



AMERICAN TRADE MARK 83171 CANADIAN TRADE MARK 55 Fol. 13476

# MANUAL OF INSTRUCTIONS

This manual is in reality a key by which the really wonderful treasures contained in the various parts of Meccano Outfits may be unlocked.

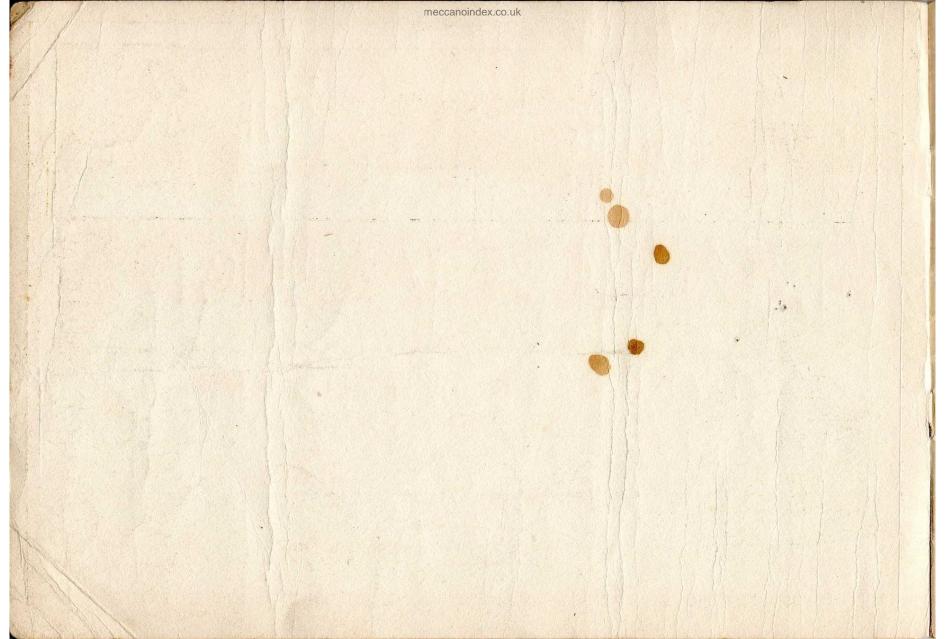
From Opinion U. S. District Court, Southern District of Ohio.

**BOOK No. 1 SPECIAL** 

PRICE 35 CENTS
MECCANO COMPANY, Inc., New York

No. 16A

AMERICAN EDITION





TOUR Meccano Outfit contains a number of accurately made and

finished engineering parts, which enable you to duplicate any and every movement known to mechanism.

The value of a constructional system does not lie in the number of parts which it contains, but entirely in the uses to which the various parts can be put. It is a sweeping statement to make, but a perfectly true one, that Meccano will do all and more than all other constructional toys put together, and that no other system will do the same as Meccano. Every other metal constructional toy is an imitation of Meccano, which was the first toy of its kind. The genius and knowledge and experience are in the Meccano parts. Each part will fill a hundred different purposes in a perfect manner, and there is no limit to the uses to which they can be applied.

Meccano is sold as a children's toy, to give them fun, interest them, and instruct them in the fascinating wonders of engineering, but every day sees a fresh use for it. Engineers and architects use it for designing models and inventing movements. Professors and teachers in technical schools use it to demonstrate mechanical principles to their students. We have received enthusiastic letters from inventors who have designed practical commercial machines with Meccano parts for weaving and other purposes. It is largely used in institutions for the blind for teaching patients, and in very many children's hospitals it brings happiness and relief to thousands of afflicted ones.

# To Meccano Boys—(continued)

There is no hard work attached to building Meccano models. All the work and thought have been put into the parts when they were designed, and all you have to do is to follow the instructions, and screw the parts together.

Bright boys are inventing new Meccano models every day, and sending them in to win prizes in our big competitions. Already we have very many more than can be included in this book, and another edition is in preparation, which you should secure when it is ready. Further editions will follow, in order to keep pace with the new models, and you should ask your dealer, or ourselves, if you have any difficulty, to keep you up to date with these, so that you may miss none of the pleasures of Meccano.

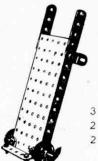
# MECCANO PRIZE COMPETITION

MONEY AND FAME FOR MECCANO BOYS. Each year there is a big Meccano Prize Competition, in which we offer big prizes in money, and new Meccano Outfits to clever boys, who are able to design new models. Send your own ideas in, and get your share of the prize money. Be sure to ask your dealer for full particulars and entry forms. If you have any difficulty send us a postcard, and we will see that you get what you want. There are no entrance fees or restrictions of any kind.

Important Notice.—In some of the models throughout this manual we have made use of the Meccano Braced Girder, large wheels, sprocket wheels and chain, etc., which are only supplied in the Inventor's Accessory Outfit, or as separate parts. We have employed these parts, as they improve the appearance and working of the models, and they also form a suggestion for the use of the Inventor's Accessory Outfit; but in every case the same models may be effectively built with the parts contained in the regular Meccano outfits.

MECCANO COMPANY, Inc.

Masonic Hall, New York



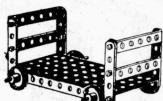
# Types of Trucks and Luggage Carts

#### Model No. 1

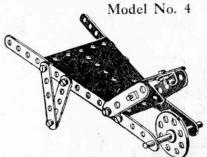
#### Parts Required:

3	of	No.	5	1	of	No.	15A
2	12	**	10	2	,,	**	22
2	**		12	8	,,	.,	37
		1	of I	No.	52		





Parts
Required:
4 of No. 5
4 ..., 60
2 ..., 15A
4 ..., 22



Parts Required:

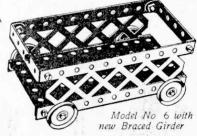
2	of	No.	2	1 1	of	No.	24	
9			5	2	**		35	
2		**	12	14	**:	**	37	
1			17	1			54	

Model No. 6

	art leq	s uired	:
4	of	No.	2
4			5
4	**	**	60
2	.,		15A
			22

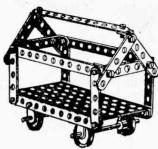
12 ,, ,, 37



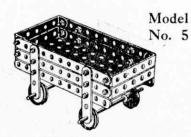




Parts Required:



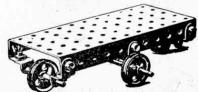
3 of No. 2 8 ,, ,, '5 2 ,, ,, 60 4 ,, ,, 10 2 ,, ,, 12 2 ,, ,, 15A 4 ,, ,, 22 20 ,, ,, 37 1 ,, ,, 52



Parts Required:

4	of	No.	2	4	of	No.	22
4	71		5	20	٠,	**	37
4	,,	,,	60	1	,,	**	52
2			15.	1			

Model No. 7



Parts Required: 2 of No. 10 , 2 of

2	of	No.	10	2	of	No.	22A
8			12	4	,,	.,	35
1	**	,,	10 12 15 <sub>A</sub>	10	,,	**	37
2	11	.,	17	1	"	,.	52
2			22				

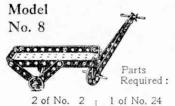


Fig. 7A

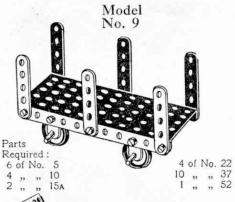
# Types of Trucks and Luggage Carts (continued)

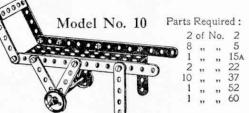
Parts
Required:
4 of No. 2
8 ,, ,, 5
2 ., ,, 15A

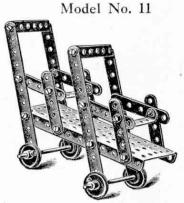
1 ,, ,, 52



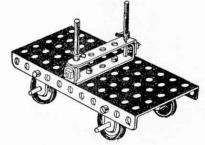
2	of	No.	2	1	of	No.	24
4	,,	**	5	9	,,	,,	37
1	11	**	15A	4	,,,	11	35
2	17	**	17	1	. 27	22	44
4	"	**	22 2 of	No 6	50"	55	52







Model No. 12

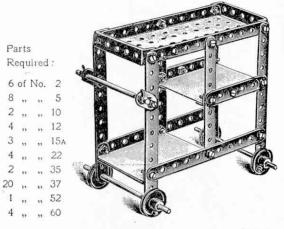


Pa				4	of	No.	
		red	- 1	2	"	**	35
4	of	No.	10	8	**	22	37
2	11	**	15A	1	,,	,,	52
2	,,,	,,	17	2	13	12	60

#### Model No. 13

	rts	ired	:				\	A
2	of	No.	15a		150	000	A. C.	
1	"	**	52					

# Model No. 14

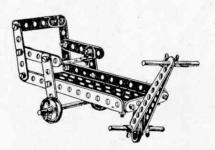


The two lower platforms are constructed out of pieces of ordinary cardboard, their outer edges resting on  $2\frac{1}{2}$ " bent strips and their inner edges on angle brackets.



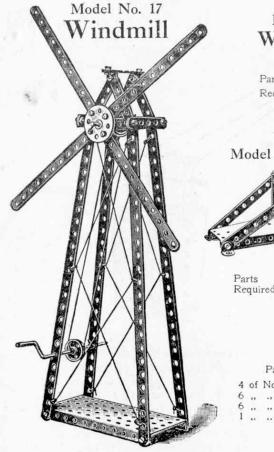
# Model No. 15 Swing

	arts	s iired	
4	of	No.	1
1	11		2
6	12	,,	5
4	**	,,	12
12	,,		37
1	**	**	52
3	**	,,	60



# Model No. 16 Bath Chair

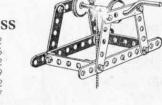
	2	of	No	2			No.	
Parts	6	**	,,	5	14	**		37
Required:	1	.,	.,	15A	1	,,	,,	44
recquires.	2	"	"	22	3	**	**	52



# Model No. 18 Well Windlass

	2	of	No	2	
	8	**	**	5	
Parts	4	**	7.0	12	
Required:	1	**	23	19	
	2	**	**	22	
	12			37	

No. 19



Endless
Rope Railway

-	4	of	No.	2	1 1	of	No.	. 19	1 12	of	No.	37
Parts	4	.,	,,	5	4	**	11	22	1	32	,,	52
Required:	8	,,	21	12	2	22	12	22A	2	,,		54
	3	1.	**	15A	4	**	**	35	1 2	,,	**	60

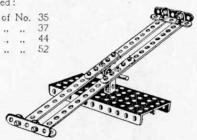
# Model No. 20 Seesaw

#### Parts Required:

4	of	No.	2	2	of	No.	35	
6	***	.,	5	19	.,,	**	37	
6	1.7	**	12	1	181	**	44	
1	**	**	17	- 1	**	**	52	



4	of	No.	1	1 1	of	No.	15A	4	of	No.	35
4		**	2	1 1		**	19	20	**	**	31
7	,,	**	5	2	**		22 24	1	**	**	52
2	.,		12	1 1	**	**	24	2	**	**	60



#### Model No. 21

Travelling Ladder

# Parts Required: 6 of No. 2 4 ,, ,, 5 2 ,, ,, 15A 4 ,, ,, 22 16 ,, ,, 37

1 ,, ,, 52 4 ,, ., 60

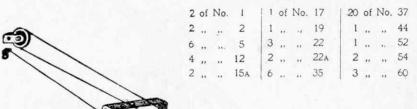
# Model No. 22 Step Ladder

Parts Required:

4 of No. 2 2 of No. 12 3 ., ., 5 4 ., ., 60

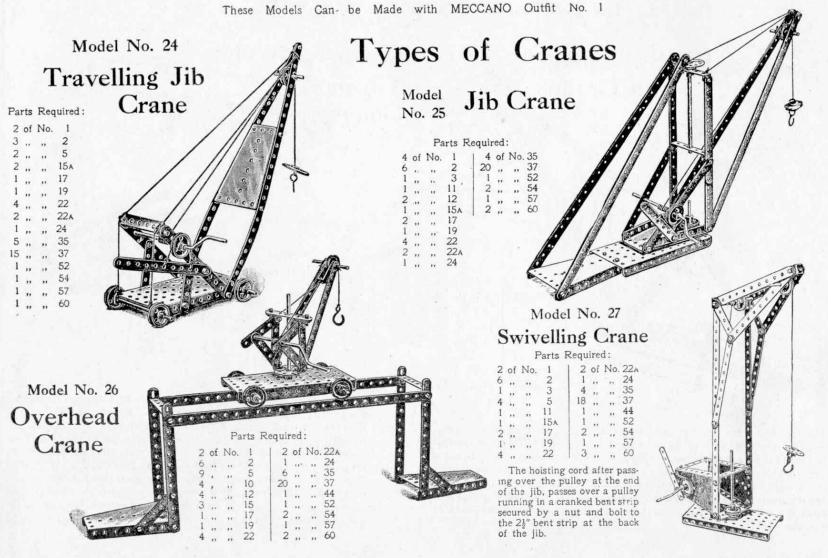
# Model No. 23 Telpher Span

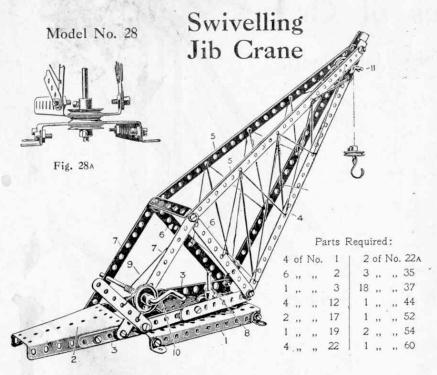
Parts Required:



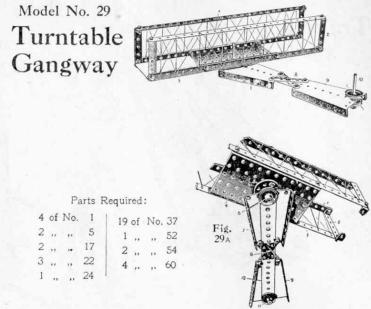
Many hours of enjoyment can be obtained from this model. The illustration shows just how it is worked. The cords may be made to any length, and the load carried from one side of the room to the other. In order to give a better grip, the operating cord should be wound twice round the crank handle pulley. The open sides of the bucket may be filled in with cardboard, so that it can be loaded with marbles, or beads, etc. The body of the Telpher should be screwed down on to a solid base with ordinary wood screws, and the pulley bracket, and that to which the cord on which the bucket travels, are screwed in a suitable position on the opposite side of the room.



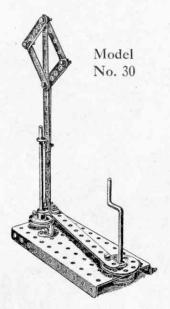




The fixed base of this Crane is a perforated flanged plate 1, and the swivelling base of the Crane is formed by two sector plates 2 and 3. The jib is formed from two  $12\frac{1}{2}$  strips 4 bolted to the ends of the sector plate 3, two other  $12\frac{1}{2}$  strips 5 being bolted to the top of the strips 4 and to cross strips 6, the outer ends of these latter strips being stayed by strips 7 bolted to the other sector plate. The upper structure of the Crane swivels about a rod 8, and is secured as shown in Fig. 28A. The winding rope 9 is operated by a crank handle 10 and passes over a pulley in the head of the Crane on a short rod 11.



The side frames of the gangway are made of  $12\frac{1}{2}$ " strips 1 bolted by means of  $2\frac{1}{2}$ " bent strips 2 to lower strips 3, the strips 3 and 1 being set at right angles to each other, and the side frames being connected by a perforated flanged plate 4. A bush wheel 5 is bolted to the underside of the flanged plate and fitted with a rod on which is mounted a 1" pulley 6, the rod passing through one of the end holes of a sector plate 7. This sector plate 7 is connected by diagonal strips 8 to another sector plate 9, through the end hole of which a rod 10 is threaded carrying two 1" pulleys 11. An operating cord 12 passes from the pulley 11 to the pulley 6. In this way the gangway may be rotated by operating the spindle 10.



#### Parts Required:

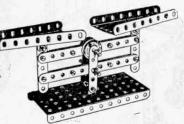
3	of	No.	2	3	of	No.	22
4	,,	,,	5	1	**	1,	24
4	,,	**	12	14	**	,,	37
1	11	. 27	15A	- 1		**	52
-1		**	19				

Model No. 33

# Scales

#### Parts Required:

4	of	No.	2	1 2	of	No.	22 A
8	,,	**	5	4	*		35
1	**	**	11	19	,,	**	37
2	**	***	12	1	,,	**	52
2	"	**	17	2	,,	**	54



# Types of Railway Signals

#### Model No. 31

In fixing the lever to the lower end of the sector plate, lock the nuts, so as to prevent the screw from working out.

#### Parts Required:

2 of No. 1 2 ,, ,, 2 1 ,, ,, 3 4 ,, ,, 12 1 ,, ,, 17 2 ,, ,, 22 19 ,, ,, 37 2 ,, ,, 35

#### Model No. 32

#### Parts Required:

3	of	No.	2	1	1	of	No.	22	
9	***	**	5		1	,,	11	35	
1	30	+9	11		16	17	**	37	
1	19		17		1	22.0	22	52	

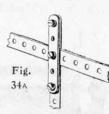
The two outside signals of this Model are operated by the levers pivoted to the upright, and the centre signal by the pulley wheel. The cord operating this latter signal is securely tied round the pulley wheel so that when the wheel is turned the signal is raised or lowered.



The scale beam of this model is pivoted in a slot at the top of the upright standard. This slot is formed by bolting a 2½in. strip to the standard, nuts being placed between the strip and the standard

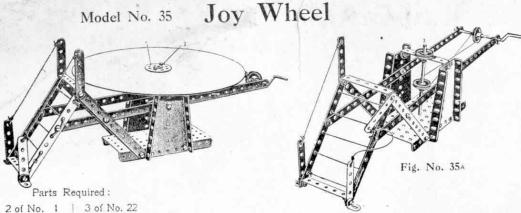
before screwing up. These nuts hold the strip and the standard at the required distance apart to give the beam free play.





Parts Required.

2 of	No.	1	19	of	No.	37
3 ,,	**	2	1	.,		52
1 .,,	**	5	2	**	.,	54
4 ,,	**	12	2	17		60



The driving mechanism and construction of the framework of this model are clearly brought out in Fig. 35A. Cut out a circular piece of cardboard. 8" in diameter, and in the centre of the disc fix a bush wheel 1 by nuts and bolts 2. The eye of the bush wheel is then threaded over the top of the vertical spindle 3, and secured by its set-screw. The rotating table is cut out of a piece of ordinary cardboard.

Model No. 36

Go Chair

Parts

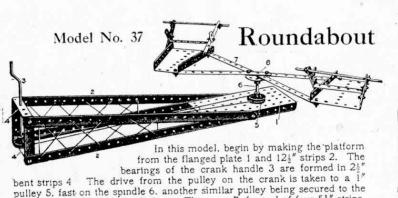
Required:
2 of No. 2
7 ,, ,, 5
2 ,, ,, 15A
4 ,, ,, 22
13 ,, ,, 37
2 ,, ,, 60

Model No. 38

Cot on Wheels

Parts Required .

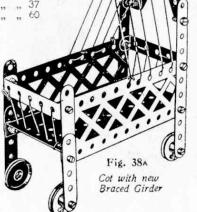
4 of No. 2 | 4 of No 22.
6 , , 5 | 17 , , 37
2 , , 12 | 3 , , 60



spindle beneath the flanged plate. The arms 7, formed of four 51" strips.

are bolted to a bush wheel 8 fast on the spindle 6.



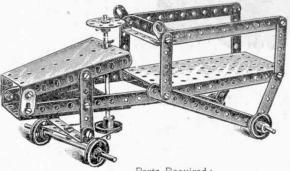


Parts
Required:
4 of No. 1
4 " " 2
6 " " 5
4 " " 10
2 " " 15
1 " " 17
1 " " 19
3 " " 22
1 " " 24
5 " " 35
20 " " 37
1 " " 52
2 " " 54
4 " " 60



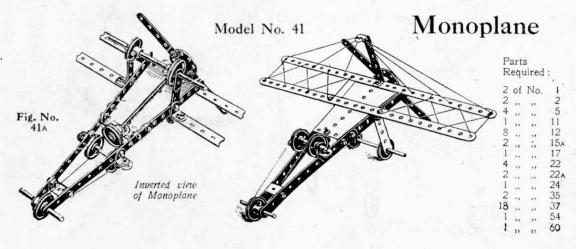
The construction of the framework of this Model presents no difficulty. The sector plate 1 forming the plough is loosely pivoted on the bolts 2. The axle 3 is mounted in the front sector plate 4 and the 2½" bent strip 5. A 2½" strip 6 is bolted by angle brackets to a bush wheel on the front of the axle and forms a dispersing propeller for the snow after it rises up the inclined sector plate 1. A continuous cord 7 is passed round a 1" pulley wheel 8 and round a short axle 9 and a 1" pulley wheel on the propeller axle. In this way, as the plough is moved along the track, the propeller is revolved.

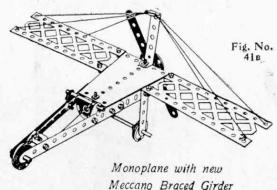
#### Motor Cart Model No. 40

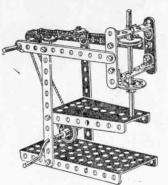


Parts Required:

6	of	No.	2	1	of	No.	24
8	,,		5	3	11	,.	35
4	"	2.2	10	20	4.9	***	37
3	**	2.6	15a	1	**	4.5	52
3	**	**	22	2	,,	**	54
2		44	22A	4		**	60





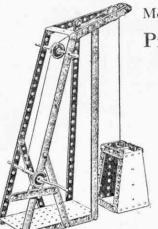


# Model No. 42 Drilling

Parts Required

Machine

4 of No. 2 5 ,, ,, 5 6 ,, ,, 12 2 ., ,, 15A 1 ., ., 19 4 ... ... 22 1 ... ... 24 4 ... ... 35 18 ... ... 37 1 ... ... 52 1 ... ... 54



# Model No. 43 Pit Headgear

Parts Required:

4	of l	No.	. 1
4		**	2
1	1.1	11	3 5
4	1.7	1.1	5
1	**	11	11
1	11	.,	15A
1	11	11	17
1	1.9	111	19
3	,,	**	22
2 24	11	,,	35
24	**	1.1	37
1	**	100	52
2			54

# Model No. 44

# Hoisting Block

Parts Required:

-4	ot	No.	2
3	.,		5
8	,,	**	12
1	100	**	17
1	100	2.7	22
1	1.0	11	24
22	**	,,	37
1	14.0		52
1		2.5	57
- 1		2.2	60



# Model No. 45

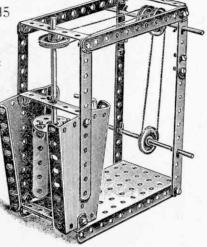
Churn

Parts Required: 6 of No. 2

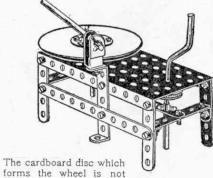
4 ., ., 51 2 ., ., 12 2 ., ., 15 1 .. ., 19 2 .. ., 22 2 .. ., 22A

1 .. .. 24 5 .. .. 35 19 .. .. 37 1 .. .. 52

2 .. .. 54 3 ., ., 60



# Model No. 46 Potter's Wheel



provided in the outfit.

Parts Required:

> 2 of No. 2 4 ,, ,, 5 1 ,, ,, 15A 1 ,, ,, 17 1 ,, ,, 19 2 ., ,, 22 1 ,, ,, 24 3 ,, ,, 35 16 ., ., 37 1 ,, ,, 44

View 1 ., ,, 52 Potter's 3 ,, ,, 60 Wheel

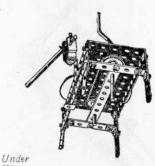
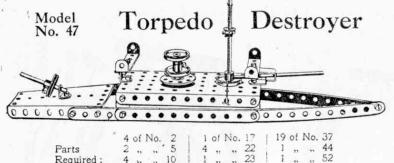
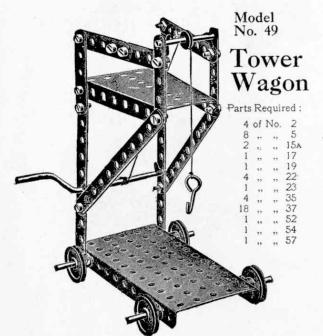


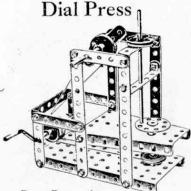
Fig. 46A



	4 of No. 2	1 of No. 17	19 of No. 37
irts	2 ., ., '5	4 ,, ,, 22	1 ,, ., 44
equired:	4 ., ., 10	1 ,, ,, 23	1 ,, ,, 52
	1 ,, ,, 11	1 ,, ,, 24	1 ,, ,, 54
	1 ,, ,, 12	3 ,, ,, 35	2 ,, ,, 60
	2 15A		



# Model No. 50 Automatic



#### Parts Required:

4	of	No.	2	.2	of I	No.	22A	
7	11	11	5	1	"	,,	24	
2	**	**	15A	6	31	**	35	
1	55	22."	17	18	33	"	37	
1	23	12	19	1	"	**	54	
4	**	29	22	3	33	22	60	
				0	33	33	00	

#### Model No. 48 Drop Stamp

#### Parts Required:

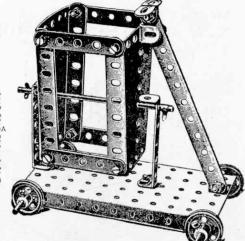
4	of.	No.	2	4	of l	No.	22	
7	**	,,	5	1	,,	17	24	
4	11	**	12	2	11	**	35	
2	33	**	15A	20	15	**	3/	
1	55	.55	19	1	15	37	52	
				1	15	**	60	

The stamp of this model is raised and dropped by a  $2\frac{1}{2}$ " strip attached to a bush wheel similar to Model No. 55.



#### Parts Required:





# Model Polishing Spindle No. 52

# Model No. 53 High Level Bridge

#### Parts Required:

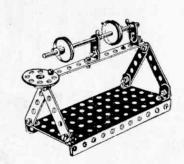
1 of No 2 4 ,, ,, 5 2 ,, ,, 10

8 " " 12 1 " " 15<sub>A</sub>

2 ,, ,, 22

2 ,, ., 35

15 .. .. 37 1 .. 52



# Level Crossing

#### Parts Required:

Model

No. 54

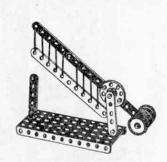
3 of No. 2 2 ,, ,, 5

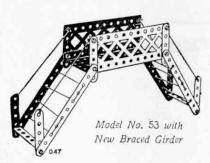
2 ,, ,, 12

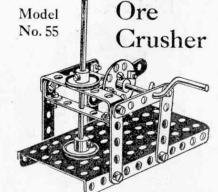
4 ., ,, 22

9 " " 37

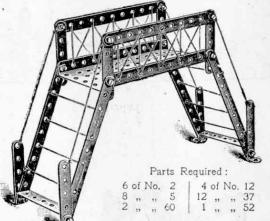
1 ,, ,, 52







#### Parts Required:



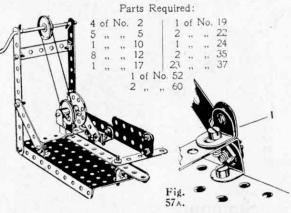
Model Buffing Spindle



## Parts Required:

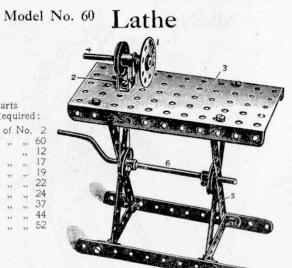
6 of No. 5 | 1 of No. 24 1 ,, ,, 15A | 8 ,, ,, 37 1 ,, ,, 22 | 1 ,, ,, 52





Parts

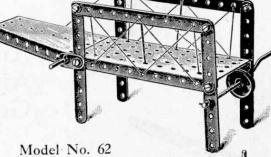
Required:

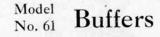


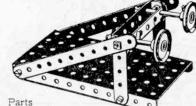












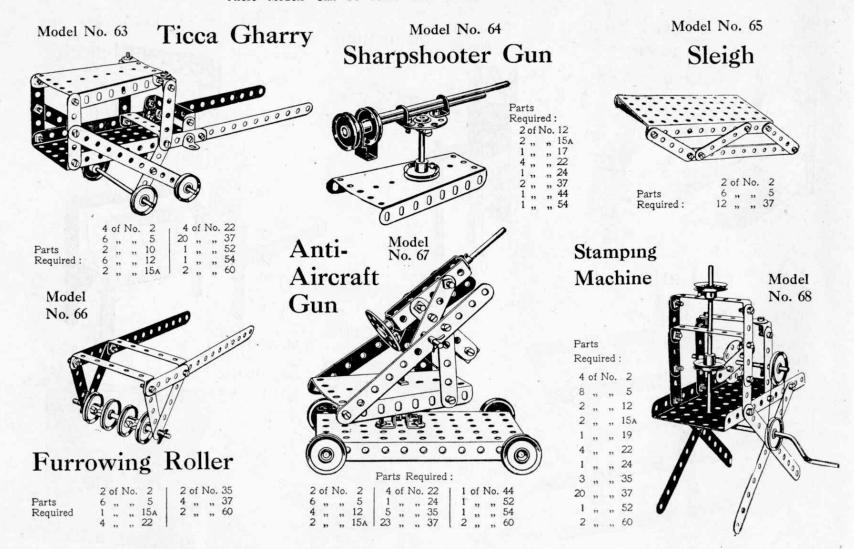
Parts	
Dogwired	
Required	

2	of	No	2	4	of	No.	35	
2	22	. 22	5	6	11	. 55	37	
2	91	17	17	1		5+	52	
2	**	44	22	1 2	***	- 53	00	

Stamping

# Mill

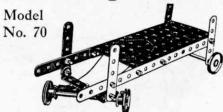
		IVI	111					P					
	F	arts	Req	uired	:					HERE			T.
1	of	No.	2	18	of	No.	37	2		,		2	
1	11	20	3	1	22	32	52 54	1.5		1	de	2	k
2	30	12	12	2	22	227	54				9		
2	**	**	15A						635	12	-13	6-17	÷
1	- 17	**	19 22 24				1	1.8	man.	18	20		2
4	33	.53	24			1	/	_ 1		1	130	100/100	Sit.
1	22	27		0	No.		1 1 7 9 1	or)	0) 2				23
2	11	*13	35				1-0	See P	9	NAME OF		-	
							1=	- 1		77	-	-	525





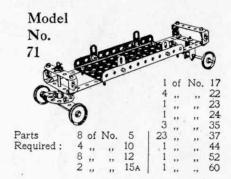
Parts 4 of No. 2 | 4 of No. 22 Required: 4 ..., 10 | 18 ..., 37 6 ..., 12 | 3 ..., 60

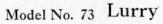
# Steering Truck

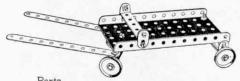


Parts 2 of No. 2 | 11 of No. 37 Parts 4 ,, ,, 5 | 1 ,, ,, 52 Required: 2 ,, ,, 15A | 2 ,, ,, 60 4 of No. 22

# Boiler Truck







Parts
Required: 2 of No. 2 | 13 of No. 37
4 , , , 10 | 1 , , 24
2 , , , 12 | 1 , , 52
2 , , , 15A | 2 , , , 60
4 of No. 22

Model Telegraph No. 75 Code Key



3 of No. 2 | 1 of No. 22 1 ,, ,, 10 | 12 ,, ,, 37 5 ,, ,, 12 | 1 ,, ,, 52



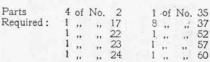
4 of No. 2 | 18 of No. 37 9 ,, ,, 5 | 1 ,, ,, 52 2 ,, ,, 12 | 1 ,, ,, 60

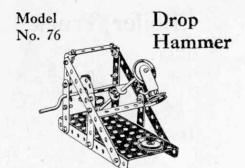
Model No. 72

Rocking

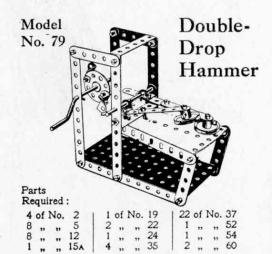
Chair



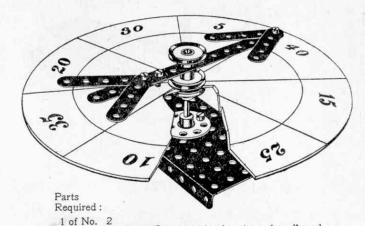




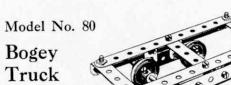




# Model Roulette Wheel



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.

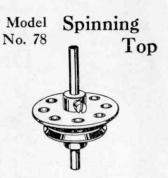


Parts Required:

" " 5

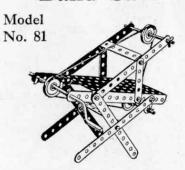
" " 15A " " 22 " " 24 " " 37 " " 52

> 4 of No. 2 3 ", ", 5 4 ", ", 10 2 ", ", 15A



Parts Required: 1 of No. 17 1 ,, ,, 22 1 ,, ,, 24

# Band Saw

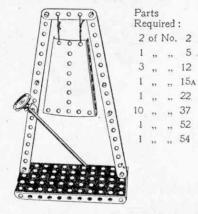


Parts Required

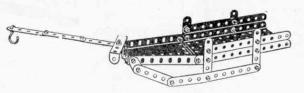
Re	qui	red	:				
6	of i	No.	2	3	of l	No.	22
4	,,	,,	5	6	,,	,,	735
2	,,	"	10	10	,,	**	37
2	**	**	15A	1	**	**	52
1	**	11	19	2	**	**	60

# Gong



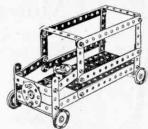


# Model Horse Sleigh



Parts 4 of No. 2 | 25 of No. 37 9 ,, 5 | 1 ,, 52 Required: 4 ,, 10 | 1 ,, 54

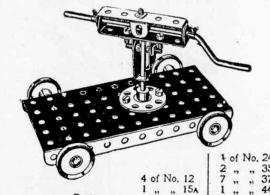
# Model Motor Van



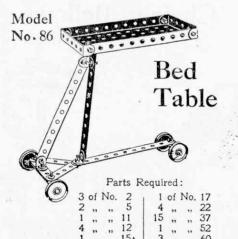
Parts Required:

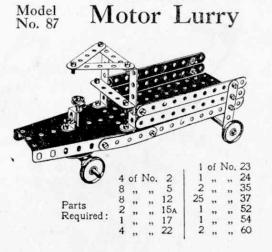
6	cf	No.	2	í	2	of	No.	15 <sub>A</sub>	22	of	No.	37
1	**	17	3				55		1	è	33	52
9	22	"	5		• 1	22	11	22A	4	"	33	60
- 1	**		11		- 1		44	24	1			

# Model No. 85 Rock Drill

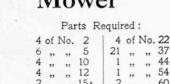


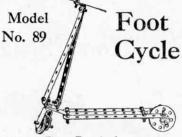
Required:

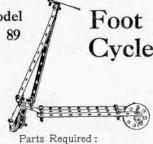




# Model No. 88 Lawn Mower









Model No. 90

Cart

4 of No. 2	2 of No. 22	2 of No. 59
4 " " 5	15 " " 37-	4 ,, ,, 60
1 ,, ,, 15	1 ,, ,, 44	2 ,, ,, 100
2 19A	1 52	

5 of No. 2 | 1 of No. 22

1	,,	,,	5	1	22	,,	24
4		**	5 10 11	1 4 15	11	,,	35
1	**	,,	11		22	22	24 35 37
3	"	,,	12	1	22	,,	44
2	,,	,,	17				

Model No. 91 Deck Chair





Model Invalid

Parts Required:

4	of i	No.	1	1	of	No.	15A
4	"	"	2	30	"	"	37
1	"	"	3			,,	
6	22	27	5	1		12	
6	"	17	12				

Parts

Required:

22 of No. 37 4 of No. 2 1 ,, ,, 52 8 " " 5 1 ,, ,, 54 2 ,, ,, 10 2 " " 60 2 " " 15A 4 " " 22

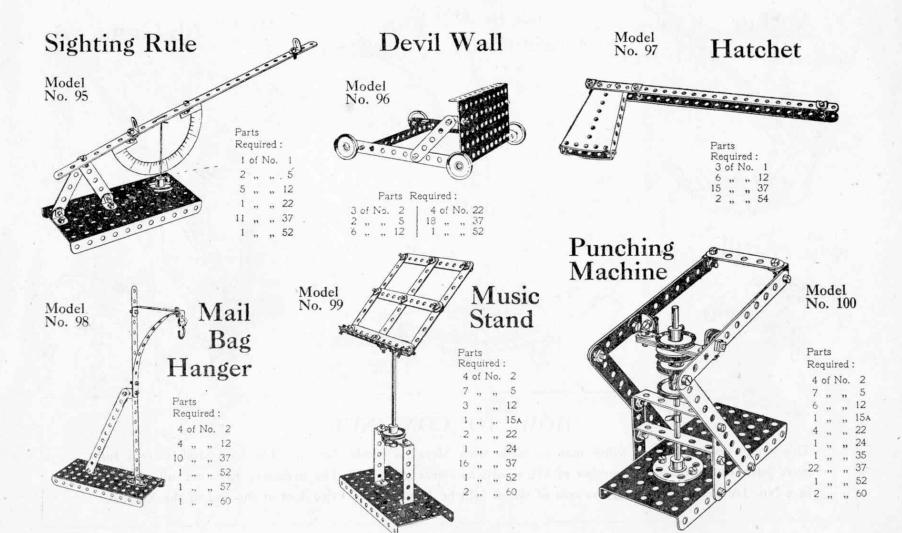
Forge Bellows Model No. 93

Parts Required: 4 of No. 2



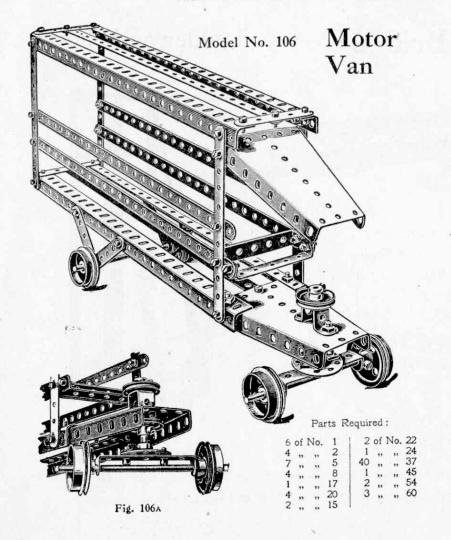
Parts Required:

4	of	No.	2	4	of	No.	35
8	. 22	22	5	16	**	19	37
2	27	11	10	1	71	- 11	52
1	**	**	15a	2	11	77	60
2	**	**	19A				

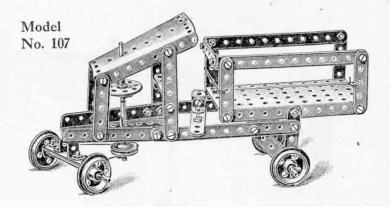


# HOW TO CONTINUE

This completes the Models which may be made with Meccano Outfit No. 1. 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 cost of which will be found in the Price List at the end of the Manual.



# Tipping Motor Wagon





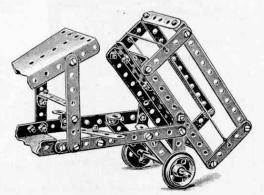
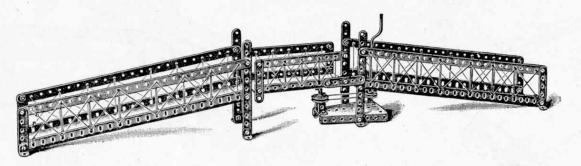
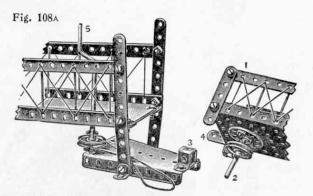


Fig. 107A

# Model No. 108 Swing Bridge





#### Parts Required:

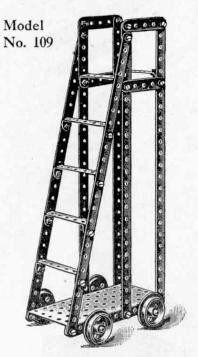
4	of	No.	1	1	of	No.	24
6	,,	,,	2	1	,,	"	35
9	"	"	5	31	22	"	37
4	"	,,	8	1	,,	,,	45
8	,,	,,	12	1	,,	27	52
1	,,	,,	17	1	,,	,,	54
1	22	11	19	4	,,,	,,	60
2	,,	**	22				

The action for swinging the middle section of the Bridge will be made clearer by the detail Fig. 108A, the middle section 1 being fitted with a spindle 2 journalled in the double bent strip 3; the upper end of the spindle being secured to a bush wheel.

A short strip 4 acts as a stop against the middle section of the Bridge swinging past the central position.

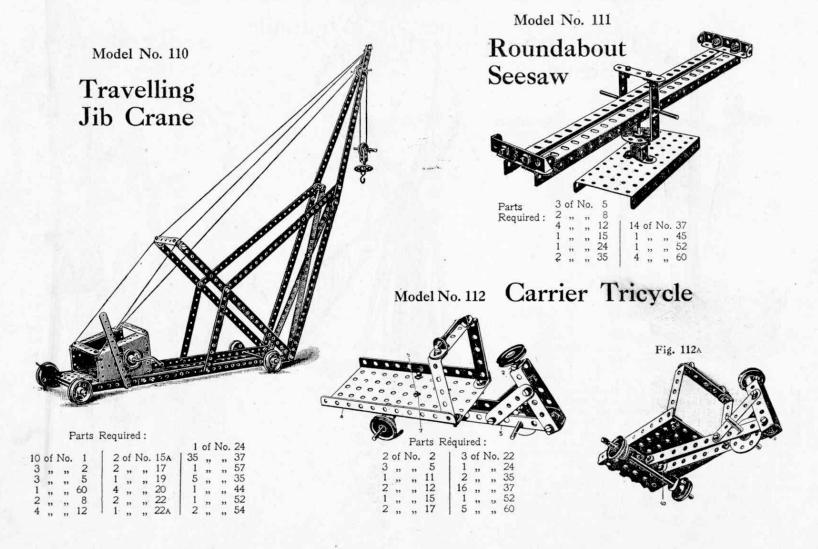
The operating cord passes round pulleys on the spindles 2 and crank handle 5.

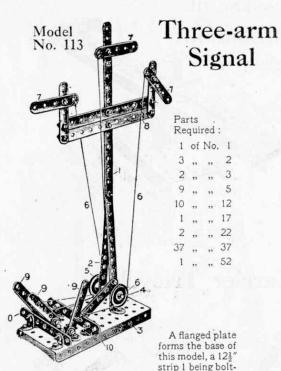
# Ladder on Wheels



#### Parts Required:

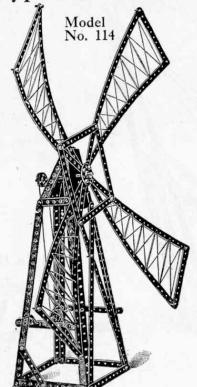
6	of	No.	1	24	of	No.	37
4	11	,,	5	1	**	**	52
2	,,	"	15	6	**	**	60
4	**	٠,,	20				





ed to a 5½" strip 2, the feet of both these strips being connected to the flanged plate 3 by angle brackets. A rod 4 is passed through the lower holes of the strips 1 and 2 and is fitted with guide pulleys 5 leading the actuating cords 6 to the signal arms 7. The cord operating the central arm is run under the rod 4. The signal arms 7 are carried from transverse strips 8. The operating cords 6 are led to three strips 9, pivoted to angle brackets bolted to the flanged plate, and transverse strips 10 are bolted to the perforated plate in the front and rear of the pivoted strips 9 to limit their movement.

# Types of Windmills

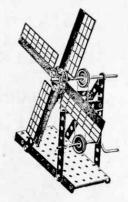


#### Parts Required

		1 all	.5 1	Lug	un	uu.	•		
10	of	No.	1	1	- 1	of	No.	19	
13		-22	2	1	2	27	,,	22	
2		22	3		1	,,	"	24	
2		**	5	4	4	>>	77	35	
4	**	22	8		45	**	- 11	3/	
4	22	. 22	12		2	11	11	54	
1	12		15	1					

# Model No. 115

		ired No.	2
2	,,	**	60
1	17	**	15
1	"	"	19
2	,,,	17	22
1	**	**	24
12	**	11	37
3	,,	12	35
1	**	"	52
4		**	61

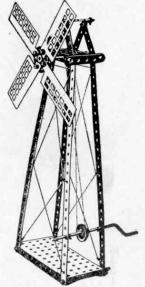


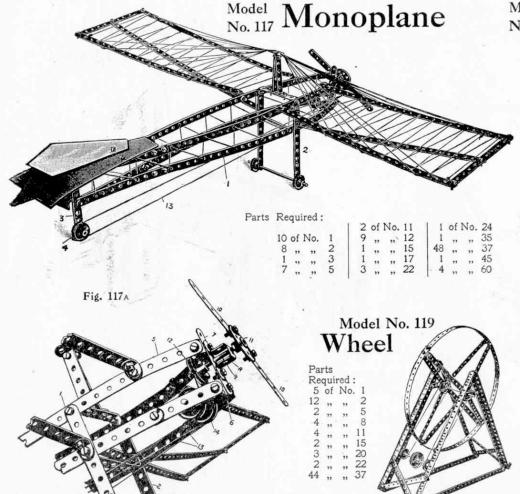
# Model No. 116

Parts Required:

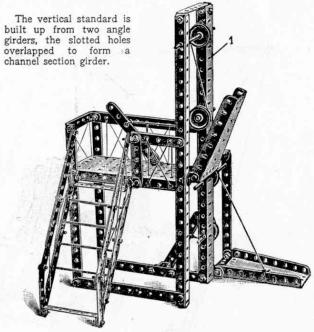
4	of	No.	1
7	,,	"	5
2	11	,,	60
2		,,	
- 1	,,	9.2	15
1	,,	"	19
2	22	- 22	22
1	11	**	24
20	57	**	37
4	22	22	35
1	,,	**	52

4 ., ., 61





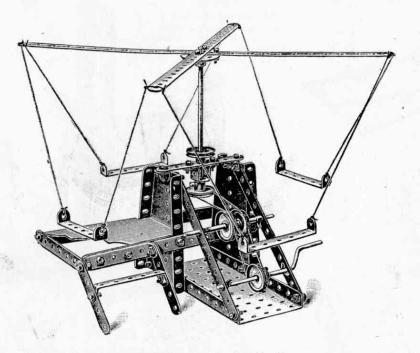
# Model No. 118 Ferry Gangway



#### Parts Required:

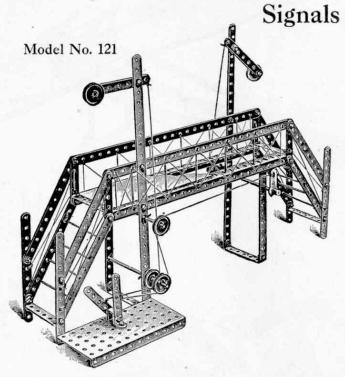
14	of	No.	2	2	of :	No.	15	50	of i	No.	37
2	,,	,,	3	2	**	**	17	1	,,	6	45
6	,,	,,	5 ·	2.	,,	,,	22	1	17	**	52
3	"	,,	8	2	**	***	22 <sub>A</sub>	2	,,	22	54
2	,,,	,,	10	6	11	. ,,	35	6	**	-93	60
7	**	**	12	1							

# Model No. 120 Roundabout



Parts	2 of No. 1	2 of No. 22
Required:	4 ,, ,, 2	1 ,, ,, 24
	2 " " 3	4 ,, ,, 35
	4 ,, ,, 5	33 ,, ,, 37
	3 ,, ,, 12	1 ,, ,, 45
	1 ,, ,, 15	1 ,, ,, 52

Railway Foot Bridge and

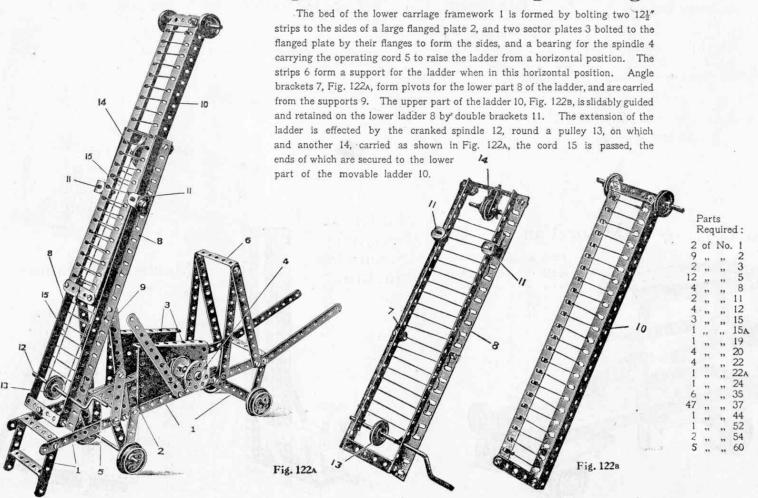


Parts Required :

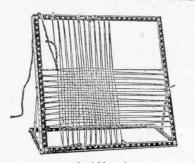
4	of	No.	1	2 of No. 8	6	of	No.	35
14	,,	"	2	2 " " 22A	1	53	**	45
2		. ,,	3	3 ,, ,, 22			11	60
8	,,	22	5	43 ,, ,, 37	2	,,	**	62
3	**	11	15	1 ,, ,, 52				

#### Made with MECCANO Outfit No. 2, or No. 1 and No. 1A

# Model No. 122 Extending Ladder on Running Carriage



# Model No. 123 Mat Frame



Parts	
Required:	

Model No. 124

# Coaster

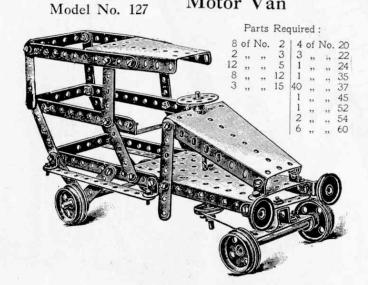


Parts Required:

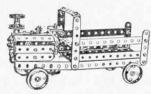
2	of	No.	2	1	of	No.	22
5	22	25	5	1	22	22	24
1	11	22	15	12	22	11	37
1	"	11	16	1	11	11	45
1	"	27	17	2	17	*1	54
4	39	22	20	1	12	22	60

-	22	35	0	1 4	22	33	24	
1	22	22	15	12	22	22	37	
1	**	200	16	1	-	100	45	
1	14	**	17	12	44	200	54	
4	**	**	20	1			60	

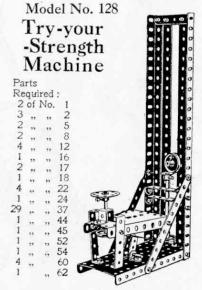
# Motor Van



# Model No. 125 Locomotive



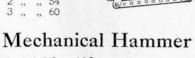
					err.	19 11	cyu	1100			
4	of	No.	2	1	of	No.	16	146	of	No.	37
2	**	**	3	1	17	"	17	1	**	**	45
7	27	12	5	4	**	**	20	1	,,	12	52
4	22	12	10	4	22	99	22	1	11	55	54
1	51	12	11	1	11	22	23	6	. 13	22	60
8	11	11	12	1	11	**	24	2	**	. **	62
2	22	55	15A	3	"	23	35				

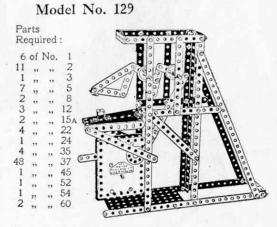


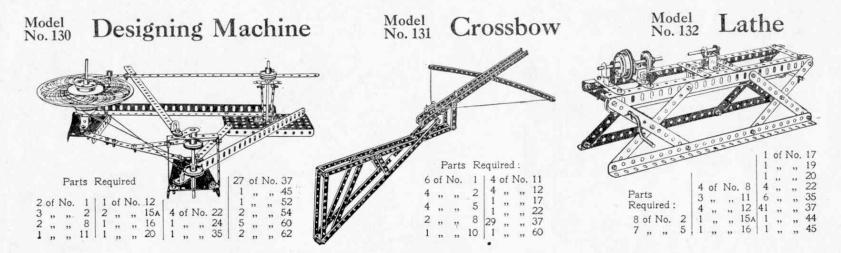
# Model No. 126

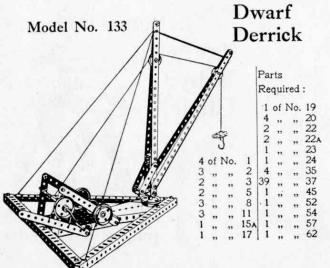
Embossing Machine

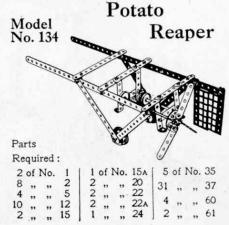


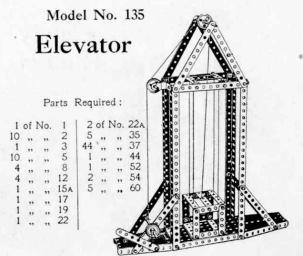


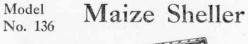


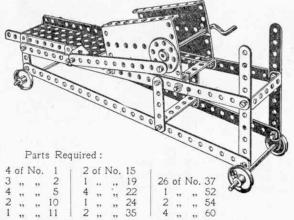






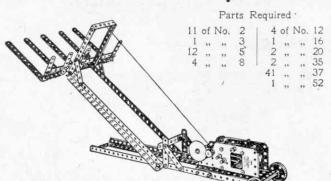






Model No. 137

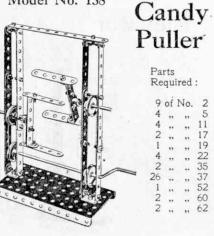
# Hay Stacker

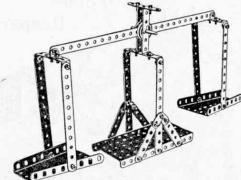


Model No. 139

# Beam Scales

# Model No. 138





Parts Required:

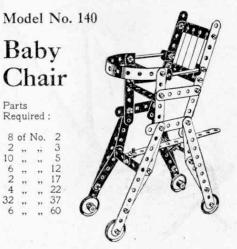
1	of	No.	1	4	of	No.	12	32	of	No.	37	
6	,,	,,	2	1	,,	,,	17	1	**	**	52	
5	11	**	5	2	**	17	22A	2	**		54	
4	**	**	10	2	**	**	35	5	**	**	60	

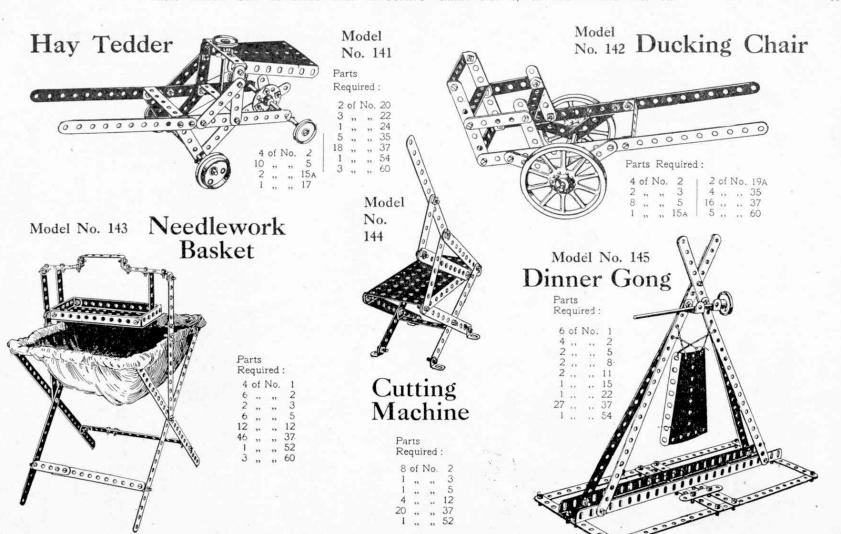
Baby

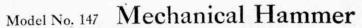
Chair

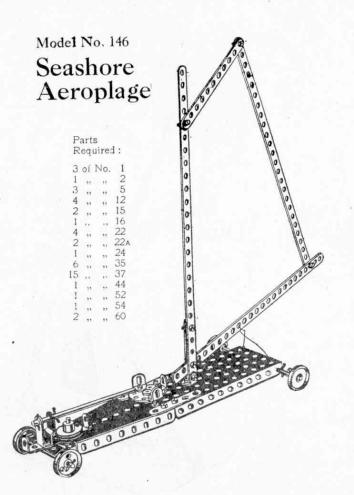
Parts Required:

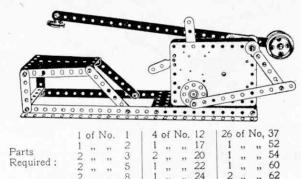




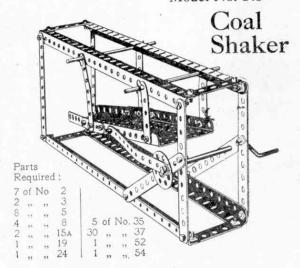


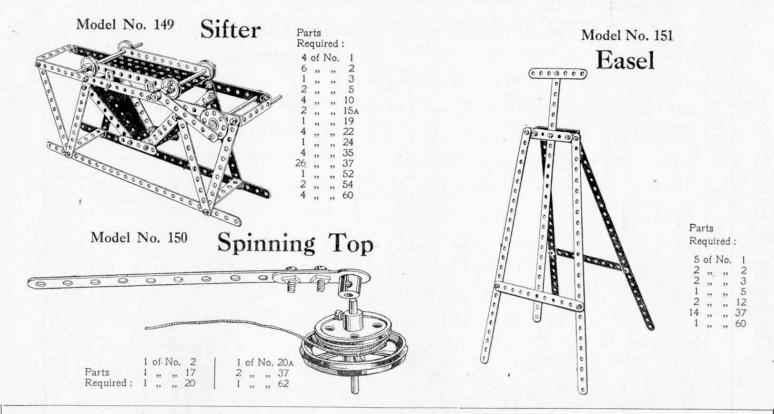












# HOW TO CONTINUE

This completes the Models which may be made with MECCANO Outfit No. 2. 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. 2A Accessory Outfit, the cost of which will be found in the Price List at the end of the Manual.

# Contents of Outfits

22 Pul 114 Mongalan M	rtips, riggle ngle cas s. 1.3	124 34 34 34 24 24 24 24 24 24 24 24 24 24 24 24 24	122 12 12 12 12 12 12 12 12 12 12 12 12	44   0     4   8       4   4	221           14	401	100	10 10	1 2	18	4 4	14 22 22	4	14 26 17	34	0.4
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	Pinion Wheels, 1"			I	1	1	1	1	ľ	Ţ	I	I	1	I	7	2
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	Spring Clins			4	2	9	1	9	9	12	4 6	1 00		18	9	24
-	Screwdriver			1	1	-	1	-	1	1	1	1	1	1	, -	2
37 Nu	Nuts and Bolts	:		25	S	30	25	55	25	80	20	130	45	175	290	465
10 Ha	Hanks Cord	:	-	-	.1	1	1	7	н	m	1	4	2	9	1	9
II Pro	Propeller Blades	:	:	1	1	I	1	1	1	1	1	1	7	2	1	2
Spr	Springs	:		1	1	E	1	1	1	1	-	-	1	٦	1	2
	Cranked Bent Strip			. 1	J	1	1	г	1	1	1	н	-	2	1	23
1130	Double Bent Strip	:	:	1	1	ı	-	-	1	7	1	2	1	7	5	4
	Large Bent Strip			1	1	1	1	İ	1	1	-	-	7	n ,	-	4
50 Ey	Eye Fieces		"-01"	1 *	1	-	1			1 9	1	1 0	ri e	-	- ,	7 0
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	Sector Plates			1	H	67	1	2	1	5 0	-	- 67	1	3	,	4
	Manual of Instructions	18		-	-	-	1	-	1	-	1	-	1	-	-	23
	Hook			-	1	1	1	1	1	1	1	Н	1	1	1	2
	Spring Cord	:		1	I	f	1	1	1	1	1	1	1	1	1	1
-	Collars and Set Screws			١	I	I	1	1	4	4	4	00	1	co	10	18
	Bent Strips, 21/2"	:		5	7	4	53	9	1	9	7	00	-	6	7	16
-	Windmill Sails	:		1	1	1	4 (	4 0	1	4 0	J	4 0	1	4 0	1 '	4 (
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65 Ce	Centre Fork			Ī	I	1	1	1	1	٠,	, -		1	, ,	1	-
	Sprocket Chain (length)	h)		1	1	1	1	1	1	-1	1	1	1	-	-	1
	****									V.			151	N.		

# MECCANO PRICE LIST

No. 0	Meccano	Outfit	\$1.50	No. 3X	Meccano	Outfi	t\$11.50	0A Accessory	,	\$1.50	Inventor's A	\$3.00
1	"	**	3.00	4	**	"	15.00	1A "		3.00	" B	7.00
1X	"	"	5.50	5	**		20.00	2A "		3.00	Meccano Motors, E1	3.00
2	"	u	6.00	5	"	16		3A "		6.00	" E2	4.50
2X	"	"	8.50	5 X		***	26.00	4A "		5.00	Spring Motors, S1	3.00
3	"	*48	9.00	6	"	**	40.00	5A "	2	20.00	Transformer	3.25



Part	No.					Ce	nts
1.	Perf.	Strip,	121/2"	long	(1/2	doz.)	45
2.	"	66	51/2"	**		66	25
3.	"	66	31/2"	**		**	20
4.	ee	"	3 "			**	20
5.	**	"	21/2"	"		44	15
6.	- 44	**	2 "	**		**	15
6A.	**	"	11/2"	***		"	15



7.	Angle	Girders,	241/2"	long,	each	25
7A.	41 -	**	181/2"	**	**	20
8.	**	**	121/2"	" 1/2	doz.	60
9.	"	"	51/2"	"	"	45



10. Flat Brackets ...... ½ doz. 05



11.	Double		 each	03
		Q		

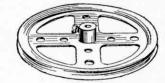


Angle Brackets ..... doz. 12

12A. Angle Brackets, 1" ...... each 05

13.	Axle	Rod,	111/2"	long								1	ea	ach	1
13A.	"	"	8"												1
14.	**	66	6"	990									ì	"	- 27
15.	66	66	5"	441								•	1	**	
15A.	66	**	41/2"		į	Ī	7		1		Š			"	
16.	**	"	31/2"	**	i	١	i	٠	٠	١	٥	Ì	•	**	
17.	11	"	2"	**			Š					Č.		"	
18A.	**	**	1"	**										"	





19A. Pulley Wheel, 3" diam. with centre boss and set screw, each 25

19B. Wagon Wheels, 3" diam. .... " 20



20. Flanged Wheel ..... each 25

	6.		i Zuk-					
1962	Pulley Wheel, 2" diam. with set screw each Pulley Wheel, 1½" diam. with	122	28. 29.	Contrate Wheel, 1½" diam., each " " "," " "	50 30	37. 37A. 38. 40.	Nuts and Bolts, per box         doz.           Nuts, per box         "           Washers         "           Hank of Cord         each	05 05
22.	set screw	10						
22A. 23.	Pulley Wheel, 1" diam. without set screw" Pulley Wheel, ½" diam. with-	05	32.	Worm Wheel "	25		( BREE	
23A.	out set screw	10				41.	Propeller Blades per pair	15
	683		33.	Pawl "	05		C minimum animodimos.	05
24.	Bush Wheel each	15	00.		00	43.	Spring each	03
				200				
			34.	Spanner	10	44.	Cranked Bent Strip"	05
25. <b>26.</b>	Pinion Wheel, ¾" diam each	15		N		1:		
			35.	Spring Clip, per box doz.	15	45.	Double Bent Strip"	05
27.	Gear Wheel, 50 teeth (to gear with ¾" pinion) each	30						
27A.	Gear Wheel, 56 teeth (to gear with ½" pinion)	35	36.	Screw Driver each	10	46.	Large Bent Strip	05

		Commission of Statement	
47A.	Dynometer (tension) each 1.50	58. Spring Cord, per length each	1 30
		4	63A. Octagonal Coupling each 20
50,	Eye Piece	59. Collar and Set Screw "	05
		00000	63B. Strip Coupling " 20
52.	Perf. Flanged Plate, 5½"x2½" " 25	60. Bent Strip, 2½" long ½ do 60A. Double Angle Strip, 1½" long " 60B. Bent Strip, 3½" long " 60C. " " 5½" "	18 25 36
			64. Threaded Boss 06 65. Centre Fork 10 66. Weight, 50 grms 20 67. 25 15 68. Wood Screws, ½" doz. 10
53.	Perf. Flanged Plate, 3½"x2½" " 20	61. Windmill Sail eac	69. Set Screws
	Ao: horself	or. Winding San	
		600	(0000)
54.	Perforated Sector Plate " 20		00000
56. 56A.	Manual of Instructions " 35 Instruction Manual, No. 2 " 35	62. Crank	
	Co		00000
57. 57A.	Hook	63. Coupling	70. Flat Plates, 5½"x2½" each 15 72. " 2½"x2½" " 10

104.

# Screwed Rods, 5" ..... each 15 81. 82. Curved Strip, 21/2" ..... 1/2 doz. 25 Sprocket Chain ...... per yard 25 Wheel, 2" 95. ..... each 25 96. Braced Girder, 31/2" long ... 98. 15 99. 100. 50 101. Healds for Looms ..... doz. Single Bent Strip for Looms, each

Perforated Flat Girder Strip,

5½" long ..... "

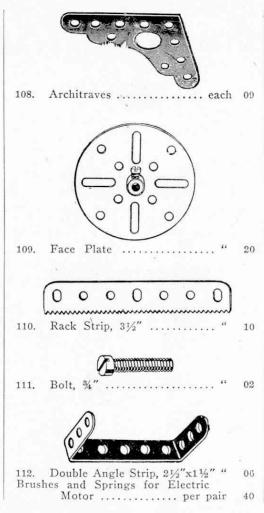
Reed Hook ..... "

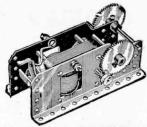
Roller ..... "

107. Tables for Designing Machines "

Shuttle ..... each 50

15





#### MECCANO ELECTRIC MOTORS

The best way to operate Meccano models. Side plates are perforated with equidistant holes so that motor can be built into model. E1 Non-reversing . . . . . . . . . . . \$3.00 E2 With reverse lever and extra gears 4.50



#### TRANSFORMER

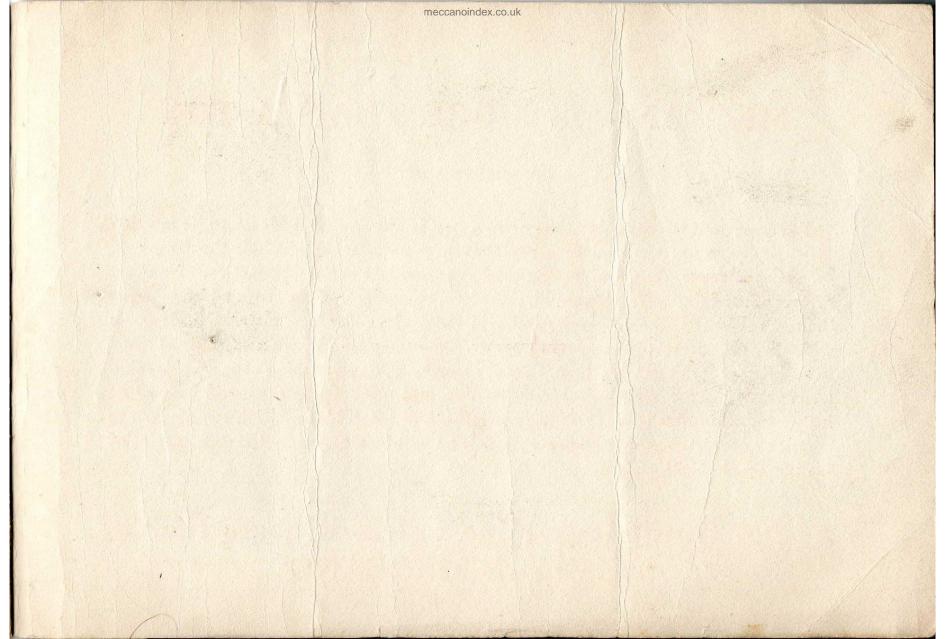
For alternating current only. Specially designed for Meccano motor.

Transformer for 110 a. c. 60 cycles ... \$3.25

#### SPRING MOTOR

No. 1 ...... \$3.00

Ask your dealer for outfits and parts. If he cannot supply you, send money orderstamps direct to Meccano Company. In 46 West 24th St., New York City, and will ship postage prepaid, providing orders and less than \$1.00.



# MECCANO IS MORE THAN A TOY

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

No Outfit is genuine unless it bears the trade mark MECCANO