



MECCANO



(TRADE MARK 296321)

INSTRUCTIONS FOR OUTFIT No. 0.

Price 4d.

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No. 22.0

ENGLISH EDITION.

A TALK WITH NEW MECCANO BOYS



HE Meccano No. 0 Outfit is the first step in the Meccano system. With it 70 working mechanical models can be made, each one a perfect little toy. After you have made them all, you will wish to go on building and you can do this either by adding new parts to your No. 0 or by purchasing a No. 0A Accessory Outfit, thus converting your No. 0 into a No. 1. You will then be able to build 106 models, including larger and better cranes, bridges, wagons, trucks, windmills, etc.

You never come to the end of Meccano fun. There is always more ahead—always some new, ingenious and interesting model to build. Each one, as it is completed, "tuned up," and set going, brings a joy and satisfaction beyond anything which boys have ever previously experienced.

As you progress in Meccano you obtain a greater variety of parts, gear wheels, pulley wheels, worm wheels, couplings, cranks, and all manner of perfectly-made real engineering parts. These enable you to construct

complicated mechanical movements without any difficulty. The most wonderful feature of Meccano is that it is real engineering; it is fascinating and delightful to play with, and yet so simple that even an inexperienced boy may join in the fun—without first having to study or learn anything.

THE LIFE OF A MECCANO BOY

A Meccano boy is the happiest boy in the world. He builds models from the Meccano Instruction books; invents new models; has a shot at the Competitions which are always being held in connection with the hobby; joins the Meccano Guild and a Meccano Club and by wearing the Guild badge proclaims himself to be the friend of millions of other Meccano boys all over the world. He reads the Meccano Magazine regularly and corresponds with his friend the Editor when he feels like it. Time never hangs heavily on his hands and he is too busy and too happy to grumble.

The Meccano Magazine is the Meccano boy's 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 interesting articles on engineering and electrical subjects, and deals with many 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. Write to the Editor, Meccano Magazine, Binns Road, Liverpool, and he will send you a copy FREE. It is sent regularly to subscribers at the rate of 6d. for six issues, or it may be purchased from any Meccano dealer, price 1d. per copy.

HOW TO BUILD WITH MECCANO

Follow the instructions closely at first, and build the models just as you see them. Then take each model and try to improve our design. Every model can be made in a dozen different ways. Screw up all the nuts and bolts and you will find that you can play with the trucks, cranes, signals, etc., and obtain many hours of fun from them.

Particulars and Prices of Meccano Parts



No. 19A.	Wheels,	3"[diam.,	with	set	screws	 each	s. 0	d. 8
			9	3				



20.	Flanged	Wheels				 each	0	
20.	r rangeu	Wheels	***	***	***	 each	0	



		Pulley Wheels. 3" dia. with centre boss and set screw, e										
19B.	3"	dia.	with cent	tre boss	s and s	et screw,	each	0				
20a.	2	"	11	,,	**	**		0				



1B.

11. Duoble Brackets each 0 1

12. "Angle Brackets doz. 0 6 12A. Angle Brackets, 1" each 0 1

... each 0 3

13. Axle Rods, 111" long

19. Crank Handles



21						
	12	22	"	**	0	
11	"	23	22	33	0	
ithout	22	**	"	22	0	1
***	32.	22.	22	22	0	1
	"	n n				0





		(24)					(23	5)		
24.	Bush	Wheels	***	***	***			each	0	6
25.	Pinion	Wheels,	3"	diam.		***		,,	0	6
26.	22	**	2"	27		***	***	22	0	4
						_	=	-		





	(27)		ear V	Vheels.		(28)		
27.	50 teeth	to gear	with	3" pi	nion		each	0	9
27A.	57 ,,	"	,,	2"	,,		**	0	9
28.	Contrate	Wheels,	11"	diam.			11	0	9
29.	"	11	1"	"			22	0	6





No. 30.	(30) Bevel Gears Gear Wheels,	1", 38 teeth	(31) ea	s. d. ach 0 10 ,, 1 0
				2

		(32)			(33	3)		
2.	Worm	Wheels		 		each	0	6
3.	Pawls	(complete)	***	 		***	0	4
3A.	Pivot	Bolts with	Nuts	 			0	2

34.	Spanners	• • • •	 	 		each	0	1





							-					
35.	Spring	cl Cl	ips				per	box	(doz.)	0		
36.	Screw	Dr	ivers				*		each	0		
36A.	***			Ext	ra Le	ng				0		
37.	Nuts	and	Bolt	S			per	box	(doz.)	0		
3/A.	Nuts								**			
37B.	Bolts							,,		0		
38.	Washe	ers								0		
40.	Hanks	s of	Cord						2 for	0		
41.	Prope	ller	Blade	es					r pair			
43.	Spring	rs							each			



11 Cranbad Dent Ct-i-			2.3	
44. Cranked Bent Strips	***	***	***	each
45. Double Bent Strips	***	***	***	22
	1	1		
/01	/6	0		
1-1	1	~/		2
(0)	10	/		
100000	1			

V	0	0	0	0	0	V		6	1
46. 50.	Do	ouble re Pie	Angle eces	Strin	s, 21	" ×	1"	(50) doz. each	62



No.											d.
52.	Perfe	orated	Flan	ged	Pla	tes, 51	"×2	1".	each	0	5
52A.	Flat	Plates	, 51"	×	31"	***			23	0	5





	(53)		(54)		
53.	Perforated Flanged Plates, 31 ×	$2\frac{1}{2}''$	each	0	3
	Flat Plates, $4\frac{1}{2}'' \times 2\frac{1}{2}''$		"	0	3
54.	Perforated Flanged Sector Plates	***	,,	0	3



	Perforated	Strips, sl	otted,	51"	lon	g	each	0	2
55A. 56.	Instruction	Manuel	" "	2"	,,,		**	0	1
	Instruction						"	1	0
	Instruction						"	1	0

Ca					
				-	
(57)				(5	9)
57. Hooks	***	***			each (
57A. " (scientific)					0
57в. "Loaded	***				., 0
58. Spring Cord			p	er l	ength 0
 Collars with Set Sci 	rews	1900	-		each 0

-					_
(0	10	0	0	0	(o)
D	1 1	C1 1	91#		

	Double	Angle	Strips	, 21	" ×	1"	1	doz.	0	5
60A.	"	22	"	11	" ×	1"		,,	0	4
60B.	**	"	22	31	" ×	1"		"	0	6
60c.	27	22	"	51	" ×	1"	***	**	0	9
60D.			**	41	" ×	1"	***		0	9
61.	Windmi	Il Sails	.,.					each	0	2





		62)				(63)			
	Cranks				***			each	0	3
	Threaded			***	***	***		11	0	4
63.	Couplings	***	***						0	6

Particulars and Prices of Meccano Parts (continued)





No. (63A)		63B)			d.
63A. Octagonal Couplings	***	***	each	0	8
63в. Strip Couplings	 ***	***	"	0	8





(63c)	-40		(6	54)
33c. Threaded Couplings				each 0
64. Threaded Bosses				,, 0
65. Centre Forks				,, 0
66. Weights, 50 gramme		***	***	,, 1
67. ,, 25 ,,	***	***		," 1
68. Woodscrews, ½"		***	***	doz. 0
69. Set Screws	***	***	***	,, 0
69A. Grub Screws	***	***	***	,, 0
69B. , , , , , , , , , , , , , , , , , , ,	***	***	***	doz. 0

0 0	0	0	0)	
0 0	0	0	0	
0 0	0	0	0	
0.0	0	0	0	
0 0	0	0	0)	



70.	Flat Plates	, 5½" ×	21"		***		each	0	3
72.	11 11	2½" ×	21"		***	***	"	0	2
76.	Triangular	Plates,	21"				,,,	0	2
77.	"	"	1"	***	***	***	"	0	1

78.	Screwed	Rods,	111"					each	0	6
79.	"	"	8"				• • • •	"	0	5
79A.	,,	"	6"	***	***	***	***	"	0	4
80.	,,	"	5"			***	***	"	0	3
80A.	,,	,,	31"		• • • •	***	***	22	0	3
80в.	,,	,,	44"	***		***	•••	22	0	3
81.	***	,,	2"		***			33	0	- 4



89.	Curved	Strips,	51"			 	each	0	2
90.	,,	,,	21"	***	***	 	"	0	1

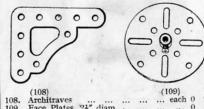


94. Sprocket Chain per yard 0 6



No.			-					5.	d.
95.	Sprocket	Wheels,	21"	diam.			each	0	5
95A.	,,	"	11"	,,	***		**	0	4
95в.		"	3"	"	***		32	0	6
96.	,,	"	1"	**	***	***	,,	0	3
96A.	1)	"	1	**	•••	***	**	0	3

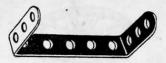
97.	Brace	d Girde	rs, 3	" lon	g		***	doz.	0
98.	,,	,,	2			***		"	0
99.	,,	,,	12	" ,,		***	***	"	1
99A.	,,	- "	9	" "				,,	1
00.	,,		51	" ,,				. 11	1
01.		s. for le	ooms				***	doz.	0
02.	Single	Bent S	Strip	s				each	0
03.		Girders,						doz.	1
103A.	***	,,	91"	77				,,	1
103в.		,,	121"	,,				,,	2
103c.		"	41"	***				22	0
103D		,,	31"	,,				23	0
03E.		. ,,	3"	23	***			"	0
103F.		"	21"	,,				,,	0
103G.		,,	2#	.,				**	0
03н.		,,	11"	.,				,,	0
104.	Shutt	les, for	loon	15				each	4
105.	Pood	Hooks,	for	looms					0
100.	Meca	R	oller	s for	T.00	ms.		**	
106.	Cloth	Rollers						,,	1
	Sand							. ,,	1
IUUA	Table	s for D					-	,,	1



	(108)	100						(90)		
108.	Archi	traves						each		2
109.	Face	Plates,	21"	diam.				"	0	4
~	~~~	~~~	~~	~~~	~~	~~	~~	ww	~	2
	_			1000					0	- 1

110. Rack Strips, 31 each 0 2

									1	
111.	Bolts.	3"							each 0	1
111A.		1"		***		***	***	***	2 for 0	1
111B.	19	70"	***		***	***			doz. ()	4



No.								d.
112.	Double	Angle	Strips,	$\frac{2\frac{1}{3}'' \times 1\frac{1}{3}''}{3'' \times 1\frac{1}{2}''}$	}	doz.	0	9
112A.	,,	11	,,	$3'' \times 11''$	***	29	1	0



113. Girder Frames each 0 2



	(114)		(115)			(12			
	Hinges		 	 	per	pair	0	4	
115.	Threaded	Pins	 	 		each	0	2	
120.	Buffers		 	 ***		**	0	2	







24.	Reversed	Angle	Brackets,	1"	1	doz	. 0	10	
25.	"	33	"	1"	***	,,	0	6	

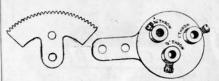




(126)			(126A)		
Trunnions	 			each	0	3
. Flat Trunnions	 	***		,,,	0	2



				-	-			
No.	(127)				8)			
127.	Simple Bell Cranks				each			
128.	Boss Bell Cranks	***	***		"	0	4	



	(129)	(130)				
29.	Rack Segments, 3" diam.			each	0	
30.	Triple Throw Eccentrics	***		**	1	3



131. Dredger Buckets each 0 2



1	132.	Flywheels,	23"	diam.				each	2	1
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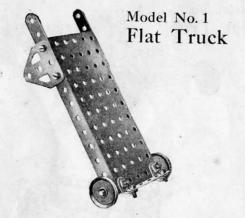


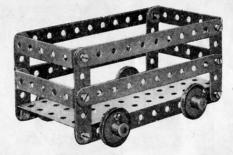
133. Corner Brackets each 0 3



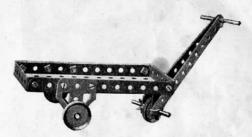
1.5	Crank Shafts, 1" str	oke		 	each	0	3
35.	Theodolite Protracto	ors			**	0	3
36.	Handrail Supports		***	 	**	0	3
37.	Wheel Flanges	•••		 	. 20	0	4

Trucks and Luggage Carts

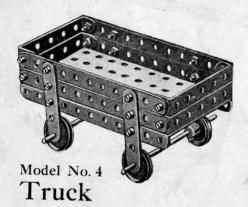


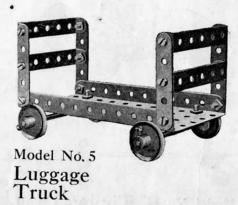


Model No. 2 Truck with Sides



Model No. 3 Luggage Cart

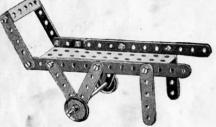




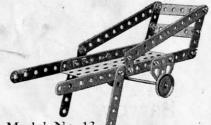


Model No. 7

Covered Truck

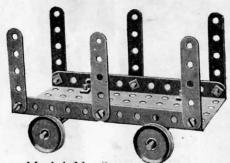


Model No. 10 Luggage Barrow

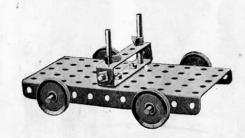


Model No. 13 Coster's Barrow

Trucks and Luggage Carts (continued)



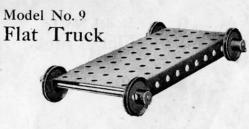
Model No. 8
Timber Truck

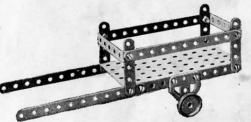


Model No. 11 Timber Truck



Model No. 14 Timber Drag



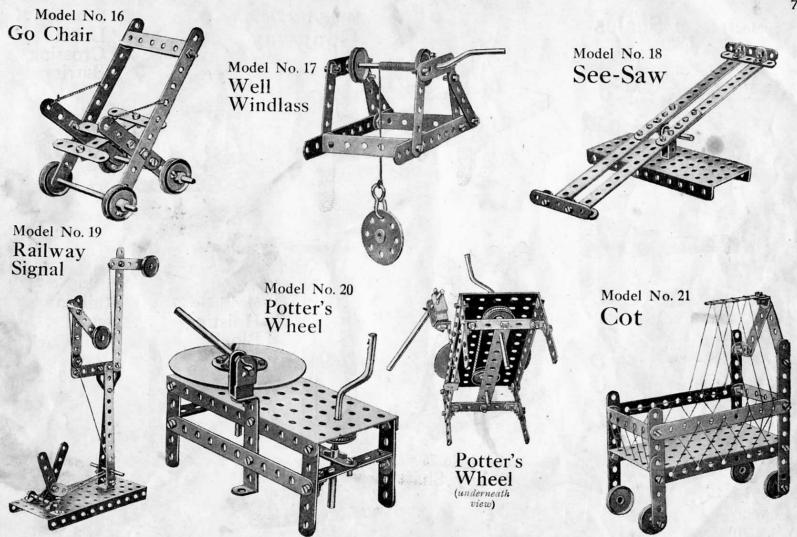


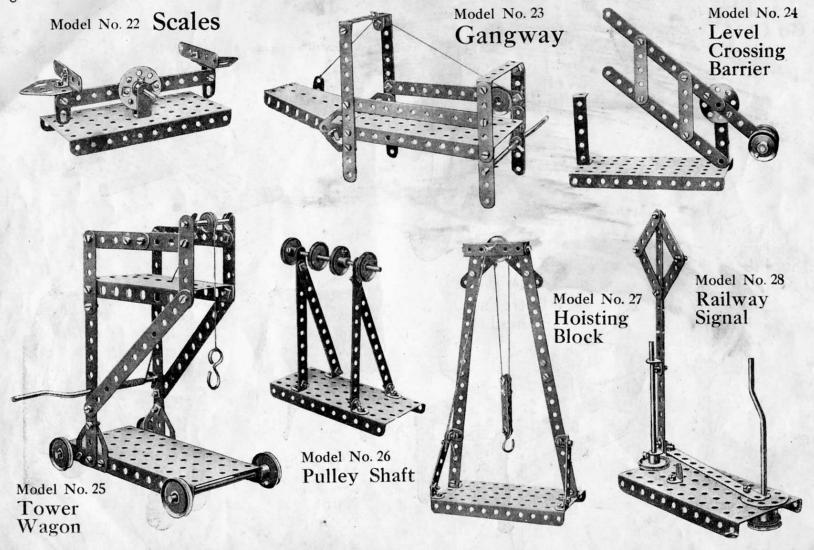
Model No. 12 Luggage Cart

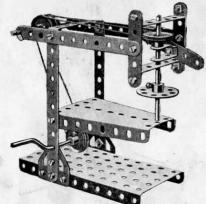


Model No. 15

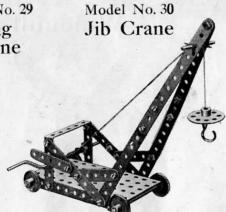
Bath Chair



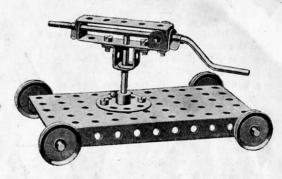


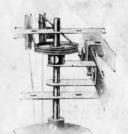




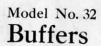


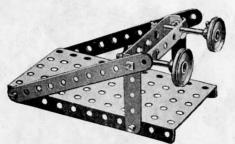
Model No. 31 Rock Drill

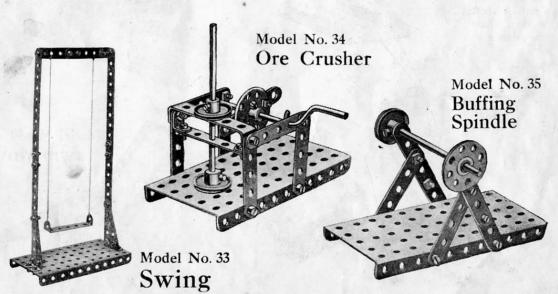




Detail of Drilling Machine.



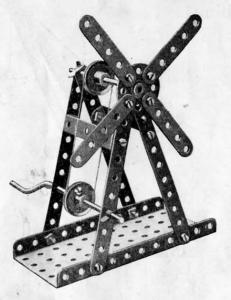




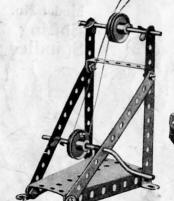
Model No. 36 Telpher Span

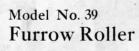
Model No. 37 Windmill

Many hours of enjoyment may be obtained from this model. The illustration shows exactly 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 body of the telpher should be screwed down to a solid base with ordinary wood screws, and the pulley bracket screwed in a suitable position on the opposite side of the room.



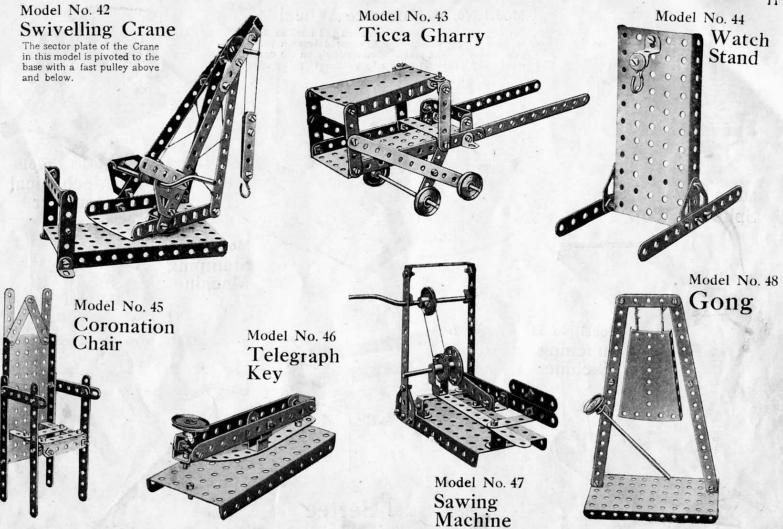






Model No. 40 Lawn Mower

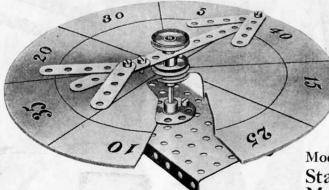




Model No. 49
Spinning Top



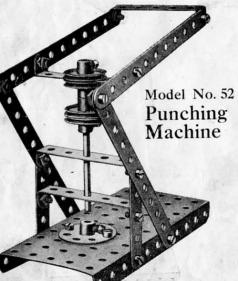
Cut out a circular piece of cardboard and mark as shown to form scoring board. This is clamped between two 1" pulley wheels. The pointer revolves freely on the upright spindle and is held in position by another 1" pulley wheel.

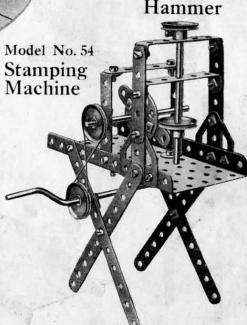


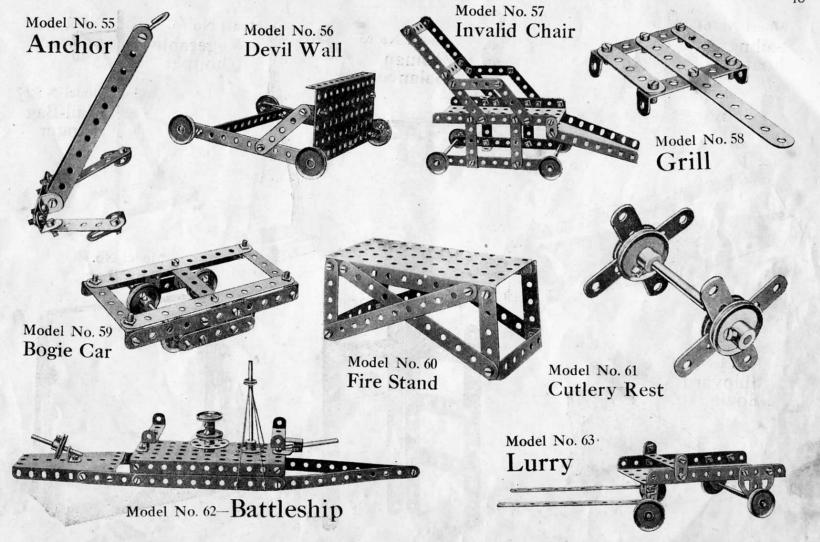
Model No. 51 Mechanical Hammer

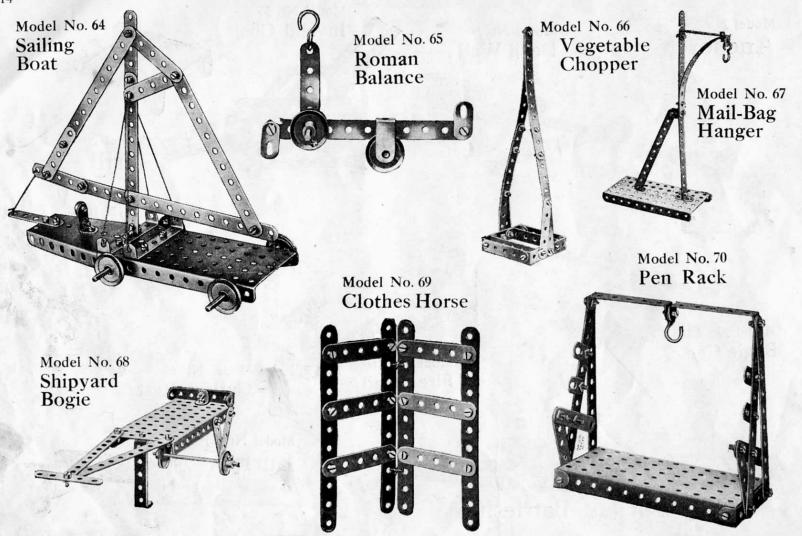


Model No. 53 Settee





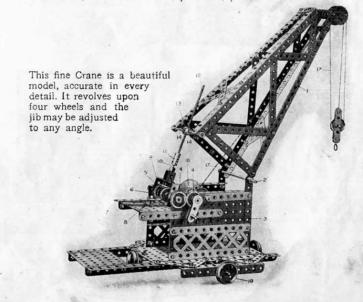




A FEW CHOICE MECCANO MODELS

Here are five splendid Meccano models that any boy may build without study. Full instructions for building them (as well as many other fine models) are contained in No. 3 Manual—price 1/4½ (post free). There is a special leafiet of instructions for building the Meccano Chassis (see below).

The Meccano Motor Chassis is a perfect model, with gear box and differential. Full instructions how to build it are contained in a beautifully illustrated leaflet, price 4d., post free.



This is a special model, designed to illustrate the operation of a Hydraulic Crane. Screws are used, in place of waterpower, to move the chain or cord puileys.

This splendid working model

of a dredger may be used in connection with a

Hornby Train,

and provides endless fun.



Model 440. Revolving Crans.

MECCANO INVENTOR'S ACCESSORY OUTFITS

New and valuable parts are added to the Meccano system from time to time, and for the convenience of Meccano boys we have made up selected assortments of these new parts in useful quantities. These may be purchased in special boxes, known as Inventor's Accessory Outfits. With them many models in the Manuals of Instruction may be greatly improved and a large number of further models made.



Accessory Outfit "A"

This Outfit makes a splendid addition to any Meccano Outfit and with it a considerable amount of extra fun may be obtained. It contains large 3" Pulley Wheels, Gear Wheels, Washers, Sprocket Wheels, Sprocket Chain, and Meccano Braced Girders. For price see page 18.

Electrical Outfits

All Meccano boys are fascinated by electricity and never become tired of learning more about this wonderful subject. The application of electricity to the Meccano system adds a further and wonderful charm, and the joys of model-building are now increased by the fascinating pastime of carrying out delightful electrical experiments.

The Meccano Electrical Outfit contains a number of specially

designed electrical parts which may be used in conjunction with any of the regular Outfits. For prices see page 18.



MECCANO

Accessory Outfit "B"

Every boy who is interested in engineering subjects will find this Outfit of the greatest service to him, not only providing him with new movements but also considerably extending the scope of his experiments.

The Outfit contains Bevel Gears, Gear Wheels, Flat Plates, Octagonal and Strip Couplings, Triangular Plates, Screwed Rods, Curved and Rack Strips, Hinges, and Buffers and Couplings (for constructing Trains). For price see page 18.

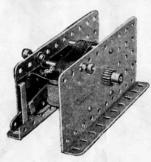
Clockwork Motor

How splendid it is, after spending hours in building a model, to be able to set it in motion with a motor, just as do real engineers! The Meccano Clockwork Motor is specially made for this purpose and is a fine piece of mechanism—simple, powerful, and reliable. It is fitted with starting and stopping levers, and has a reversing movement. For price see page 18.



Electric Motor

This Motor serves the same purpose as the Clockwork Motor and may be run from a 4-volt accumulator or—by employing a suitable transformer—direct from the main. It is specially made to be built into Meccano models and is the most reliable and powerful toy electric motor made. When suitably geared it will lift over 30-lbs. dead weight. It is fitted with reversing motion, starting and stopping levers. For price see page 18.



HORNBYCLOCKTRAINS

THE HORNBY TRAINS are manufactured by Meccano Ltd., and they are built on the Meccano principle. All the parts are standardised and Engines, Tenders, Coaches and Wagons may be taken entirely to pieces and rebuilt. If one of the parts is lost or damaged you may fit a new one yourself. A Hornby Train lasts for ever! The Hornby Train is a beautiful piece of workmanship, with perfect clockwork mechanism, ensuring smooth running. Each Train is guaranteed by Meccano Ltd.

No. 1 PASSENGER SET.—Gauge 0. Each Set contains Loco, Tender, and two Coaches with rails for a 2 ft. diameter circle and two straights. The Loco is fitted with reversing gear, brakes, and governor. In four colours, to represent L.& N.W., G.N. Midland, and Caledonian Railway systems.

Complete in brown leather-finished gold-embossed box, 35/-.





No. 1. GOODS SET.—Gauge 0. Similar in every way to No. 1 Passenger Set, except that this Set contains Loco, Tender and one Wagon.

Complete in strong attractive gold-embossed box, 25/6.

Prices of Locos, etc., separately: Locos, 16/-; Tenders, 3/6; Passenger Coaches, 6/6; Wagons, 3/9. (Rails, Crossing, and Points, see below.)

No. 2 PULLMAN, SET.—This Set includes Loco and Tender of a larger type, measuring 17th in length. A superior mechanism has been adopted, making this the most attractive and satisfactory clockwork train yet produced. The Coaches are beautiful, both in colour and finish. Each Set includes Loco, Tender, one Pullman and one Dining Coach, as illustrated, with set of Rails making a 4 ft. diameter circle. Gauge 0. In four colours to represent L.& N.W., Midland, G.N., and Caledonian Railway systems. The Loco is fitted with reversing gear, brakes and governor. Complete Set in gold-embossed box, 70/-.



No. 2 GOODS SET.—Similar to Passenger Set No. 2 but two Wagons in place of Coaches. Complete Set in gold-embossed box, 45/-.

Prices of Locos, etc., separately: Locos, 30/-; Tenders, 4/-; Passenger Coaches, 16/-; Wagons, 3/9.

RAILS FOR No. 1 AND No. 2 SETS.—Gauge 0, curved or straight, per dozen, 5/-. POINTS.—Right or left hand, for 2' or 4' diameter circles, each 3/9.

CROSSINGS.—Acute or right angle, 2/6 each.

SEND FOR SPECIAL LIST OF RAILS, POINTS AND CROSSINGS.

MECCANO PRICE LIST

		MECC	ANO	OUT	FIT	S					ACCES	SORY	1	DUTF	TS		
							s.	d.								s.	d.
No.	0 N	Meccano	Outfit				5	0	No	. OA	Meccano	Outfit				4	0
,,	1	,,	,,,,,,,,				8	6	,,	1 A	,,	,,				7	6
,,	2	,,	,,				15	0	,,	2A	,,	,,				8	6
,,	3	,,	,,				22	6		3A		,,				18	6
,,	4	,,	,,				40	0	,,	4A	,, .	,,				15	0
. ,,	5*	,,	,,	(Carto	on)		55	0	,,	5A	* ,,	,,	(Ca	rton)		50	0
,,	5*	,,,	Presen	tation	0	utfit			,,	5A	* ,,	,,	(W	ood)		80	0
			(Wood	d)			85	0	Inv	rento	r's Accesso	ory Ou	tfit	Α		8	6
,,	6	,,	Presen	tation	0	utfit	140	.0		,,	,,	,,		В		15	0
Med	cano	Clockw	ork Mo	otor			9	0	No	. XI						12	6
	,,	Electri	c Moto	r			12	6	. ,,	X2	,,	,,		,,		42	0

^{*} Outfits Nos. 5 and 5A are supplied in neat and well-made cardboard boxes (cartons) or in superior oak cabinets, with look and key.

Meccano is sold in seven different Outfits, numbered 0 to 6. All parts are of the same high quality and finish, the larger Outfits containing a greater quantity and variety of parts.

Each Outfit may be converted into the one next higher by the purchase of an Accessory Outfit. Thus, a No. 2 may be converted into a No. 3 by adding to it a No. 2A. A No. 3A would then convert it into a No. 4, and so on. In this way, no matter which Outfit you commence with, you may by degrees build up your Outfit to a No. 6.

CONTENTS OF No. 0 OUTFIT

No.			Qu	antity.	No.	Quantity. No.	Qu	antity.
2.	54" Perforated Strips		 	4	22.	1" Pulley Wheels (with Set-screw) 4 57. Hook		1
5.	21," ,, ,,		 	9	23A.	1 60. 21"×1" Double Angle Strips		4
10.	Flat Brackets		 	5	24.	Bush Wheel 1 125. 1 Reversed Angle Brackets		2
11.	Double "		 	2	35.	Spring Clips 6 126A. Flat Trunnions		
12.	Angle "		 	. 8	37.	Nuts and Bolts 25 38. Washers		6
16.	31" Axle Rods	٠	 	2	44.	Cranked Bent Strip 1 36. Screwdriver		I
17.	2" ,, ,,		 	2	52.	Perforated Flanged Plate, 5½" × 2½" 1 40. Hank of Cord		1 .
19.	Crank Handle		 	1	54.	., , Sector Plate 1 56. Manual of Instructions No. 0		1

This rule is provided for measuring rods, strips and other parts.

1 4	1 3 2 4	inch	6	2	3		4	5		б 	7	8	9
	1												

HAMAY. SHELTON

MECCANO

Hornby's Original System, First Patented 1901

PATENTS AND DESIGNS, GREAT BRITAIN:

116,370	577,207	671,485	682,209	22,962/13 3,869/14
139,125	577,272	671,534	682,934	3,009/14
145,357	- 648,958	671,790	683,011	4,183/14
153,234	671,212	680,416	21,117/12	4,564/15
154,130	671,484	682,208	20,535/13	

PATENTED THROUGHOUT THE WORLD.

Meccano is more than a Toy

parts in miniature, and that these parts act in precisely the same way as do the corresponding engineering elements in actual practice. No other system of model construction can be correct, and other toys which attempt the same object by other methods must avail themselves of 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.