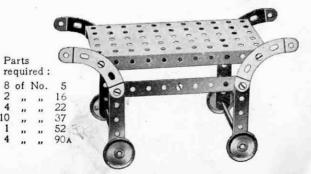
2	of	No.	11	1	of	No.	22
		,,	12	12			-
1	,,	,,	16	1	,,		52
1	,,	,,	19s	4	**	,,	90

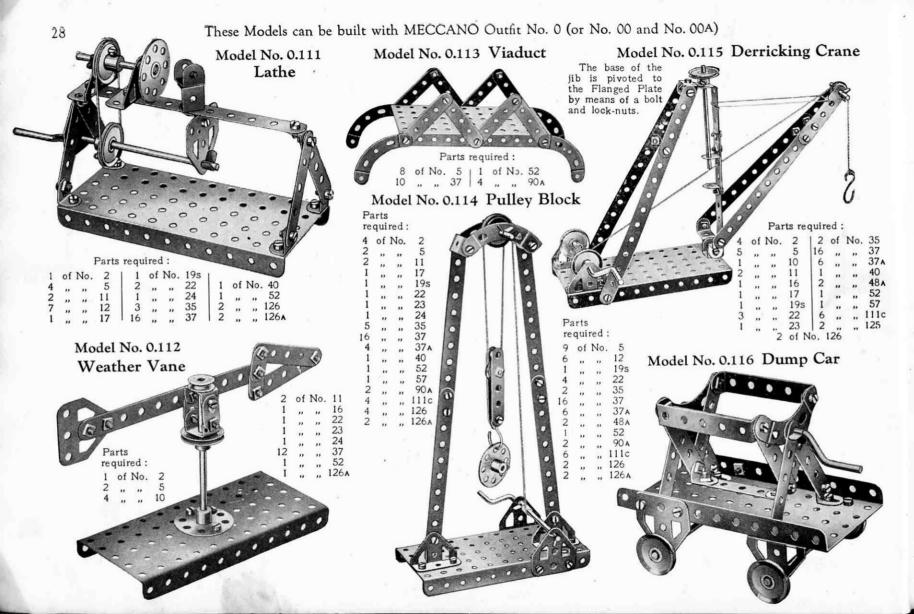
Model No. 0.109 Single Sheave Pulley Block

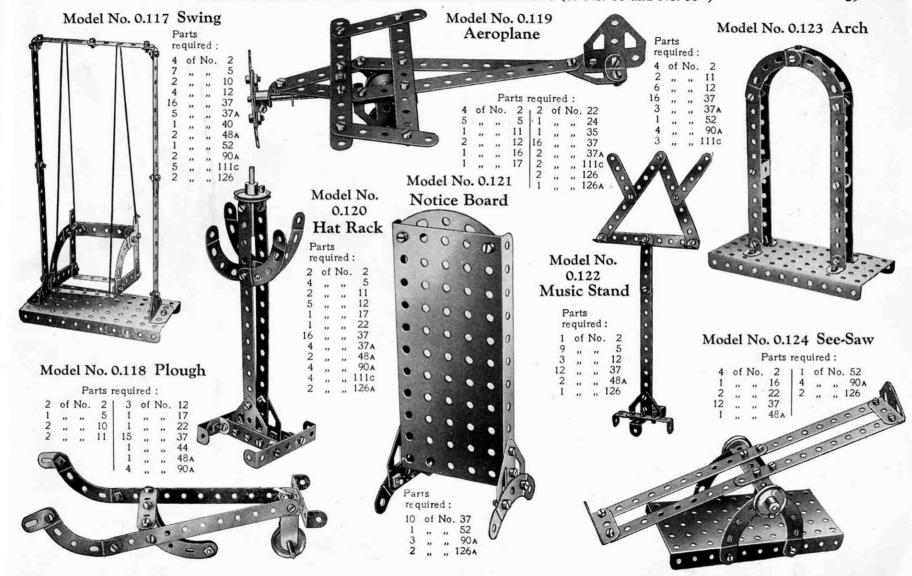


Parts required: 2 of No. 5 | 7 of No. 37A 1 ,, 23 | 1 ,, 57 3 of No. 111c

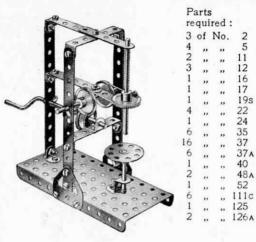
Model No. 0.110 Tea Wagon







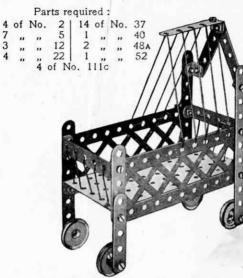
Model No. 0.125 Drilling Machine



Model No. 0.127 Scales

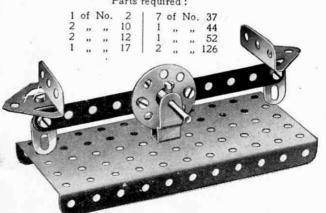


Model No. 0.129 Cot



Model No. 0.126 Counter Scales

Parts required:



Parts required:

2	of	No.	2	2	of	No.	48A
9	,,	,,	37	1	,,	,,	52
1	,,	,,	37 A	4	,,	,,	90 A
1			40	1		21	126

Model No. 0.128 Single Sheave Pulley Block

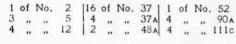


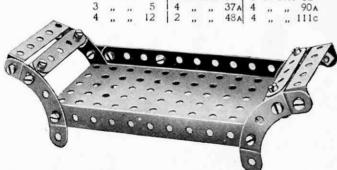
Parts required

1 of No. 23 12 " " 37A

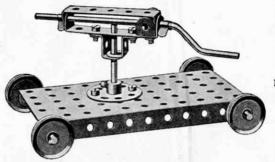
Model No. 0.130 Couch

Parts required





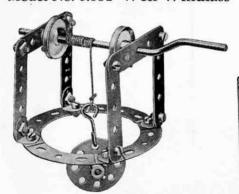
Model No. 0.131 Rock Drill



Parts required:

1	of	No.	11 16 17 19s	1 4	of	No.	22	12	of	No.	48A
2	,,	.,,	16	1	,,	,,	24	1	,,		52
1	,,	,,	17	2	.,,	.,	35	2	,,	,,	125
1			195	5			37	1			

Model No. 0.132 Well Windlass



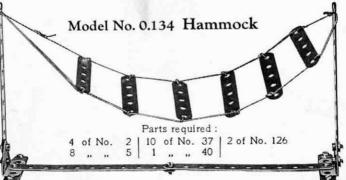
Parts required:

							Contract of				
6	of	No.	5 12 19s	2	of	No.	22	1	of	No.	40
4	,,	.,	12	1	,,		24	1	,,		57
1	.,		19s	12	**	11	37	4	.,	.,	90A

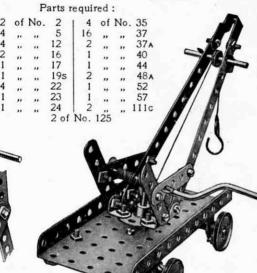
Model No. 0.133 Prancing Horse

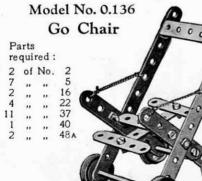
P	arts	1100			6	A							
re	qui	red:			1				A			2	of
6	of	No.	5						0			4	,.
4	,,	"	12		II7	. 1	1	,	10/			4	**
1	,,	,,	17		W	N	100			•		4 2	,,
1	,,	,,	19s			4		1 1	/	- 2		1	"
4	,,	,,	22		6	1						1	,,
1	"	,,	24			· V	Ψ,			_ 1		4	,,
16	**	,,	37		-	15	30 3	10		-	~	1	,,
4	,,	,,	37A		3-	-1	4	1 20	-	- 8		1	,,
1	.,,	**	40			10	1	0	01	(P)			
1	**	**	44		,	1						Λ	
1	**	**	52		6	127	13	Db x	1	0	0 1	1	
1	"	"	90 A	1	9	9		10	00	9		-	
4	"	"	111c	18	30	0/0		40	0				0
2	"	"	125	48	1/_	Jok	G	0	2			19694	
1	,,	**	126 126a	76	316	0/	5	0	A		_	42	
1	"	"	120A	4	1	46	0	01			1		
			A			0	0	40					١.
		- 4	400	0	0	0 .	0				,	1	
		-6		0	0	0	43				2		
		v		~	00			Fig	. 0.13	33a	4	0.0	A
					>	40	7					1	P
					- 31							V 9	

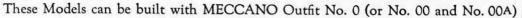
The Strip 1 forming part of the body is free to move about the Bolt 2, but two Nuts on the latter secure the rear legs and tail rigidly together. The arrangement of the various Strips about this Bolt 2 is shown more clearly in Fig. 0.133A. The Strip 3 is free to move at each end about pivots formed from Bolts and Nuts.

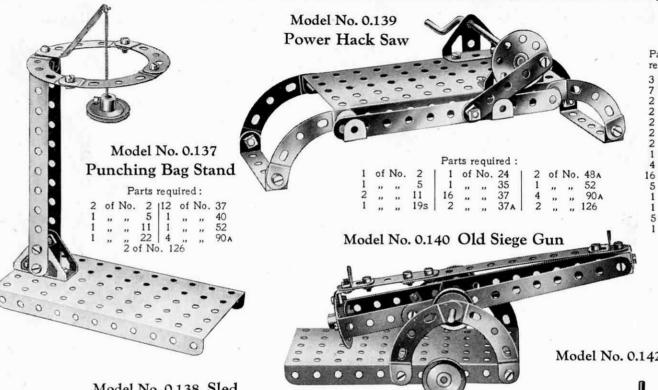


Model No. 0.135 Swivelling Crane

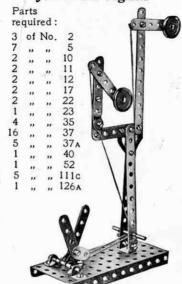








Model No. 0.141 Junction Signal



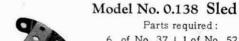
Model No. 0.142 Battleship

Parts required:

	4	of	No.	2	1	of	No.	35
	2	,,	,,,	5	16	,,	,,	37
	4	,,,	,,	10	6	,,	,,	37A
	1	,,	**	11	2	,,	,,	48A
0	1	,,,	"	16	1	,,	,,	52
2	1	,,	,,	17	2	,,	,,	90 A
9	3	,,	,,	22	6	,,	,,,	111c
	1	,,	"	24	1	."	**	125
			2	of .	No. 1	26		

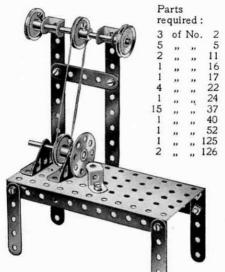
Parts required:

3	of	No.	2	1	of	No.	24
	,,	,,	11	16			37
1	,,		12	2	,,	,,	37A
l	,,	,,	15 16	2 2 1	,,	,,	48A
2	,,	,,	16	1	,,	,,	52
1		.,	22	4		,,	90 A

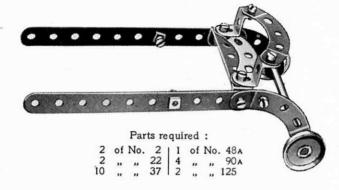


6 of No. 37 | 1 of No. 52 " " 48A 4 " " 90A

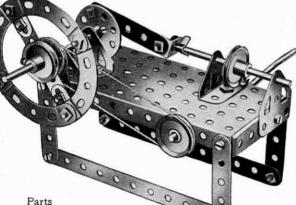
Model No. 0.143 Bench Lathe

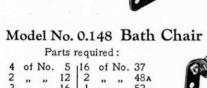


Model No. 0.145 Sulkey



Model No. 0.146 Horizontal Engine





Model No. 0.147

Punching Machine

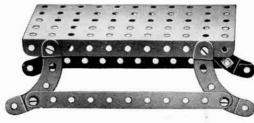
Parts required: of No. 2



Model No. 0.144 Bench

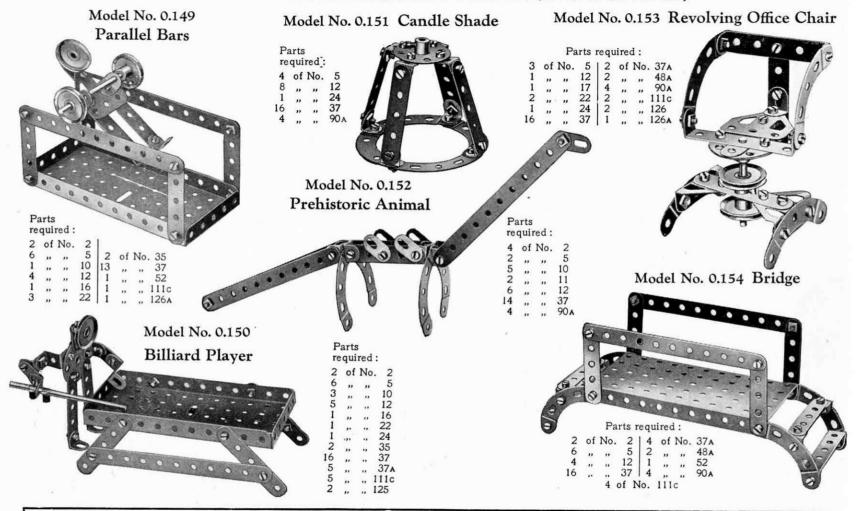
Parts required:

2 of No. 2 | 1 of No. 52 8 ,, ,, 37 | 4 ,, ,, 90A



required:

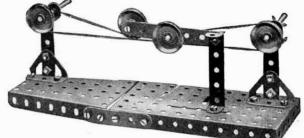
4	OI	NO.	2	4	01	INO.	22 .		~			
6		,,	5	1	,,		24	1	of	No	. 52	
2	,,	,,,	10	3	,,	,,	35	4	,,	,,	90 A	
1	,,	,,	12	16	,,	,,	37	5	,,,		111c	
2	.,	,,	16	5	,,	,,	37A	2	,,	.,	126	
1	,,		19s	1	"		40	2	,,	,,	126A	



HOW TO CONTINUE

This completes our examples of models that may be made with MECCANO Outfit No. 0 (or No. 00 and No. 00A). The next models are a little more advanced, requiring extra parts to construct them. The necessary parts are all contained in a No. 0A Accessory Outfit, the price of which may be obtained from any Meccano dealer.

Model No. 1.1 Jockey Pulley

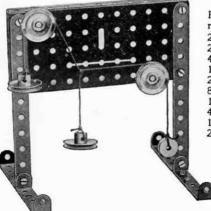


Parts required:

1	of	No.	3	12	of	No.	35 37 37 _A 40 48 _A	1	oi	No.	52
4	,,	,,	5	20	,,	,,	37	1	,,	,,	54
2	,,	,,	17	1	,,	,,	37A	2	,,	,,	111c
4	,,	,,	22	1	,,,	,,	40	2	,,	,,	126
				1	,,	,,	48A				

The weight of the pivoted $3\frac{1}{2}$ Strip, augmented by the 1 fast Pulley Wheel, causes the jockey pulley to press on the belt. Hence the latter is kept always taut.

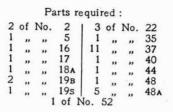
Model No. 1.2 Triangle of Forces



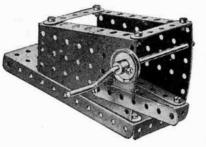
		red	
2	of	No.	- 2
2	,,	,,	18
4	,,	,,	22
1	,,	,,	23
2	,,	,,	35
8	,,	,,	37
1	,,	,,	40
4	,,	,,	48
1	,,	,,	52
2	,,	,,	125

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.

Model No. 1.5 Belt Gear Right-angle Drive Transmission

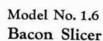


Model No. 1.3 Band Brake



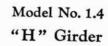


Parts required:

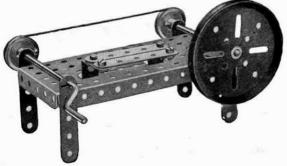


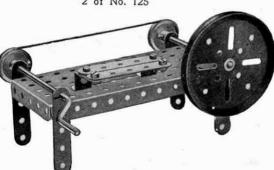
Parts required:

6	of	No.	5	2	of	No.	22
2	,,	,,	10	1	,,	,,	35
1	,,	,,	16	10	,,	,,	37
1	,,	,,	19в	1	,,	,,	40
1	,,	,,	19s	1	,,,	"	52
		- 7	of I	Va	125		



Parts required:

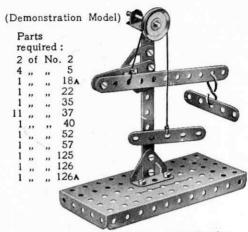




Model No. 1.7 Lever of the Second Order

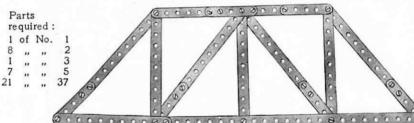
Model No. 1.9 Compound Triangulated Truss

Model No. 1.14 Belt Gear For Reversing Motion of Driven Shaft

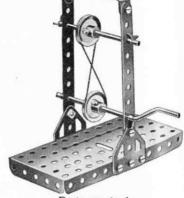


000000000000 Parts required: 2 of No.

Model No. 1.10 Howe Truss



Model No. 1.11 Triangulated Truss



Parts required: of No. 2 110 of No. 37

The fulcrum is at one end, the power at the other and the load lies between the two.

Model No. 1.8 Lever of the Third Order

(Demonstration Model) Parts required: 2 of No. 2

Parts required: 1 of No.

Model No. 1.13 Model No. 1.12 45° Set-Square

> Parts required: 3 of No. 2 | 1 of No. 3 5 of No. 37

60° Set-Square Parts required: 2 of No. Parts required: 2 of No. 2

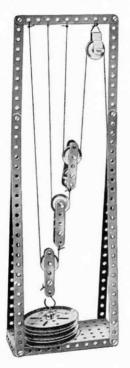
The fulcrum is at one end, the load at the other and the power lies between the two.

Model No. 1.15 Belt Gear

For Driving Shafts at Right Angles

Model No. 1.16 Pulley Block

Demonstration Model: 1 Fixed and 3 Movable Sheaves. Theoretical Mechanical advantage: 8 to 1



Parts required:

4	of	No	. 1	3	of	No.	19в	
3	,,	,,	2	4	,,	,,	22	
6	,,	,,	5	15	,,,	,,	37	
2	,,	,,	11	1	,,	,,	40	
2	,,	,,	12	1	,,	**	44	
2	"	,,	17	1	,,	**	52	
2			184	1	-		57	

Model No. 1.17 Pulley Block

Demonstration Model: 3 Fixed and 2 Movable Sheaves. Theoretical Mechanical advantage: 5 to 1

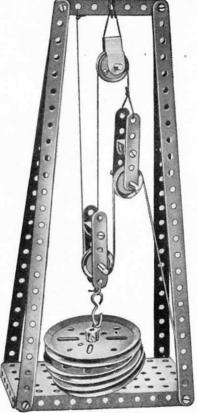
			arts :		100		12020
4	01	No.	1	4	of	No.	19B
7	,,	,,	2	4	,,	,,	22
6	,,	,,	5	6	,,	,,	35
2 2 2	,,	"	10	22	,,	,,	37
2	,,	,,	12	1	,,	,,	40
_	,,	,,	16	1	,,	,,	44
2	,,	"	17	1	,,	,,	52
2	,,	,,	18A	1	,,	,,	57



Model No. 1.18 Pulley Block

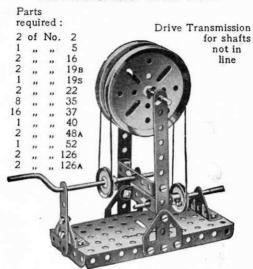
Demonstration Model:

1 Fixed Sheave and 2 Suspended Blocks.
Theoretical Mechanical advantage: 4 to 1

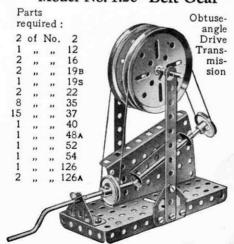


		P	arts :	requi	red	:	
4	of	No.	1	4	of	No.	19B
1	,,	,,	3	3	,,	,,	22
4	,,	,,	5	10	,,	,,	37
2	,,	,,	11	1	,,	,,	40
1 2	,,	"	17	1	,,	"	44
2	**	,,	18a	1	,,	"	52
		1	of l	No.	57		

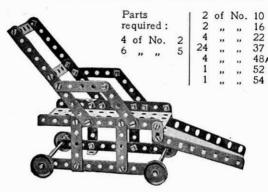
Model No. 1.19 Belt Gear



Model No. 1.20 Belt Gear



Model No. 1.21 Invalid Chair



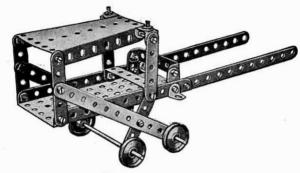
Model No. 1.22 Letter Balance

Parts required:

						. oqu.	····				
	of	No.	2	4	of	No.	22	12	of	No.	48A
3	,,	,,	5	1	,,		24	1	,,		
1	,,	,,	10	26	,,	,,	37	2	,,		111c
1	"	**	12	4	,,	,,	37A	2	,,		126
2	**	"	18A	2	,,	***	38	2	,,	,,	126A
1	,,	**	19в	1	,,	,,	44				

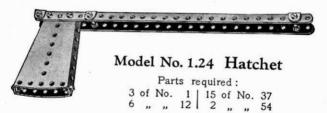


Model No. 1.23 Ticca Gharry



Parts required:

4	of	No.	2	6	of	No.	12 16 22	22	of	No.	37
6	,,	,,	5	2	,,	,,	16	1	,,	,,	52
2	,,	**	10	4	,,	,,	22	_ 1	,,	,,	54



Model No. 1.25 Truck with Sides

Parts required:

4 of No. 2

4 " " 5

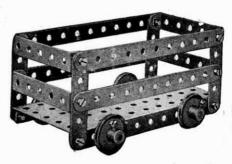
2 " " 16

4 " " 22

12 " " 37

4 " " 48A

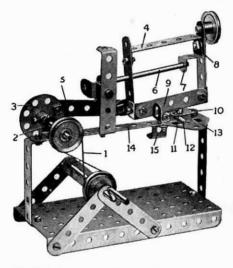
1 " 52



Model No. 1.26 Mechanical Saw

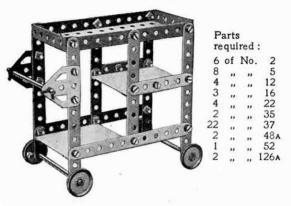
Parts required:

1	of	No.		1	of	No.	17	4	of	No.	. 38
8	,,	,,	5	1	,,			1			40
1	,,	**	10	3	,,	,,	22		,,	,,	44
1	,,	"	11	1	,,	,,	24	4	,,	,,	48A
4	,,	,,	12	3	,,	**	35	1	,,	,,,	52
1	**	**	16	22	,,	,,	37	2	,,		125
								1	,,	,,	126A



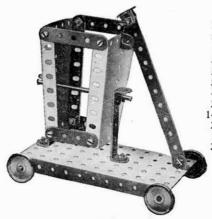
The Strip 9 represents the saw. The Crank Handle drives, through a belt 1, a short Rod journalled in a Double Bracket 2 and carrying a Bush Wheel 3. The latter imparts a reciprocating motion to the saw frame 4 through a 2½ Strip 5 loosely mounted on Bolts secured to the Bush Wheel and to an Angle Bracket bolted to the saw frame. This frame slides on a 3½ Rod 6, which acts as a guide, passing through the frame and supported in a Reversed Angle Bracket 7. A Washer is placed on the Bolt 8 behind the Bracket 7. A vice to secure the objects in position for cutting consists of a Flat Bracket 10 mounted on a Bolt 11, a few turns of which causes the Flat Bracket to grip the object 12. The Bolt 11 enters a Nut held between the Flat Trunnion 13 and 5½ Strip 14, which are spaced apart for the purpose by Washers placed on the two Bolts holding the Trunnion in position. The saw frame rests on the stop 15 when not in use. A 1" Pulley secured to the top of the frame acts as a weight and helps to steady the saw.

Model No. 1.27 Dinner Wagon



The two lower platforms are constructed out of pieces of ordinary cardboard, their outer edges resting on 21" Double Angle Strips and their inner edges on Angle Brackets.

Model No. 1.28 Tip Wagon



	arts	red	;
1	of	No.	2
4	,,	,,	5
5	,,	,,	12
3	"	,,,	16
4	"	**	22
.2	"	,,	35
14	"	**	37
2	,,	33	48A
1	"	"	52
2	**	**	54

Model No. 1.29 Aeroplane



Parts required:

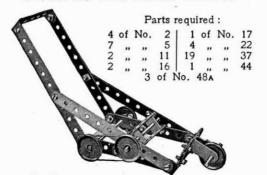
						4						
2	of	No.	2	2	of	No.	16	1	of	No.	48A 54 90A 100	
5	,,	,,	5	2	,,	,,	22	1	,,	,,	54	
1	,,	,,	11	1	,,	"	24	2	,,	,,	90A	
6	,,		12	21	,,	,,	37	2	,,	,,	100	
				1			40					

Model No. 1.30 Timber Drag



4 of No. 2 | 2 of No. 16 | 8 of No. 37 2 , , , 11 | 4 , , , 22 | 4 , , , 48A

Model No. 1.31 Lawn Mower



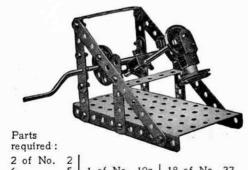
Model No. 1.32 Tandem Car



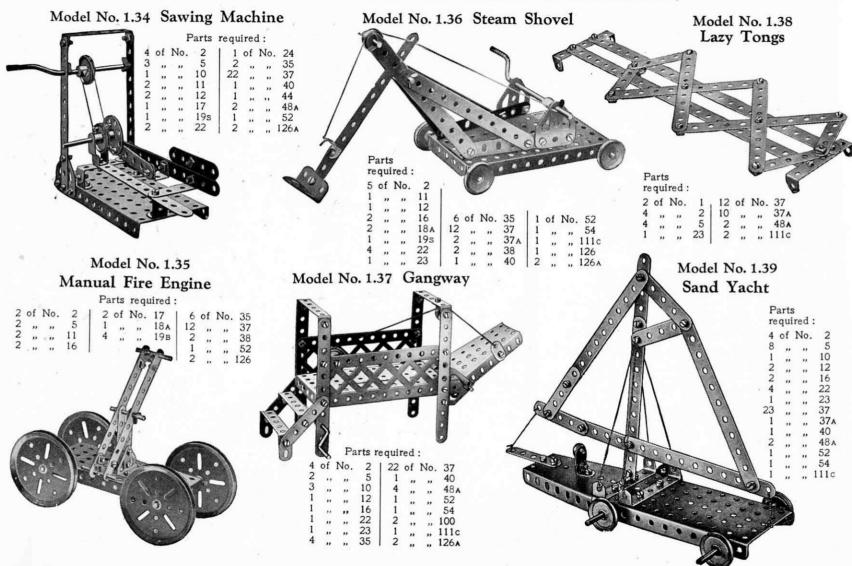
Parts required:

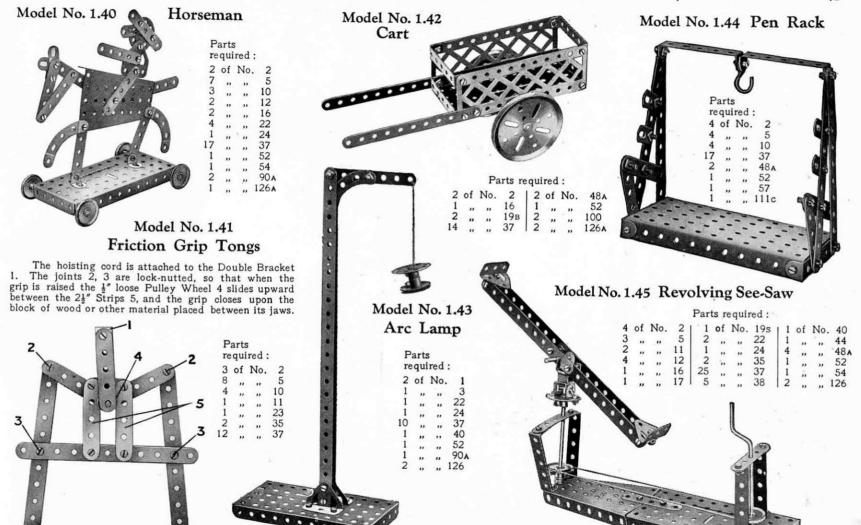
4	of	No.	2	4	of	No.	19 _B
8	,,	,,	5	26	,,	,,	37
2	,,	,,	12	5	,,	,,	48A
2	,,	,,	16	1	,,	**	52
		2	of I	Vo.	126	A	

Model No. 1.33 Mechanical Hammer

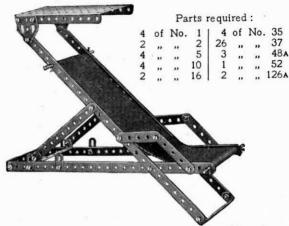


1 of No. 19s | 18 of No. 37 2 ,, ,, 22 | 1 ,, ,, 44 1 ,, ,, 35 | 1 ,, ,, 52





Model No. 1.46 Deck Chair

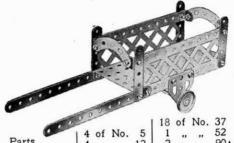


Model No. 1.47 Potter's Wheel

Parts required

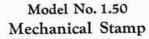
		Parts re	equi	red	:		
1 1 1	of	No. 2 " 5 " 16 " 18A " 19B " 19s	1 1 12 1 3 No.	of " " 52	No.	22 24 35 37 40 48A	

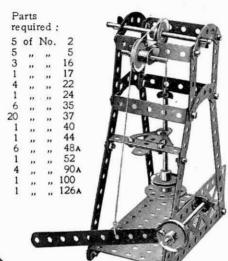
Model No. 1.48 Luggage Cart

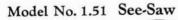


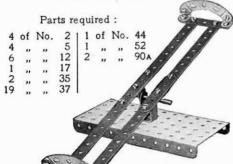
0	4	of	No.	5	1	,,	,,	52
Parts required :	4	,,	,,	12	2	,,	,,	90A
성보면서 이번에게 여러	1	,,	,,	16	2	**	**	100
2 of No. 2	1 2	**	,,	22	(2	,,	**	126A

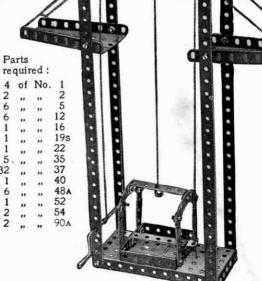
Model No. 1.49 Elevator













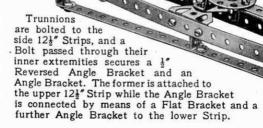
Model No. 1.52 Umpire's Seat

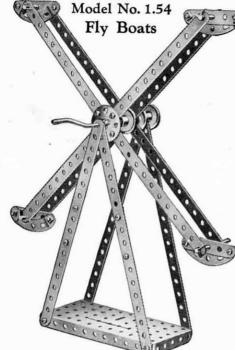
re	arts	red	
6		No.	
7	,,	,,	5
2	,,	,,	10
4	,,	,,	12
24	,,,		37
3	,,	,,	48
2	"	,,	90
2	,,	,,	126

Model No. 1.53 Submarine

Parts required:

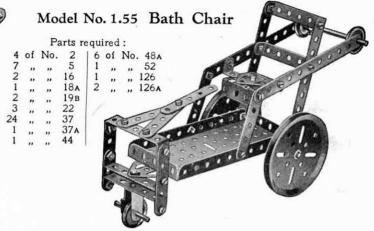
				oqu.	1100		
	of	No.	1	12	of	No.	35
5	,,	,,	10	28	,,	"	37
2823	,,	,,	11	3	,,	,,	37A
8	,,	,,	12	2	,,	,,	38
2	,,		17	1	,,	**	48
	,,	,,	22	1		.,,	48A
1	**	,,	24	2	.,	.,	125
			0	2	.,	,,	126





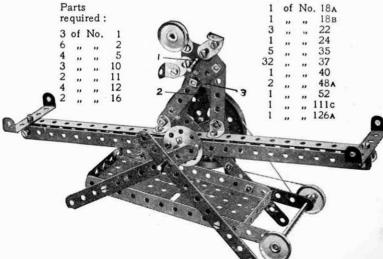
Parts required:

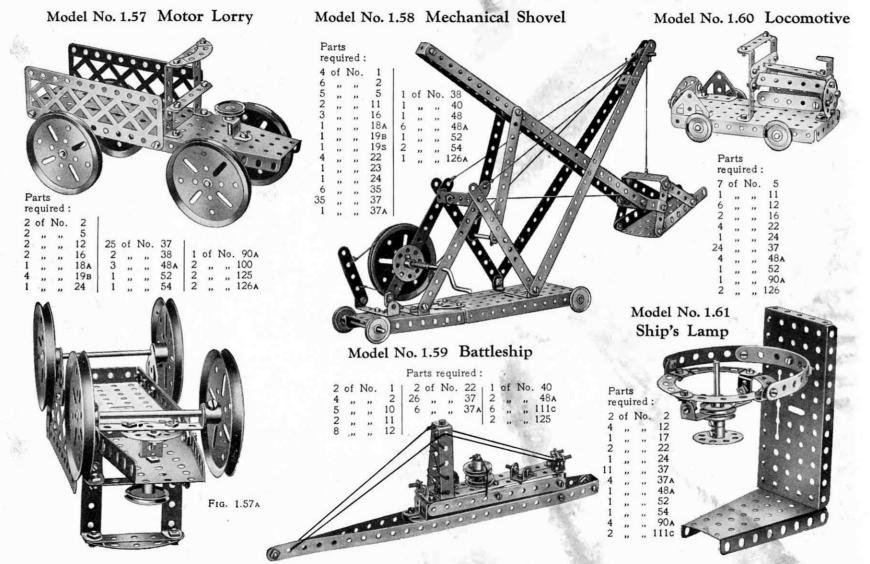
4	of	No.	1	2	of	No.	18A	
8	,,		2	1		,,	19s	
4	,,		5	4		.,	22	
2			17	1			24	
				8			35	
				24			37	
-	_			1	**		52	
				4	**		90 4	

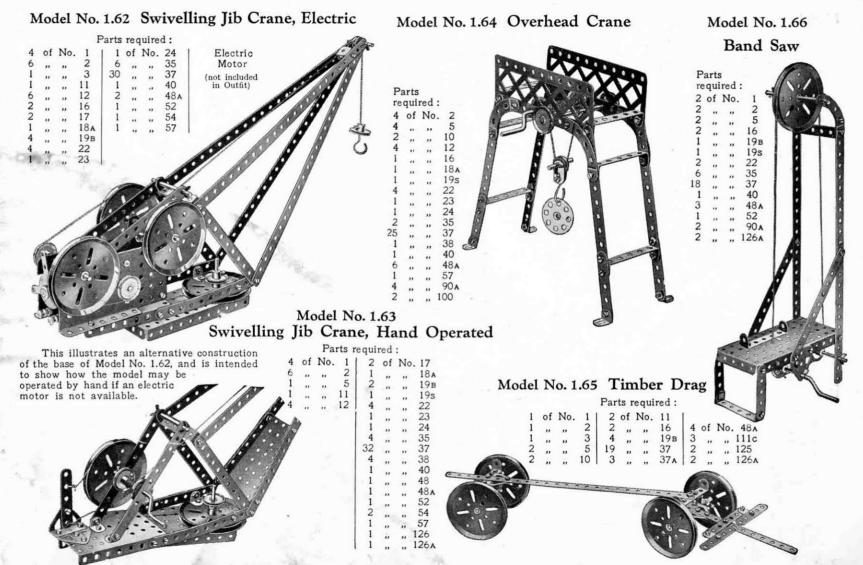


Model No. 1.56 Acrobat on See-Saw

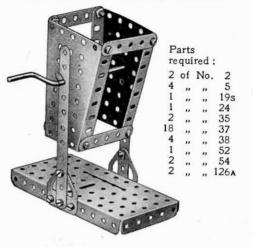
The 1" Rod 1 is journalled in the end holes of two $5\frac{1}{2}$ " Strips 2 and in the Flat Trunnion 3 which joins them. It is held in position by two Spring Clips, placed on either side of the $5\frac{1}{2}$ " Strips 2.







Model No. 1.67 Butter Churn



4 of No. 22

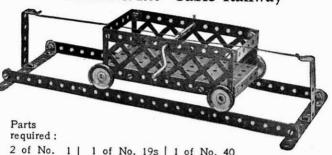
Parts required:

Model No. 1.68 Inverted Centrifugal Governor

23

111c 125

Model No. 1.69 Cable Railway



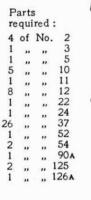
2	of	No.	1	1	of	No.	19s 22 35 37	1	of	No.	40
2	,,	,,	2	4	,,	,,	22	4	,,	,,	48
4	,,	,,	12	2	,,	,,	35	1	,,	,,	52
2	,,	,,	16	18	,,	,,	37	2	,,	,,	100

Model No. 1.70 Candle Stick



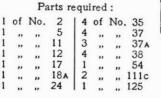


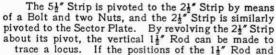
Model No. 1.72 Man and Boy



Model No. 1.71 Machine for Tracing a Locus

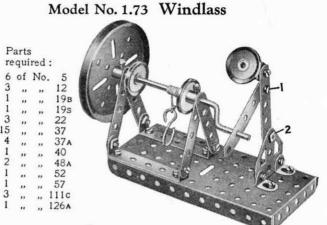
_ .





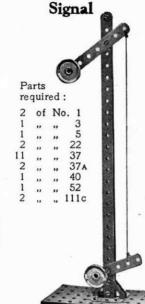
the 5½" Strip are altered, several different loci may be traced. Machines of this type are of advantage in assisting in the design of engine connecting rods.

Model No. 1.75

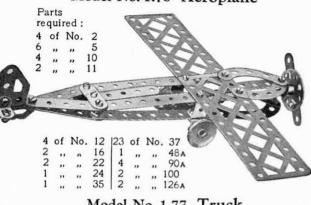


The figure at the right of the model is arranged to work to and fro when the Crank Handle is rotated. The Bolts 1 and 2 are both secured by two nuts as in Standard Mechanism No. 262.

Model No. 1.74 Lorry Crane



Model No. 1.76 Aeroplane



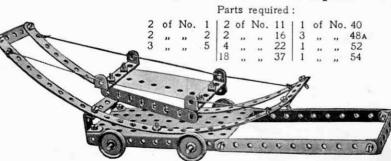
Model No. 1.77 Truck

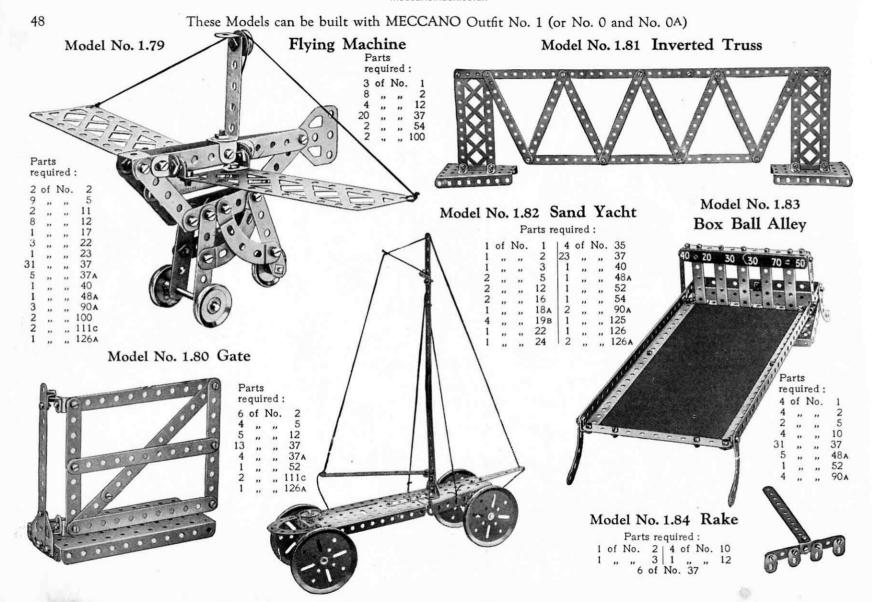


Parts required:

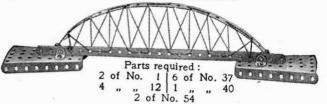
2	, 2	of	No.	16
2 5 0 2	1	,,	,,	17
0	1	,,	,,	18A
2	4	,,	,,	19в
	1	,,	,,	19s
	1 3 1 1 3 29	,,	,,	22 23 24 35
	1	,,	,,	23
	1	- 22	,,	24
	3	,,	,,	35
		,,	,,	37
	1	,,	,,	40
	1 5 1	,,	,,,	44
	5	,.	,,	48A
	1	,,	,,	52
	1	,,	,,	54
	1 2	,,	**	48 A 52 54 57
	2			125

Model No. 1.78 Mountain Transport



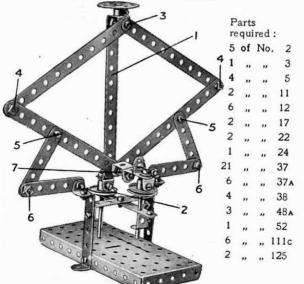


Model No. 1.85 Bow Girder

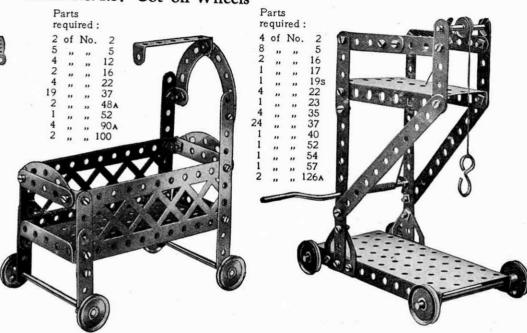


Model No. 1.86 Double-Action Pump

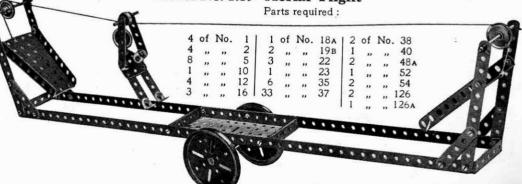
The 5½" Strip 1 is attached to the 1" Pulley Wheel 2 by means of two Angle Brackets, through the lower of which passes the Set-Screw that secures the Pulley to its 2" Rod. Two Washers are placed beneath the head of the Bolt joining the Angle Brackets in order to prevent its shank from binding on the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



Model No. 1.87 Cot on Wheels Model No. 1.88 Tower Wagon

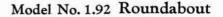


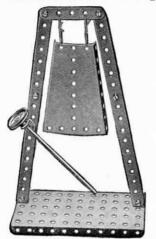
Model No. 1.89 Aerial Flight



Model No. 1.93

Model No. 1.90 Gong





Begin to build this model by making the platform from a Flanged Plate and 121" Strips. The drive from the Pulley on the Crank Handle is taken to a 1" Pulley, fast on the vertical 2" Rod, another similar Pulley being secured to this Rod beneath the Plate.

The arms are formed of four $5\frac{1}{2}$ " Strips bolted to a Bush Wheel fast on the 2" Rod.

Model No. 1.94

1 3 of No. 22

Parts required:

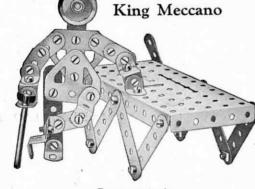
Parts required:

Model No. 1.91 Emery Wheel Parts required:

1	of	No.	17	1	of	No.	22	10	of	No.
1		,,	18а 19в	1	,,	,,	24 35	1	,,	,,
2	,,	,,,	19в [2	,,	,,	35	1	,,	,,
								1	,,	"
								1	,,	,,

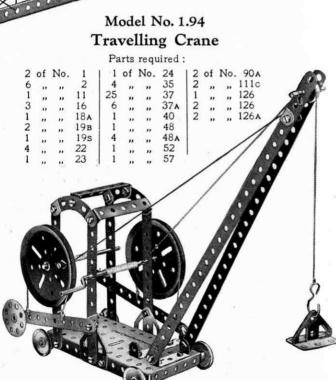


48A

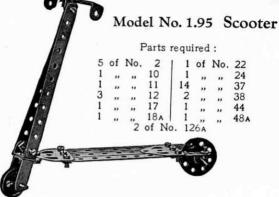


Parts required:

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







Model No. 1.96 Ballista

This is a model of an ancient engine of war, resembling the crossbow. The 3½" Strip 1 is bolted firmly to the Double Angle Strip 2, which is prevented from turning by the addition of Angle Brackets as shown. A Double Bracket 3 slides on the Strip 1 and is secured to a piece of cord. On rotation of the

backward until the Double Bracket 3 slips off its end. The Strip then flies forward and strikes the missile, which consists of a 2" Rod placed ready in the

Crank Handle 4, the Strip 1 is pulled

Double Bracket 5.

	-
Parts	required .

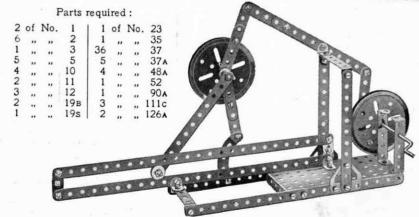
4	of	No.	1	12	of	No.	16 18a	1	of	No.	40
4	,,	,,	2	1	,,	,,	18A	1	.,		44
1	**	.,	3	3			19B	4	166	**	48A
2	,,		11	1			19s	1	,,	**	52
2	,,	,,	12	4	,,	**	22				90a
				21	,,	,,	37	2	,,	**	126A

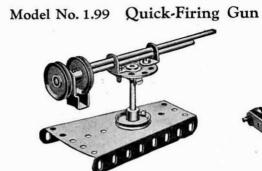
Model No. 1.97 Tight-Rope Walker

The cord on which the "Meccanitian" runs is endless and passes over the 1" fast Pulleys at each end of the model. One of the Pulleys is secured to a Crank Handle, by means of which the model may be operated. The Meccanitian runs on the upper half of the endless cord, the lower half being attached to one of his feet.

	Part equ	is ired	:	1							
4	of	No.	1								-
4	,,	,,	2	2	of	No.	17	2	of	No.	38
1	,,	,,	3	1	,,	.,	19s	1	,,	,,	40
5	,,	.,	5	4	,,		22	2	,,	,,	48.
3	,,		10	1	,,		23	1	,,	,,	52
4	,,	.,,	12	6	,,	,,	35	2	,,	,,	54

Model No. 1.98 Double-Action Piston Connection

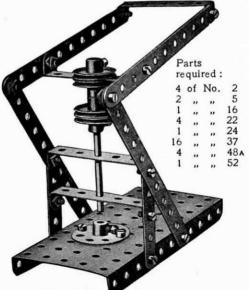




Parts required:

2	of	No.	12	1	of	No.	24
2			16	2	,,	,,	37
1		.,	17	1	,,	,,	44
4	,,	No.	22	1	,,	,,	54

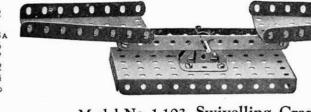
Model No. 1.100 Punching Machine



Parts required:

			_
2	of	No.	2
2	,,	.,,	11
1	**	,,	18A
2	,,	**	35
8	,,	**	37
1	**		52
2	**	**	54
2	**	"	126

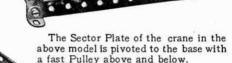
Model No. 1.101 Scales

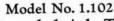


Model No. 1.103 Swivelling Crane

1 of No. 52

	-					
		P	arts re	equ	irec	i :
4	of	No.	2	1	of	No
7	,,	**	5	1	,,	,,
7 2 2	,,	,,	12	1	,,	,,
2	,,	••	17	2	"	*1
1 4	,,	••	19s			
	,,	"	22	1		
1 2	"	,,	23 35	-	X	
21	"	,,	37		0	-
3	"	"	38			0
1	"	"	40			•
î	"		44			
1	,,	,,	48A	1	13	

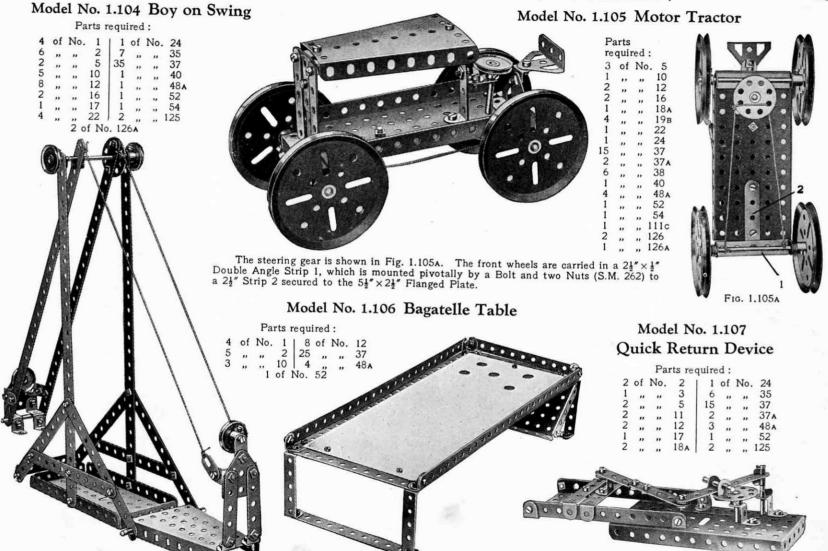




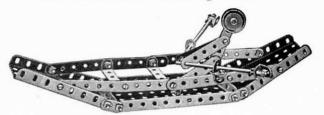
Extended Ash Tip

6	/			Pa	rts	requ	ired:				
4	of	No.	1			No.		2	of	No.	48
5	,,	,,	2	1	,,	,,	19s	1	,,	,,	52
7	. ',,,	,,	5	4	,,	,,	22	6	,,	,,	1110
2	,,	,,	11	1	,,	,,	24	2	,,	,,	125
8	,,	,,	12	5	,,	,,	35	2	,,	**	126
1	,,	,,	16	36	,,	,,	37	2	,,	**	126.
2	,,	,,	17	1	,,	,,	40				
2	"	**	17	1 1	,,	"	40				

The trolley is operated by means of a cord that is wound round the 13" Axle Rod carrying the Bush Wheel, both ends of the cord being secured to the trolley. The bucket is suspended from a cord that winds on to the Crank Handle, and it is tipped by lowering it until a short cord that is attached to the bottom of the bucket and to the trolley, becomes taut. Further lowering causes the bucket to swing over.



Model No. 1.108 Rowing Boat



Parts required: 4 of No. 2 | 4 of No. 35

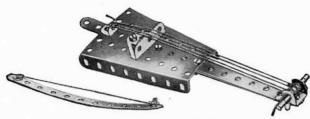
Model No. 1.109 The Wrestlers

Model No. 1.110 Weather Vane

Parts required:

3	of	No.	1	14	of	No.	37
2	,,	,,	2	1	,,	,,	52
1	,,	,,	11	1	,,	,,	54
2	,,	,,	12	1	,,	,,	111c
1	,,	,,	24	2	,,	,,	126

Model No. 1.111 Violin and Bow



Parts required:

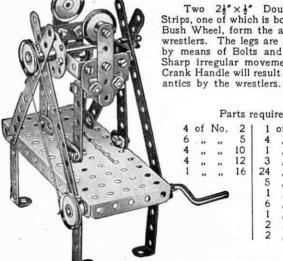
4	of	No.	2	1	of	No.	12	1	of	No.	40
í	,,	,,	5	1	,,	,,	18A	1	,,	,,	54
1	"	,,	11	5	,,	"	12 18a 35 37	1	"	**	126

Model No. 1.112 Beam Engine

The connecting Strip 1 is attached pivotally by a Bolt and two Nuts (Standard Mechanism No. 262) to one end of the beam 2 and to the Bush Wheel 3. The Strip 4 is similarly connected to the other end of the beam 2 and to the Double Bracket 5 attached to the piston rod. The short rod carrying the flywheel 6 is journalled in a 21" Strip supported by the Trunnion 7 and in a Reversed Angle Bracket bolted to the 21" Strip.

	qui		_
	10	No.	
1	,,	,,	3
3	,,	,,	5
2	**	,,,	11
3	,,	**	12
2	"	"	16
1	,,	,,	17
1	,,	,,	19B
1	,,	,,	24
8	,,	,,	35
20	,,	,,	37
4	,,	,,	37A
1	,,	,,	48
1	,,	,,	52
2	,,	,,	125
1	,,	,,	126
2	,,		126A





Two $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strips, one of which is bolted to the Bush Wheel, form the arms of the wrestlers. The legs are all pivoted by means of Bolts and lock-nuts. Sharp irregular movements of the Crank Handle will result in amusing

Parts required:

5 4 " 22 10 1 " 24 12 3 " 35 16 24 " 37 5 " 38 1 " 40 6 " 48 1 " 52 2 " 111c 2 " 126 2 " 126	١.	5	1	of	No.	19s
12 3 " 35 16 24 " 37 5 " 38 1 " 40 6 " 48A			4	,,	,,	
12 3 " 35 16 24 " 37 5 " 38 1 " 40 6 " 48A		10	1	,,	,,	24
5 ,, ,, 38 1 ,, ,, 40 6 ,, ,, 48A		12	3	**	,,	35
1 ,, ,, 40 6 ,, ,, 48A		16	24	,,	,,	
6 " " 48A			5	,,	,,	
	э		1	,,	**	
1 ,, ,, 52 2 ,, ,, 111c 2 ,, ,, 126A				,,	.,	
2 ,, ,, 111c 2 ,, ,, 126A			1	,,	,,	
1 2 " "126A			2	**	.,	
			2	,,	,,	126A

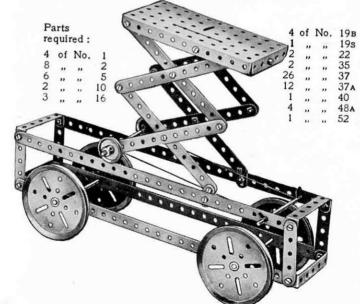
Model No. 1.113 Cum Bak



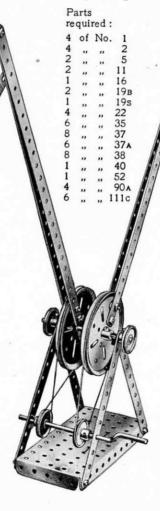
1	of	No.	18 _A
2	,,	,,	19B
2	,,	,,	22
1	,,	,,	23
1	"	,,,	35
8	,,	,,	37
4	,,	,,	48A

A short length of elastic is doubled and stretched between the centres of the 3" Pulley Wheels. A weight, consisting of two 1" fast Pulley Wheels and a 1½" Rod, is suspended from it in the middle of the drum. When the Cum Bak is rolled along any smooth level surface, the elastic becomes twisted and stores up sufficient energy to return the drum to its starting point. If the mechanism is concealed by a thin cardboard covering, the model will cause much amusement by its mystifying behaviour.

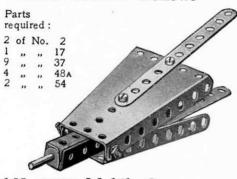
Model No. 1.114 Tower Wagon



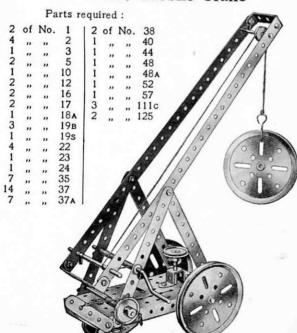
Model No. 1.115 Flip Flap

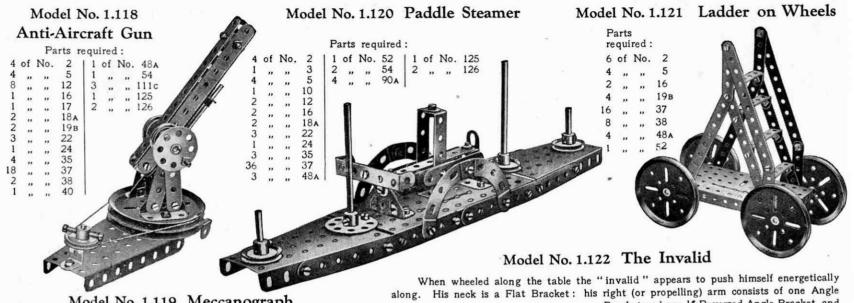


Model No. 1.116 Bellows



Model No. 1.117 Mobile Crane





Model No. 1.119 Meccanograph

Parts required: 2 of No. 17 5 of No. 35 2 of No. 48A

Parts required:

Bracket and one & 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 51" Strips, and it runs on three 1" Pulley Wheels-one in front and two at the back. One of these (not visible in the illustration) drives by cord another 1" Pulley Wheel, the shaft of which also carries a Bush Wheel 1. As will be seen, a 21 "Strip is pivoted at one end to this Bush Wheel and at the other end to a second 21 "Strip 2, which, rocking about an axle journalled through its centre

hole, is again pivoted to the

invalid's hands.

Model No. 1.123 Bow and Arrow

Parts required: 1 of No. 1 | 1 of No. 16 1 of No. 40

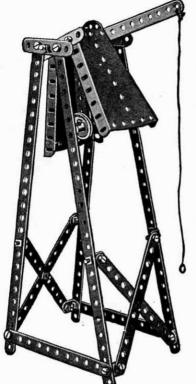


Model No. 1.124 Rotating Crane

The running wheels of this crane are journalled in Double Angle Strips bolted to the base plate and secured at an angle by means of Flat Brackets. The rear of the Base Plate is supported on a Double Bracket. The jib is bolted loosely to the supporting 5½" Strips and is connected by 2½" Strips to the Sector Plate which pivots about its supporting bolts. By moving this Sector Plate the elevation of the jib may be altered as desired. The movement is controlled by a Double Angle Strip mounted on the Crank Handle and connected pivotally to the plate by means of a 2½" Strip. A Reversed Angle Bracket bolted to an upright Double Angle Strip in the rear of the model serves to restrict the movement of the Sector Plate.

Parts required:

					· qui	cu		
	4	of	No.	2 5 10 11 16 17 19s 22	5 25	of	No.	24
	4 9 2 1 2	,,	,,	.5	5	,,	,,,	35 37 40
	2	"	"	10	25	,,	**	37
	1	"	"	11	1	**	**	40
	1	"	**	17	1	,,	"	48 A 52 54
	1	"	"	100	1 1	"	.,,	52
	4	"	"	22	1	"	"	57
TO TOO		"	,,	22	li	"	,,	57 125
	A.				٠.	"	"	120
					a de la constante de la consta			0



Model No. 1.126 Gramophone

Parts required:

2	of	No.	10
1	,,	,,	12
1	,,	,,	19в
1	,,	,,	23
1	"	33.	24
6	,,	"	37
1	**	"	38
1	,,	,,	52



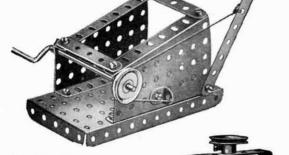
Model No. 1.127 Band Brake

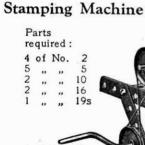
M	00	le	:1	
			_	_

No. 1.125 Fire Alarm

Parts required: of No. 2 | 1 of No. 19s 1 of No. 40

Parts required:





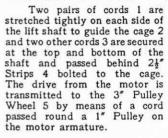
Model No. 1.128

of No. 22

Model No. 1.129 Electric Elevator

Model No. 1.130 Mounted Cowboy

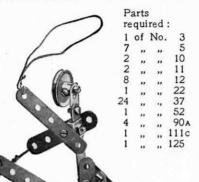
Model No. 1.132 Coaster

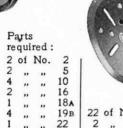


Parts required:

4	of	No.	1	34	of	No.	37
6	,,	,,	2	1	,,	,,	38
4	,,	,,	5	1	,,	,,	40
2	,,	,,	12	1	,,	,,	48
4 2 3 3	,,	,,	16	6	,,	,,	48A
3		,,	19в	1	,,	,,	52
4	,,	,,	22	2	,,	,,	54
1	,,	,,	24	2	,,	,,	100
3	,,	,,	35	2	,,	,,	125

Electric Motor (not included in Outfit)





Model No. 1.133

Model No. 1.131

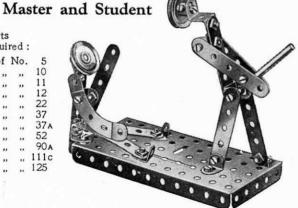


re	qui	red:	
2	of	No.	2
6	,,	,,	5
4	,,	,,	10
2	,,	,,	11
4	,,	,,	12
1	,,	,,	16
2	,,	,,	19E
2	,,	,,	22
2	,,	,,	35
14	,,	,,	37
2	,,	,,	38
2 2 2	,,	,,	1110
2	,,		125





Parts required:



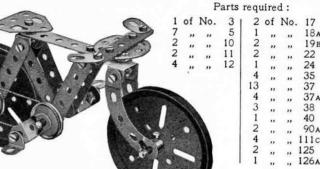
Model No. 1.134 Travelling Crane

The jib 1 is pivoted to the Flat Trunnions 2. which are bolted at 3 to Angle Brackets secured to a Bush Wheel. The latter is nipped to a 2" Rod 4 passing through the Plate 5 and further supported in a Double Angle Strip 6. A Washer and Spring Clip mounted on the Rod 4 below the Strip 6 secure the crane to the carriage. The jib is supported by means of cords 7 tied to 2½" Strips 8, the holes of which engage the shank of a bolt passed through the Sector Plate 9, and its elevation may be altered by inserting this bolt in different holes in the Strips 8. The cord 10 of the brake lever is wound once round the Crank Handle, between two Washers.

Model No. 1.135 Bicycle

Model No. 1.137 Gymnast

OHIDIO DILI



	1			
1	2	of	No.	17
1	1	,,	,,	18A
1	2	,,	,,	19в
1	2	,,	No.	22 24 35 37
1	1	,,	,,	24
1	4	,,	,,	35
1	13	,,	,,	37
1	4	,,	,,	37 A
1	3	,,	,,	38 40
1	1	**	,,	40
ı	2	**		90A
1	4	"	,,,	111c
ı	2	"	,,	125
1	1	,,	**	126A

Parts required:

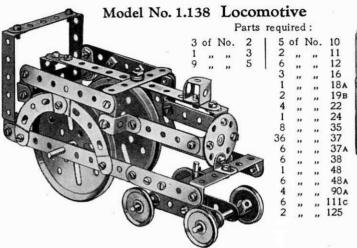
4	of	No.	2	1	of	No.	19s	1	of	No.	40
7	,,	,,	5	4	,,	,,	22	1	,,	,,	44
1	,,	,,	10	1	,,	,,	23	3	,,	,,	48A
2	,,	,,	12	1 5	,,	"	24	1	,,	**	52
2	,,	1000	16	27	"	"	35	1 !	,,	**	54
_	"	"		21	**	"	31	1 1	"	**	57
2	,,	"	17	6	,,	,,	38	2	,,	,,	126A

Model No. 1.136 Luggage Truck

_			Parts						
	of	No.	2	18	of	No.	37		
8	,,	,,	5	2	,,	,,	48A		
1 2	,,	,,	16 19в	1	,,	,,	52		
2	,,	11	19в	4	,,	"	52 90a	D	~
							_		
					-44		[0 To		0

	Part	S		W			d	
1	requ	ired :	:	, 3	of	No.	35	13
		No.	1	25	,,	,,	37	- 6
	3 "	,,	5	2	,,	,,	37 A	4
	3 ,,	,,	10	1	,,	,,	38	
4	1 "		12	1	,,	,,	40	
1	"	n	16	2	,,	,,	48A	
1	,,	"	19s	1	,,	,,	52	
3	,,	"	22	2	.,,	***	54	
- 1			24	1 1			1264	

One of the 21" Strips representing the arms of the gymnast is bolted to a Bush Wheel secured on a 31 Rod. When the Crank Handle is rotated the gymnast turns complete somersaults in a very amusing manner. The gymnast's "arms" must be pivoted to the Angle Brackets forming his shoulders by means of Bolts and Lock-Nuts.



Model No. 1.141 Quick-Delivery Chute Parts required: 2 of No.

Model No. 1.142 Mechanical Gong

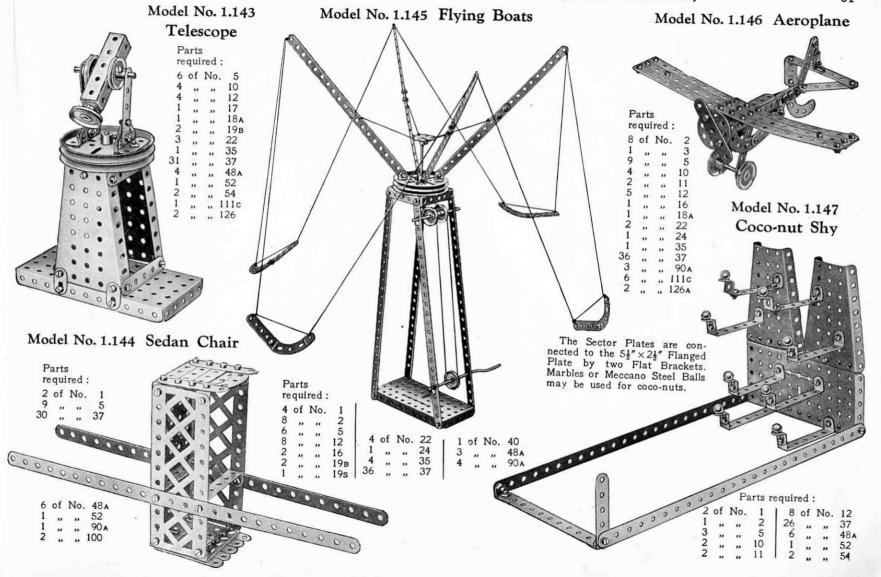
A Flat Bracket is connected pivotally to the base at 2 and is clamped rigidly to a 1" Pulley Wheel secured to the Rod 4. The latter passes through the 13" Double Angle Strip 3 and carries at its upper end another Pulley to which is rigidly secured the striking arm 5. The Double Angle Strip 3 is pivoted to the Bush Wheel 1.

The bogie is connected pivotally to the locomotive body by means of a

Parts required:

126A

11" Rod journalled in a Double Bracket, which is secured in the centre of the bogie, and in a 21 "x1" Double Angle Strip that is secured between the main side frames. Two Spring Clips between the Double Angle Strip and Double Bracket space the bogie at the correct distance. Model No. 1.140 Model No. 1.139 Treadle Grindstone Circular Saw Parts required: Parts required: No. 16 4 of No. 37



Model No. 1.148 Double Draw Bridge

4	of	No.	1	1 1	of	No.	19s	2	of	No.	38
6	,,	,,	2	2	,,	,,	22 35 37	1	,,	,,	40
1	,,	,,	16	8	,,	,,	35	6	,,	,,	48A
				16			37	2	.,		126A

Model No. 1.151 Motor Cyclist and Pillion Rider

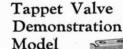
required:

				1 6	ii to	requ	med					
4	of	No.	2	12	of	No.	17	2	of	No.	48A	
9	,,	,,	5	4	,,		22	2		,,	90A	
4	,,	,,	10	1	,,	,,	24	2	,,	,,	125	
2	,,	,,	11	2	,,	,,	35	2	,,	,,	126A	
8	,,	,,	12	30	,,	,,	37				-	4
1			16									В

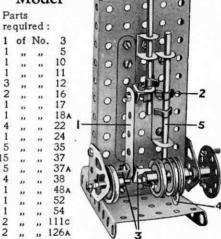
Model No. 1.149

Coaster

The figure 1 is loosely attached by lock-nutted Bolts 2 to the Sector Plate 3 and is connected to the Bush Wheel 4 by the pivotally-attached 2½" Strip 5. The 1½" Rod carrying the Bush Wheel 4 is journalled in the Cranked Bent Strip 6, the 1" fast Pulley 7 being connected to the road wheel by a cord as shown.



Model No. 1.150



Model No. 1.152

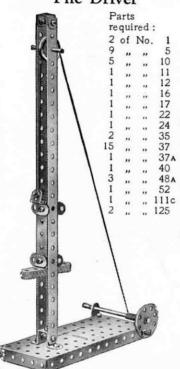
Chinese Windlass



					Pa	rts	requ	ired:				
	2	of	No.	2	2	of	No.	11	1	of	No.	24
	9	,,	,,	5	7	,,	"	12	8	,,	,,	35
1000 P	5	,,	**	10	1	,,	,,	16	37	,,	**	37
	,	. 5			2	**	**	17	6	,,	,,	37A
T.C.	/	-	14		4	,,	**	18A	1	,,	"	40
		Q			4	"	"	22	1	**	"	48
4000		$\overline{}$	O	_	1	,,	**	23	2	,,	"	48A
M M TO	1		2						2	"	"	54
1-4		2	.//	A	_	6	A		2	"	"	111c 125
		31/2	C/1	4		1	A		2	"	"	126A
O GEN	2	10			10	1	WA.	1	2	"	"	120A
2-	80	1		•	-	•		1				

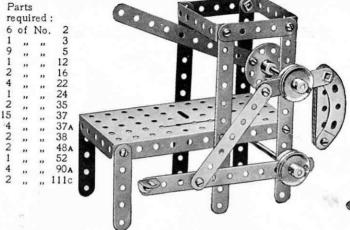
The upper end of the Strip 1 is connected pivotally by a Bolt and two Nuts to the crosshead bracket 2. The crankshaft is built up as follows: Two Angle Brackets 3 are each secured rigidly to the boss of a Pulley Wheel and are connected to each other by a \(\frac{3}{8}'' \) Bolt carrying three Nuts. The Nuts are screwed tightly against the Brackets, sufficient space being left between the inner pair to enable the connecting Strip 1 to turn freely. The valve Rod 5 is operated by the Flat Bracket 4 that is clamped between two further 1" Pulleys on the crankshaft in such a way that its protruding end serves as a cam.

Model No. 1.153 Pile Driver



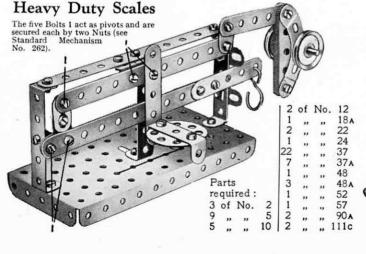
The winding cord is passed round the Pulley at the top of the model and is fastened to an Angle Bracket that is hooked under the protruding portion of a Flat Bracket bolted to the top of the driving head. When the Angle Bracket reaches the Pulley at the top it is pushed out a little, thus releasing the driving head.

Model No. 1.154 Foot Hammer

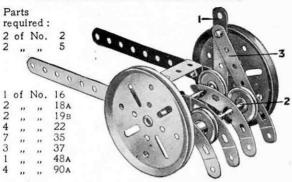


The treadle lever is connected pivotally to a 3½° Strip by a Bolt and two Nuts. The upper end of this Strip is similarly connected to a 2½° Strip that is clamped tightly between two Pulleys on the hammer Rod. Pressure on the treadle causes the hammer to descend on the work. When the treadle is released a weight pulls the hammer back to its original position.

Model No. 1.155

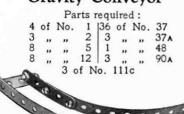


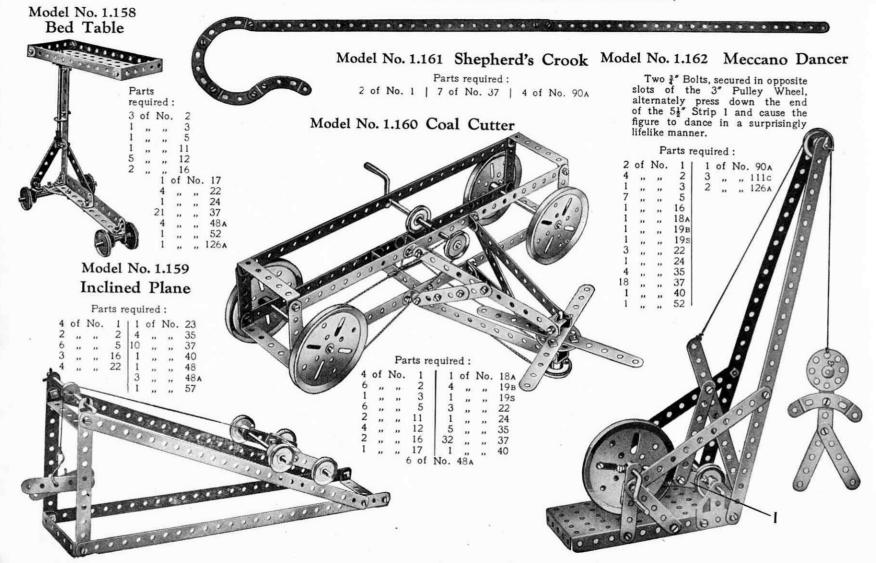
Model No. 1.156 Horse Rake



The $2\frac{1}{2}$ " Strip 1 pivots about the wheel axle. A $2\frac{1}{2}$ " Strip 3 is connected by a Bolt and two Nuts to the Strip 1 and the Shaft 2, which consists of two $1\frac{1}{2}$ " Rods, passes through its other end. On pulling the lever 1 towards the shafts the rake is lifted from the ground.

Model No. 1.157 Gravity Conveyor



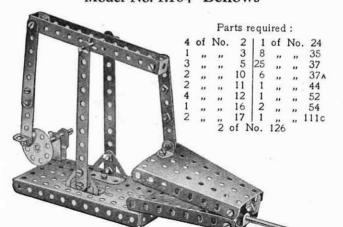


Model No. 1.163 Eccentric Dancers



4	of	No.	48a	0	1 (1)
2	,,		111c	0	00
1	,,		125		
2	,,	,,	126A		

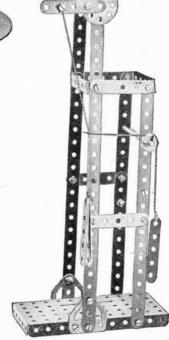
Model No. 1.164 Bellows



Model No. 1.165

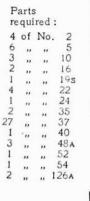
Crosshead Demonstration Model

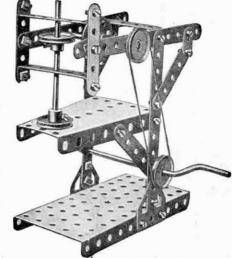
		Par	ts re	qui	red	:	
2	of	No.	1	13	of	No.	35
4	,,	,,	2	20	,,	,,	37
9	,,	**	5	1	,,	,,	40
2	,,	"	16	2	.,,	,,	484
1	,,	,,	23	1	,.	,,	52
1			24	12			1264



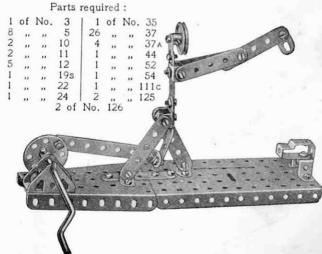
This is an apparatus for determining the forces that act at the crosshead of a reciprocating engine. The upper inclined length of cord represents the connecting rod and the lower, or vertical portion, the piston rod. The pull on the third cord indicates the pressure exerted on the slide bars of the engine due to the angularity of the connecting rod.

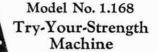
Model No. 1.166 Drop Stamp



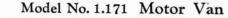


Model No. 1.167 Blacksmith



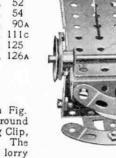






Parts required :

3	of	No.	5	17	of	No.	37
1	,,	,,	11	1	,,	,,	40
1	,,	,,	12	3	,,	,,	48A
2	,,	,,	16	1	,,	,,	52
1	,,	,,	17	1	,,	,,	54
4	,,	,,	22	3	,,	,,	90 A
1	,,	,,	23	1	,,	,,	111c
1	.,	***	24	1	,,	,,	125
1	,,	,,	35	1	,,	,,	126A



The steering mechanism is shown more clearly in Fig. 1.171a. A length of cord is given two or three turns round the steering column, and is held in position by a Spring Clip, its ends being tied to a $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strip. The latter is pivoted to the $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flanged Plate of the lorry by means of a Bolt and two Nuts (see Standard Mechanisms Manual. Detail No. 262).

FIG. 1.171A

Parts

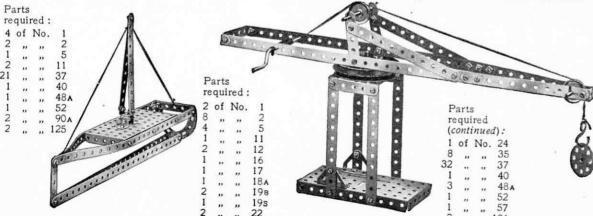
Model No. 1.169 Double Cable Key Parts required:

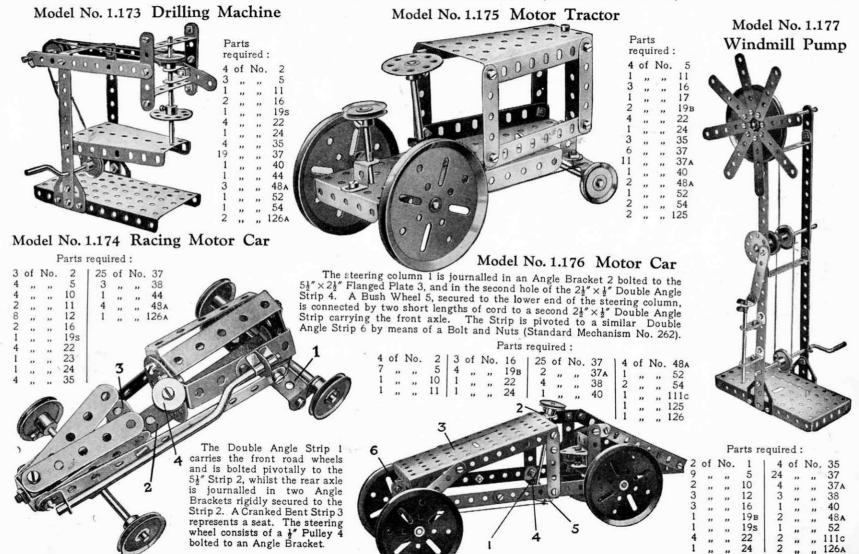
2 of No. 2 | 1 of No. 52 2 ,, 22 | 2 ,, 111c 4 ,, 37 |

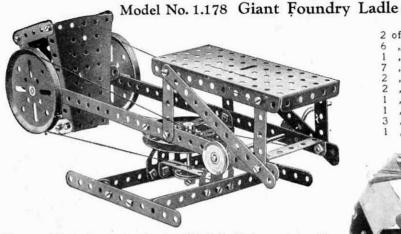


Model No. 1.170 Boat

Model No. 1.172 Revolving Hammerhead Crane

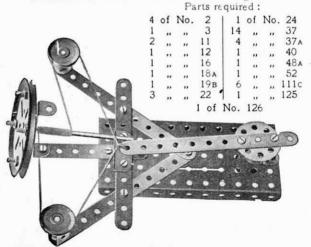




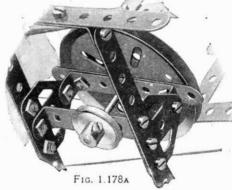


The ladle pivots about a 31" Axle Rod carrying a 3" Pulley at each end in addition to a Bush Wheel and a 21/2" Strip. The two latter parts are bolted to the side flanges of the Sector Plates and the Bush Wheel is nipped in position on the Rod. The pivot about which the superstructure turns is shown in Fig. 1.178A.

Model No. 1.179 Boat Steering Gear



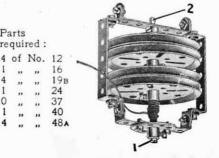
Parts required: 3 of No. 22



Model No. 1.180 Gyroscope

The 5/32" Bolt 1 is gripped by the Set-Screw of the Bush Wheel. The lower end of the Rod 2 of the gyroscope enters the boss of the Bush Wheel and rests on the shank of the Bolt 1.

Parts required:

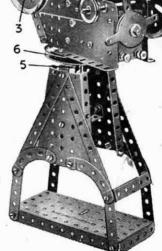


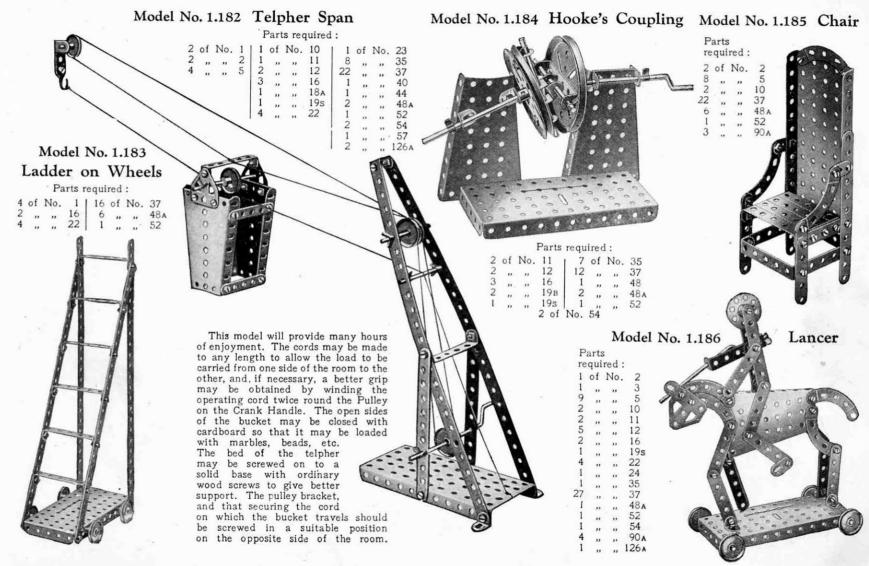
Model No. 1.181

Elevated Jib Crane A 1" fast Pulley Wheel secured to the armature spindle of the Electric Motor is connected by an endless cord to the 3" Pulley Wheel 1. A 1" fast Pulley 2 on the same Rod as the latter is similarly connected with a second 3" Pulley Wheel 3. A cord wound on the Rod to which the latter is secured carries the load book. The jib is supported by two cords
4, and the whole superstructure, 4, and the whole superstructure, which is secured to the 3* Pulley Wheel 6 is capable of revolving with the Rod 5. The latter is journalled in two 2½*x½* Double Angle Strips secured between the Sector Plates in the base of the model. of the model.

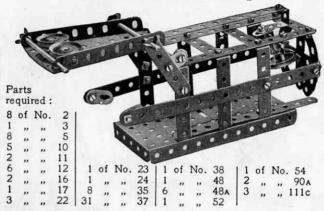
2	of	No.	1
4	,,	,,	2
1	,,	**	5
1	,,	,,	11
2	,,	,,	12
3	,,	,,	16
1	,,	**	17
3	,,	,,	19B
4	,,	,,	22
1	,,	,,	23
1	,,	,,	24
5	,,	,,	35
6	,,	**	37
2	,,	,,	38
1	,,	,,	40
5	,,	,,	48 A
1	,,	**	52
2	,,	**	54
1	,,	,,	57
4	,,	,,	90A







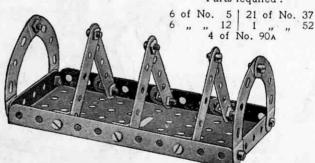
Model No. 1.187 Rat Trap

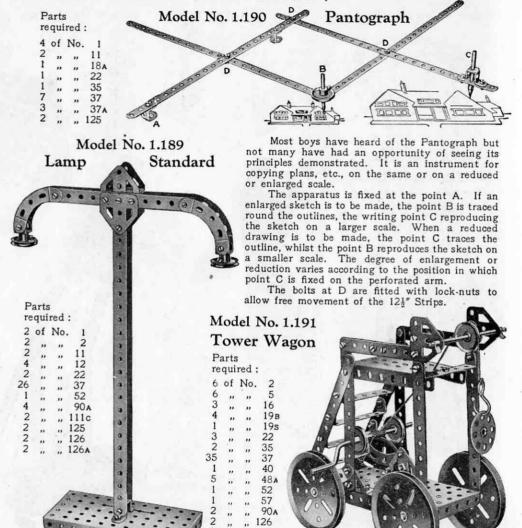


The "bait" consists of a 1" fast Pulley and a $\frac{1}{2}$ " loose Pulley suspended by means of a cord from a Double Bracket. The latter is bolted to a $1\frac{1}{2}$ " $\times \frac{1}{2}$ " Double Angle Strip that is free to turn on a 2" Rod journalled in a pair of Angle Brackets. A Flat Bracket bolted to the Double Bracket engages a second Double Bracket on the end of a $5\frac{1}{2}$ " Strip that is bolted to the door of the cage. If the "bait" is touched, the heavily-weighted door falls into place, and is prevented from re-opening by catches formed from Flat Brackets secured to $5\frac{1}{2}$ " Strips that are bolted to the trap by their extreme ends and act as springs.

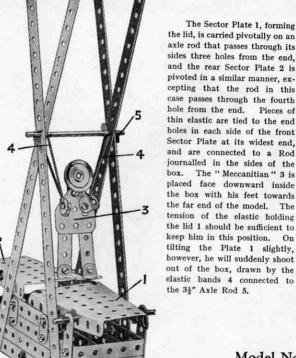
Model No. 1.188 Toast Rack

Parts required:



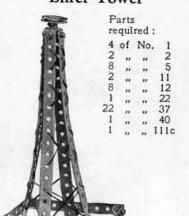


Model No. 1.192 A Sudden Appearance

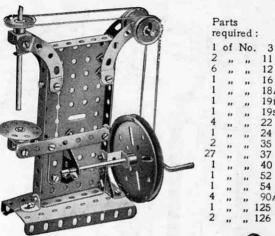


the lid, is carried pivotally on an axle rod that passes through its sides three holes from the end. and the rear Sector Plate 2 is pivoted in a similar manner, excepting that the rod in this case passes through the fourth hole from the end. Pieces of thin elastic are tied to the end holes in each side of the front Sector Plate at its widest end. and are connected to a Rod journalled in the sides of the box. The "Meccanitian" 3 is placed face downward inside the box with his feet towards the far end of the model. The tension of the elastic holding the lid 1 should be sufficient to keep him in this position. On tilting the Plate 1 slightly, however, he will suddenly shoot out of the box, drawn by the elastic bands 4 connected to

Model No. 1.193 Eiffel Tower



Model No. 1.195 Drill



Model No. 1.196 Revolving Tricyclist

Model No. 1.194 Top

To spin the top wind a length of cord round the rod, as shown, place on a smooth surface and give the cord a sharp pull. When the cord is clear of the rod remove the 51" Strip and the top will continue to spin for a considerable period.



Parts required:

A short length of elastic

Parts required:

1 of No. 2 | 1 of No. 37 " 16 1 " " 40 " 19в 1 " " 125



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

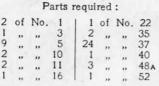


Model No. 1.199

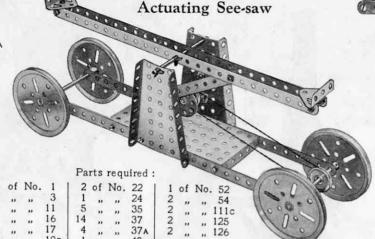
Wire-Rope

Maker

Model No. 1.197 Guillotine



72



Model No. 1.198

		red No.	
	01	140.	
1	,,	"	3
3	,,	"	5
1	,,	**	10
2	,,	,,	11
2	,,	,,	16
2	,,	,,	18.
1			191
	"	**	
3	,,	,,,	22
1	,,	,,	24
6	,,	***	35
16	,,	,,	37
2			37.
	,,	"	
1	,,	**	52
1	,,	,,,	1110
2	,,	,,	125
1		,,	126
i	"		
- 1	**	**	126

Model No. 1.200

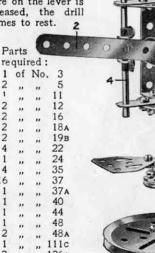
9	and the same		300	CO.	SEL O	100	September 1	200	Section 1	10.000	DAMES IN COLUMN	THE REAL PROPERTY.
					Pa	arts	requ	ired	:			
	1	of	No.	1	12	of	No.	5	1	of	No.	57
	2	,,	,,	2	6	,,	,,	37				

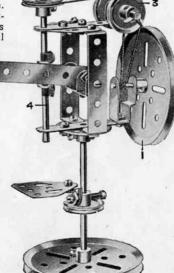
Model No. 1.201 Automatic Drill

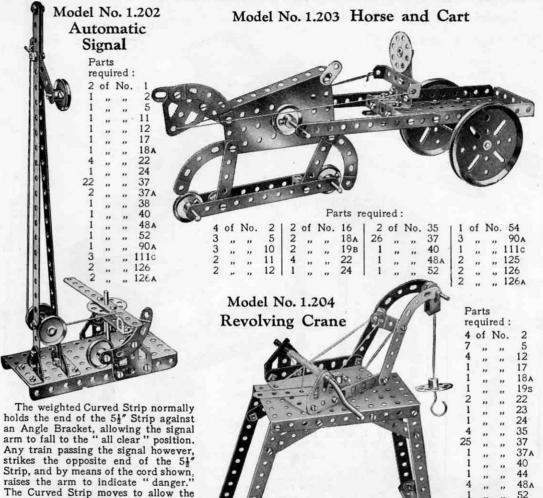
Coat Hanger

Cord is passed round the Pulley on the drill spindle 4 and thence over the Pulleys 3 and round the shaft of the Pulley 1. The lever 2 (a $3\frac{1}{2}$ " Strip) is pivoted by a Bolt and two Nuts at its inner end to an Angle Bracket, and the latter is bolted to a $1\frac{1}{2}$ " Double Angle Strip which, in turn, is bolted between the vertical $2\frac{1}{2}$ " Double Angle Strips. The arm of the lever engages between two Washers on the drill spindle, and on pressing the lever, the drill spindle with its 1" Pulley is forced downwards.

thus tightening the Cord, which then transmits the drive to the drill spindle. Immediately pressure on the lever is released, the drill comes to rest. 2







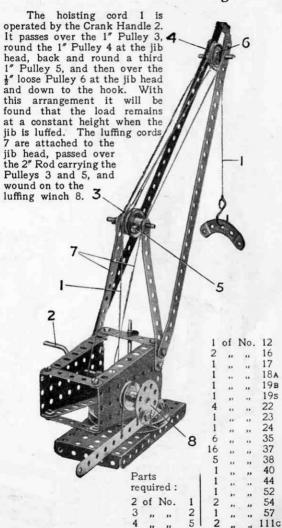
end of the 5½" Strip to pass over it, and is returned to its original position by

reason of its weighted end. The signal

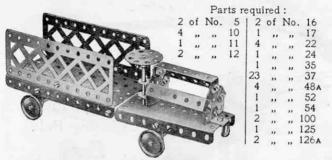
then remains at "danger" until the

mechanism is re-set.

Model No. 1.205 Patent Luffing Crane

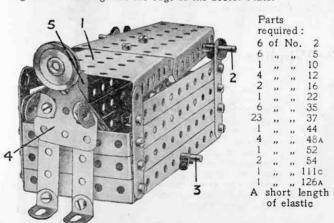


Model No. 1.211 Motor Lorry

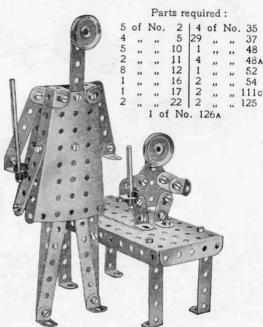


Model No. 1.212 Disappearing Meccanitian

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 three $2\frac{1}{2}'' \times \frac{1}{2}''$ 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.



Model No. 1.213 Dignity and Impudence



Model No. 1.214 Field Roller

Parts required:

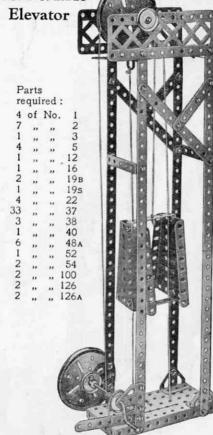
2 of No. 1 | 1 of No. 16 | 6 of No. 48A

3 " " 5 | 2 " " 19B | 2 " " 90A

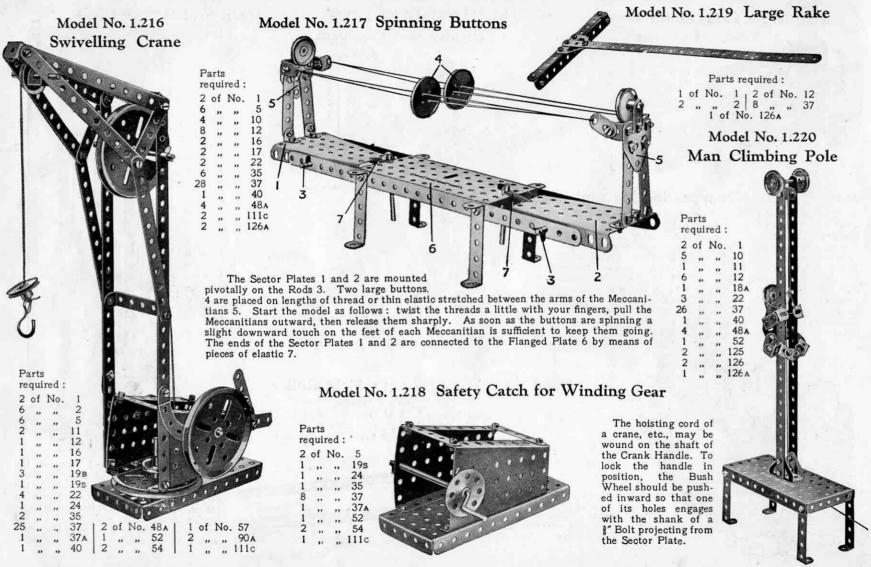
6 " " 12 | 30 " " 37 | 2 " " 126



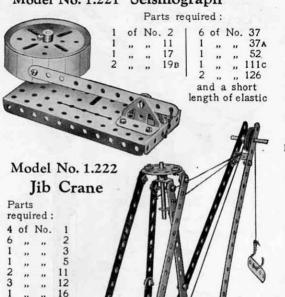
Model No. 1.215



Two cords stretched between the base plate of the model and the upper structure are passed through holes in the Double Angle Strips of the cage to form guides. A further cord is tied to the upper Double Angle Strip, and after being led over the 3" Pulley at the head of the model is tied to the shaft of a Crank Handle.



Model No. 1.221 Seismograph

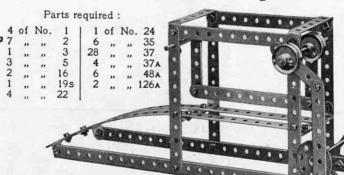


Model No. 1.223 Centrifugal Governor

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The 3" Pulley Wheel is bolted to the $5\frac{1}{2}$ " $\times 2\frac{1}{2}$ " Flanged Plate as shown, and the Rod 6 is free to rotate in its boss. The Bolts 1, 2, 3, are provided with lock-nuts. When the engine to which the governor is attached works at too great a speed, the 1" fast Pulley Wheels 4 fly outward and lift the two Double Brackets 5. In actual practice this movement is utilised to close the engine valves and so reduce speed.

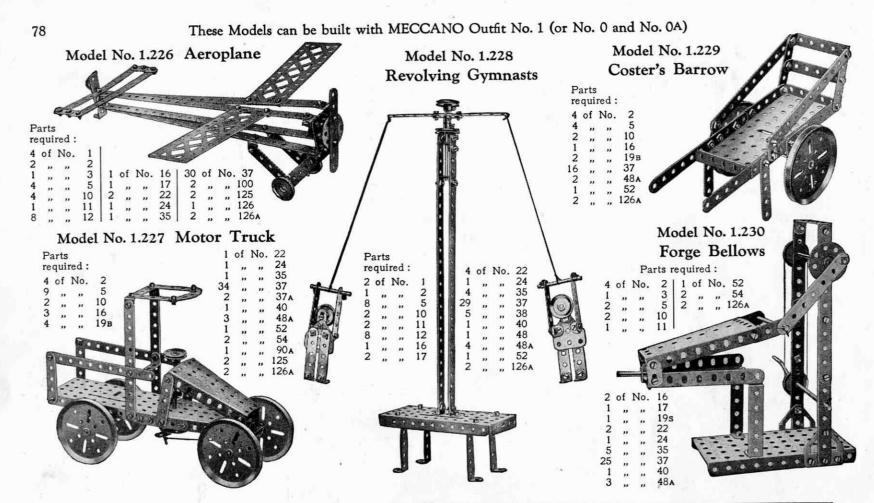
Model No. 1.224 Stone-Sawing Machine



Model No. 1.225 Elevated Crane

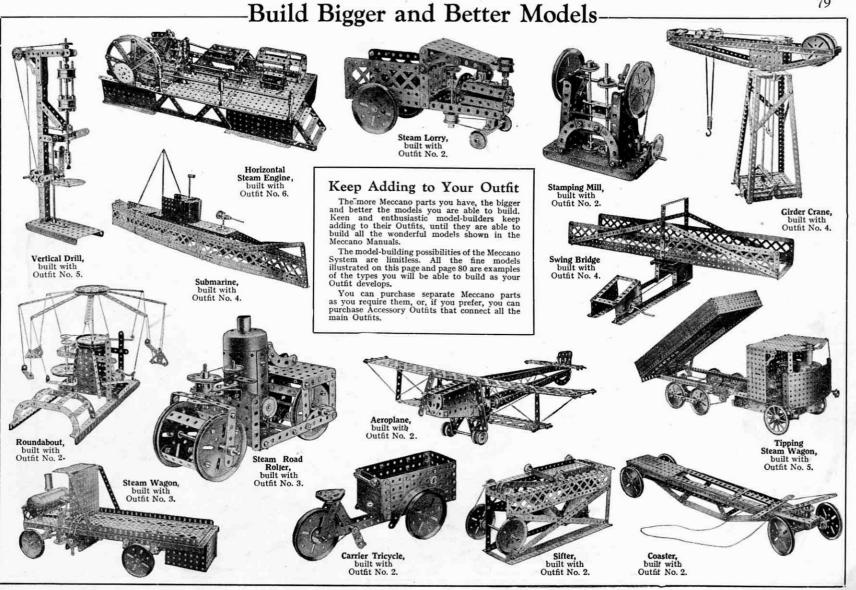
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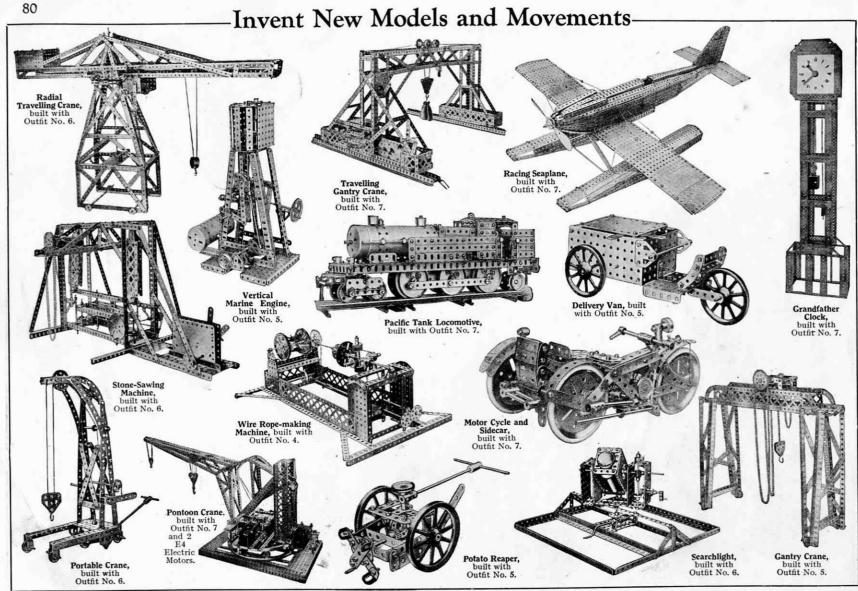
The base of the swivelling portion of the crane consists of a 3° Pulley Wheel 1, which has a 3½" Axle Rod nipped in its boss. The Rod is journalled in two 2½" Double Angle Strips 2 and 3 secured between the Sector Plates 4. The brake cord 5 passes round the 3" Pulley as shown, and is tied to one of the holes in the Bush Wheel 6. The cords 7 serve merely to support the weight of the jib.



HOW TO CONTINUE

This completes our examples of models that may be made with MECCANO Outfit No. 1 (or No. 0 and No. 0A). 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 No. 1A Accessory Outfit, the price of which may be obtained from any Meccano dealer.





[CONTINUED OVERLEAF

Contents of Outfits-continued

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

INDEX TO MODELS

vay ction ble Wire I ble Wire I charter		" Invalid Office Chase, A " Invalid Office Chase, A " Invalid Office Chutch Choure Chouse Chutch Office Chouse Drying Frame Hanger Coast Gutter Coas	8 8	10.136 10.137 10.131 10.131 10.131 10.131 10.131 10.131 10.131 10.131 10.131 10.131	" Engine, Mani " Escape Flip-Flap … Flower Pot Stand
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Forge 1-5; 1-14; Player and Stand ith totor		" Lorry		1.117	Series
Forge 1.5; 1.14; Player and Stand ith the color		" Overhead		1.64	Guillotine
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Motor 00.36 Rowing 0.91	170	" Travelling			Gymnast
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Salling	155	Crossbead Demonstration Model	ration Mo		Hack Saw, Power
	.38	Cum-bak	:		Hammer, Helve
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J.Low	3	Dancer, The Meccano	01	1.162	Hat Rack
Boxer 0	0.73	Dancers, Eccentric	:	1.163	" H" Girder
Box Ball Alley	104	Devil Wall	: :	00.76	Hoe
Brake, Band 1.3;		Dignity and Impudence	ence	1.213	Hoisting Block
::	Ξ	Dinosaurus .	÷	0.92	Hooke's Coupling
Double Draw	1.148	Disappearing meccanitian		00-17:00-55	_
	00.153	Dog		00.139	2 2
Churn	1.67	Kennel		1.105	Horseman
Cakle Beilmen	1.69	Automatic	: :	1.201	Horseman's Fall
: :		Rock	:	0.131	
		Drilling Machine .	: :	0.125; 1.173	
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Chaff Cutter 00	_	Fan		0.75	Ladle, Giant Fou
:	1.185	" Ceiling	:	19.00	Lamp St

INDEX TO MODELS (continued)

Model No. : 00-70; 0-27 00-166; 1-158 00-39 0-101	1 150 00 183 00 79		94-5-8-8	0 - 61 1 - 196 00 - 153 30 - 123 30 - 195 100 - 146 00 - 30 00 - 44 1 - 77 00 - 116	1: 00-180 1: 227 1: 25 1: 25 1: 25 1: 25 1: 9 1: 10 1: 10	00·126 1·171 00·23 0·113 1·111	149; 1.27 62; 0.110 00:111 128 14; 1:191 00:141 00:137 00:137 10:2; 1.110 00:171 1:122 1:73 1:73 1:182 1:182 1:182 1:182 1:183 1:183 1:189 64; 1:109
Mo-15; 00-77	111	6		11115	000-160 000-160 ated	1 11111	
Description	Model Telegraph Key Telescope	Telescopic Mast Telepher Span Telepher Span Three Wheel Auto Ticra Gharry Tikht Rope Walker	Tin Opener Toast Rack Top. Spinning Towel Horse Track Gauge Track Gauge Trach Grinstone Trankay Car Trankay Car	Trreycist, Revolving Tryp Hammer Tripod 00-12; Trobel 00-12; Trowel Mason's Truck Baggage Cattle	ber ber aage ber Sides pound Trie e tagulated rength Ma	Umbrella Stand Van, Motor Viaduct Viadust Wing and Bow	4 En 40 - 24 en 5
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0-111 Ra 0-143 1-31 1-31 0-22; 1-38 Ra 00-174; 1-22 Ra		0.9 Ri 00-72 Ro 1.60; 1-138 Ro 1.57; 1-209 Ro 1.57; 1-211 Ro 1.45 Ro	1.71 Safet 00.100 Sand 00.75; 00.117 Saw, 1.720 "" 1.133 " " 0.48 00.82 Sawii	0 1142 0 143 0 70 0 0 156 0 140; 1 176 5 5 7 1 174 1 178 1 1	4	ble Action 1-98 "" ble Action 1-98 "" 00-138 "" 00-14 Skir-Ru 00-62 Skir-Ru	82 106 118 119 119 119 119 119 119 119 119 119
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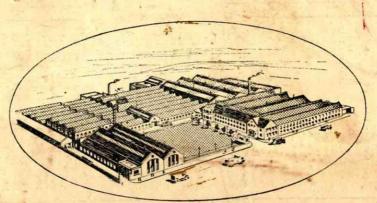
Patents and Designs Great Britain

250,378 671,484 253,236 671,485 290,121 671,534 319,160 671,790 323,234 680,416

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Patents and Designs

Great Britain
682,208 718,404
682,209 718,731
682,934 733,541
683,011 733,542
686,112 740,413
698,054 740,723

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