MECCANO

INSTRUCTIONS

FOR THE NO OUTFIT PRICE 15 CENTS

Nº 160

"Two Minds with but a Single Thought"

BY MECCANO LTD

A TALK WITH NEW MECCANO BOYS

Boys! This book is only the beginning of Meccano. You will get lots of fun building the models which it contains, but best of all it will show you what a fine hobby Meccano is, and how easy and delightful it is to build models with it.

Wouldn't you like to build all the splendid Meccano models which you have seen on exhibition in the toystores, and in our advertisements, and in the books and leaflets which we publish? Nothing could be easier; all the Meccano parts fit in

with those you have in your No. 0 Outfit. This is the advantage of the standardization of the whole Meccano system. Once you have got the idea of the equidistant holes, and the interchangeable parts, you can do anything with them. Take, for instance, one of the models which looks most complicated—the Meccano loom. It is just as easy for you to build it as it is for an engineer or a skilled mechanic.



That is what the Meccano system does—the genius and skill and knowledge are in the parts, and all you have to do is to screw them together. And when you have made a model such as the loom, you can do something with it.

•You can weave neckwear and belts in all colors and designs, just as good as the best you can buy in the stores. Our big Manual of Instructions shows you how to make this model, and it also shows you how to make the Helter-Skelter, and

the big Cranes and Bridges, and all the prize models which have been sent in by expert Meccano boys, and which took big money prizes.

Remember, boys, that with a Meccano Outfit you can make anything and everything which you can make with any other system, and that no other system can make the Meccano models.

THE NEW FULL MECCANO MANUAL OF INSTRUCTIONS CONTAINS
HUNDREDS OF PRIZE-WINNING MODELS.
GET YOUR COPY AT ONCE.

Money and Fame for Clever Boys

Every year there is a Meccano Grand Prize Competition, in which we offer big prizes in money, and new Meccano Outfits, to clever boys who are able to design new models. After you have built a few models, ideas for new ones will come to you, and we want you to send them in to us and get your share of the prize money. Be sure so 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.

Address

MECCANO CO., INC.
71 West 23rd Street, New York

When you ask for Meccano, see that you get it. Nothing else is "just as good"—nothing else will do the same.

INSIST ON THE TRADE NAME MECCANO



Meccano is Easy

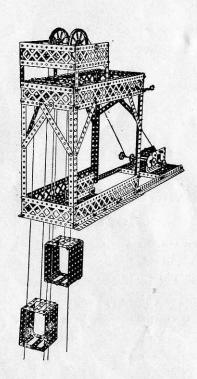
Meccano is so easy, and our instructions are so complete, that we do not believe you will have any trouble; but if there is anything you do not quite understand, or if you have any suggestions to make, do not fail to write to us.

Boys! Build Bigger Models

When you have completed all the models in this book, your next purchase will] be a No. 0A Accessory Outfit. This will convert your No. 0 Outfit into a No. 1. You will receive a large number of extra parts, and our first big 140-page full Manual of Instructions. You will be able to build scores of new and fascinating models, and will then realize what a wonderful hobby Meccano is.

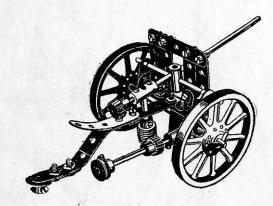
ANOTHER MECCANO COMPETITION HAS STARTED. GET YOUR ENTRY FORMS FOR IT. \$1,000.00 IN PRIZES

SPLENDID NEW MECCANO MODELS



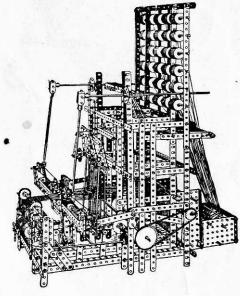
Pit Head Gear

A fine toy, giving great fun. The cages work up and down, carrying loads. Note the splendid use of the Meccano braced girder. These are just one or two of the fine new models which Meccano makes. The complete Meccano Manual is full of good things—hundreds of prize-winning models from all over the world. Get you copy at once. It is included in the No. 0A, and all regular Outfits from No. 1 upwards; or you can purchase it separately for 35 cents.



Meccano Field Gun

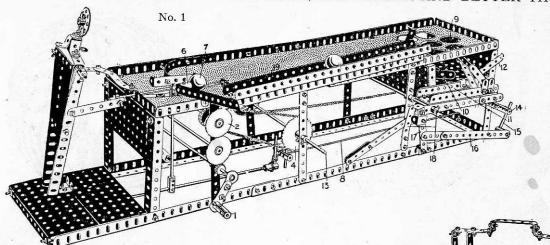
Easy to make and furnishes endless amusement.



Meccano Loom

The mechanism is fully automatic, and it is only necessary to turn the handle to weave neckwear, belts, etc., in all designs and colors. This is a Meccano triumph which every Meccano boy must make. It will teach you all about weaving. Full instructions how to make it in the full Manual of Instructions.

THE MORE MECCANO YOU HAVE, THE BIGGER AND BETTER THE MODELS YOU CAN MAKE



These are a few models taken from our big Manual, which contains more than 300 just as good.

No. 1 is an Automatic Bagatelle Player.

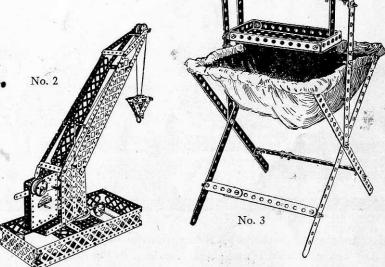
The balls are automatically played by
the figure at the end of the table, and,
after making the score, are returned to
the player.

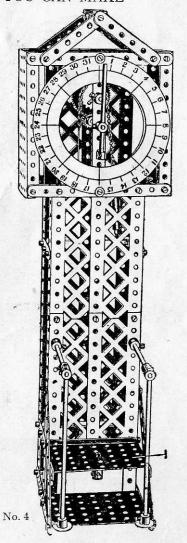
No. 2 is a beautifully designed Crane worked with a Meccano Clockwork Motor. It works perfectly.

No. 3 is a Ladies' Needlework Basket, easy to make, and most useful.

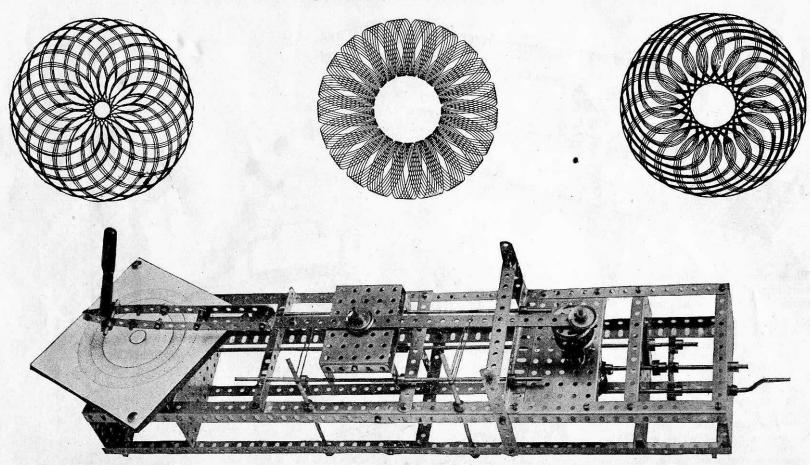
No. 4 is a type of Weighing Machine which will be familiar to every boy. It works perfectly, and can be adjusted to weigh correctly.

Full instructions for building these, and hundreds of other models, will be found in the big Meccano Manual of Instructions.





Meccanograph Another Fine Special Model



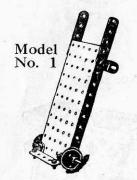
Here is a picture of the Meccanograph together with illustrations of the wonderful designs which the machine will draw.

Any boy can build it and there is no end to the designs it will make.

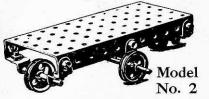
HOW TO BUILD WITH MECCANO

Follow the instructions closely at first, and build the models just as you see them. Then take each model and try to improve on our design. Every model can be made in different ways. Screw them all up tightly and you will find that you can play with the trucks and cranes and signals, &c., and do all kinds of work with them.

The large wheels shown in some of the illustrations are, of course, separate parts which you can either purchase separately or in the Inventor's Outfit, but wherever they are shown the ordinary Meccano wheels may be used instead.



Trucks and Baggage Carts

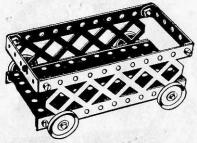




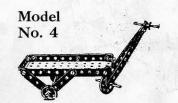
Model No. 3

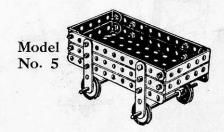
In a Revolver Truck Model No. 2 the two end wheels are always raised just a little higher than the two centre wheels with a moderate amount of play on the axles, so that the Truck may be quickly revolved upon the centre wheels.

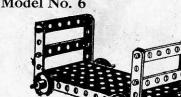
The beatings for the end axles are formed by connecting two angle brackets together, as shown in Fig. 2A, and bolting them in each end hole at the sides of the plate.



Model No. 3 with new Braced Girder

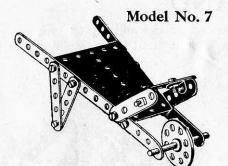


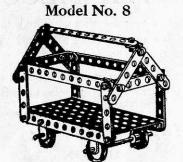


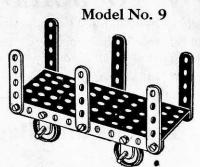


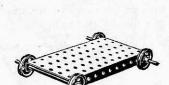
Model No. 6

Trucks and Baggage Carts

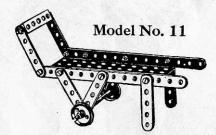


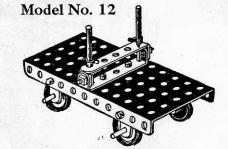


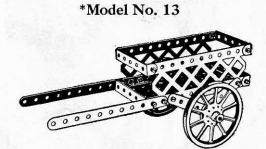


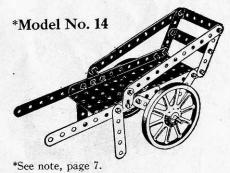


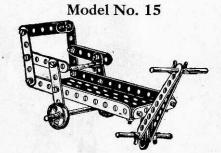
Model No. 10

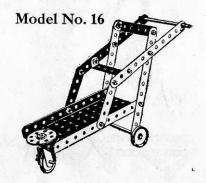


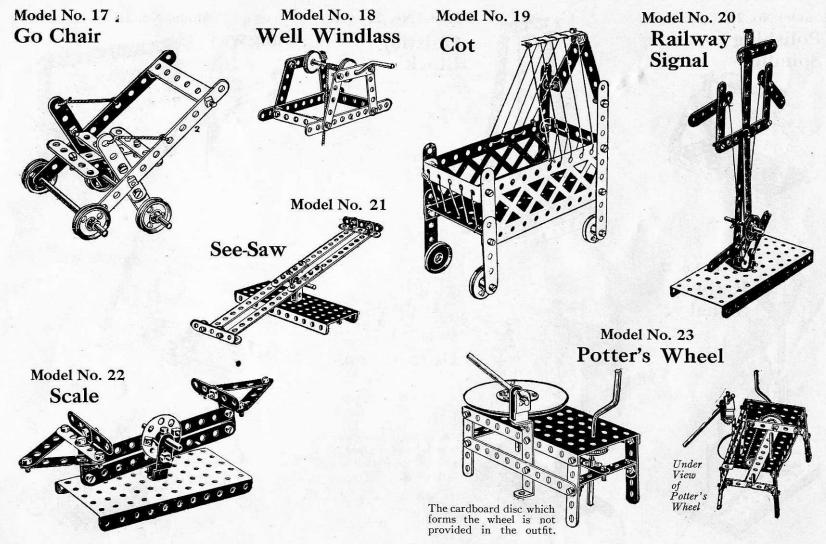




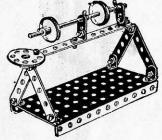


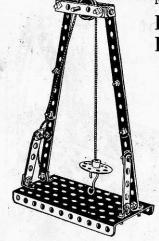




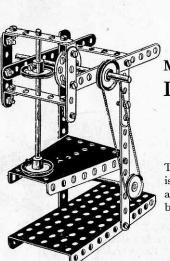


Model No. 24 Polishing Spindle





Model No. 25 Hoisting Block

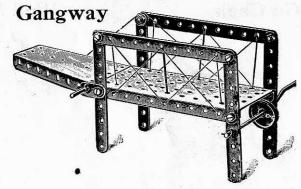


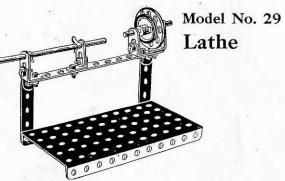
Model No. 28

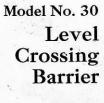
Drop Stamp

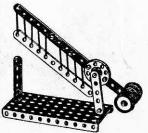
The stamp of this model is raised and dropped by a $2\frac{1}{2}$ " strip attached to a bush wheel.

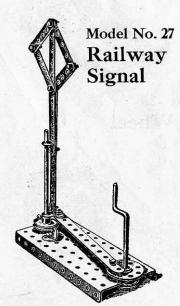
Model No. 26

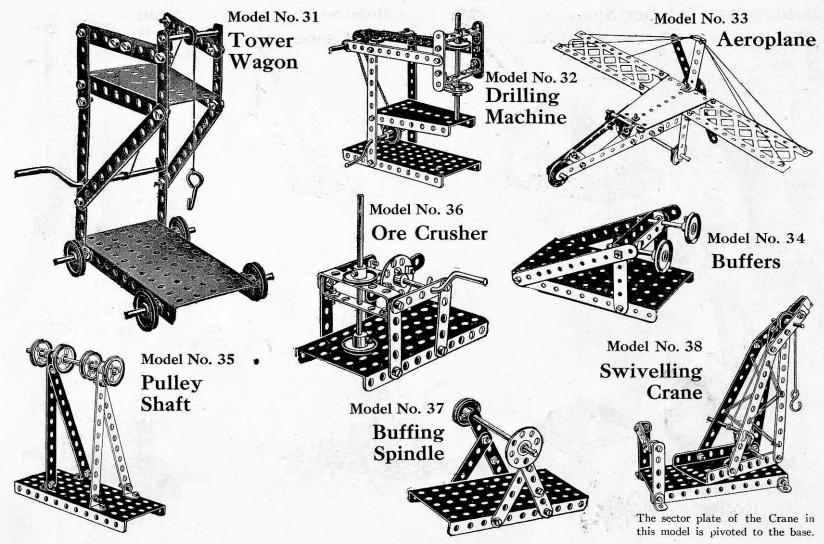


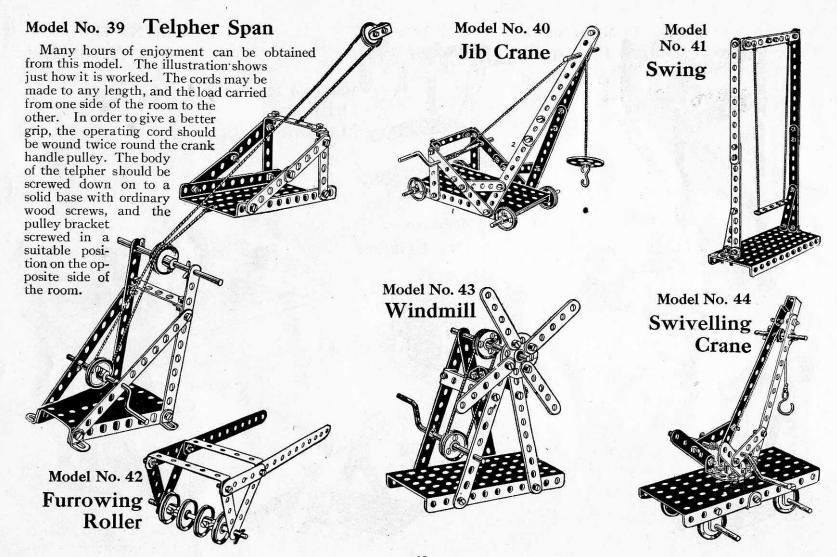


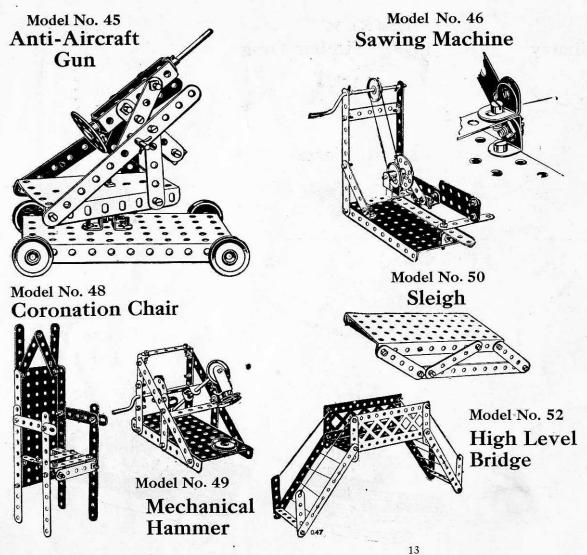




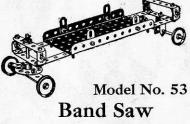


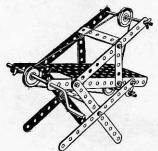




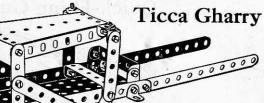


Model No. 47 Quick-Firing Gun Model No. 51 **Boiler Truck**





Model No. 54



Model No. 58

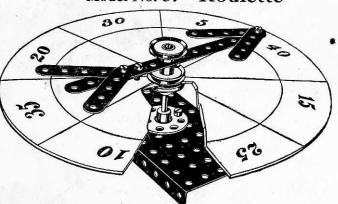
Drop 🖣

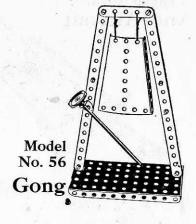
Hammer

Model No. 55

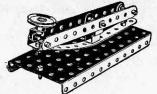


Model No. 57 Roulette



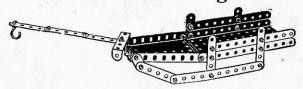


Model No. 59 Telegraph Code Key

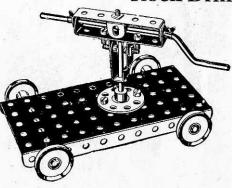


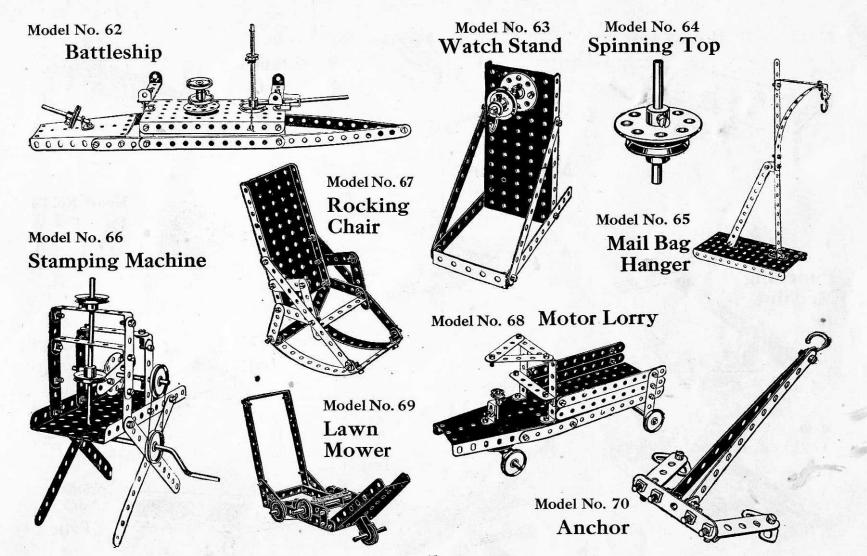
Cut out a circular piece of cardboard and mark as shown to form scoring board. This is clamped between two 1" pulley wheels. The pointer revolves freely on the upright spindle and is held in position by another 1" pulley wheel.

Sleigh Model No. 60

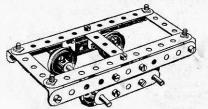


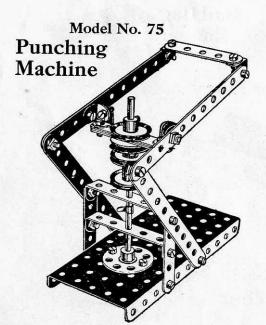
Model No. 61 Rock Drill

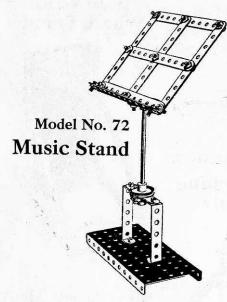




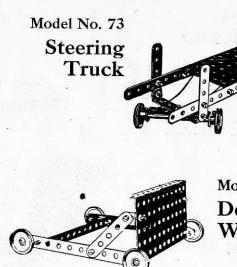
Model No. 71 Bogey Car

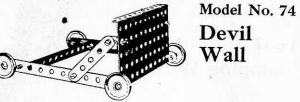


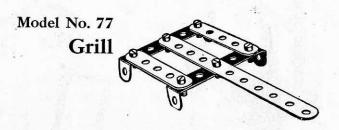


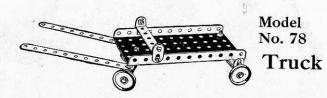












MECCANO

REGISTERED

FRANK HORNBY'S ORIGINAL SYSTEM FIRST PATENTED 1901

American	Patents and	Desig	gns	
810,148	January	16,	1906	
1,079,245	November	18,	1913	
1,161,131	November	23,	1915	
1,166,688	January	4,	1916	
49,308	July	4,	1916	

Canadian Patents and Designs 151,243 October 21, 1913 156,296 June 16, 1914 158,101 September 29, 1914

PATENTED THROUGHOUT THE WORLD

Meccano is More Than a Toy

It 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.

Prices of Meccano Accessory Parts

No.	Cents	No. Cents No.	Cents
1. Perforated Strips, 12½" long	½ doz. 30	22A. 1" diam., without set screw each 05 52. Perforated Flanged Plate,	
2. ", ", $5\frac{1}{2}$ " ",	,, 18	23. ½" ,, ,, ,, 05 53. ,, ,,	$3\frac{1}{2}$ " x $2\frac{1}{2}$ " , 15
3. " " " 3½" "	,, 15	23A. ½" , with ,, 10 54. Perforated Sector Plate	
4. ,, ,, ,, ,, ,, .,	,, 15	24. Bush Wheels	,, 15
5. ,, ,, 2½" ,,	,, 10	25. Pinion Wheels, 34" diam. 24 teeth ,, 15 56a. Meccanograph Manual of	
6. , , ,	,, 10	26. ", ", ½" ", 20 teeth ", 10 57. Hooks	0.4
8. Angle Girders, 12½" long	,, 45	27. Gear Wheels, 50 teeth to gear with $\frac{3}{4}$ " 58. Spring Cords, per length	,, 01
9. ", ", 5½" ", "	,, 30	pinion , 25 59. Collars and Set Screws	,, 20
10. Flat Brackets	,, 05	27A. Gear Wheels, 56 teeth to gear with ½" 60. Bent Strips, 2½" long	,, 05
11. Double Brackets	each 03	pinion , 30 61. Windmill Sail	per ½ doz. 15
12. Angle Brackets	doz. 10	28. Contrate Wheels, 11/6" diam 40 62 Crank	each 05
13. Silver Steel Axle Rod, 11½" long	each 05	20	,, 10
13A. Axle Rods, 8" long	,, 05	32 Worm Wheels	,, 10
14. ", " 6" "	,, 03		,, 05
15. " " 5" "	,, 03	" Sprocket Chain, per yard	
15A. " " 4½",	,, 03	35 Spring Clies	,, 20
16. ,, ,, 3½",,	,, 03	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	,, 15
17. ,, ,, 2" ,,	,, 02	27 Nets and Ball	
18A. ", " 1" "	,, 02	37A. Nuts 05 100. " " 372 "	
19. Crank Handles	,, 05	38 Washers	for Looms, doz. 30
19a. Wheels, 3" diam	,, 25	40 Hanks of Cord	" " each 05
20. Flanged and Grooved Wheels	,, 20	41 Propeller Blades per pair 15 103. Perforated Flat Girder Str	
	", 20	43. Spring each 05 104. Shuttle	,, 50
Pulley Wheels		44. Cranked Bent Strip , 05 105. Reed Hook	,, 05
20a. 2" diam., with set screw	., 20	45. Double Bent Strip ", 05 106. Roller	,, 10
21 11/4"	15	46. Large Bent Strip, 05 S1. Spring Motor	,, 2.50
22. 1" ,, ,,	,, 10	47A. Dynometers (tension) ,, 1.50 E1. Electric Motor	,, 1.50
" "	,, 10	50. Eye Piece ,, 05 E2. ,, ,,	,, 3.00

Contents of No. 0 Outfit

No.	Mark Land													2			Quantity
1.	12½" Perforated Strips					•		•		•			4		•	/	2
2.	5½" " "		•)					- Co.	•		•		•••	•	+	12	4
5.	2½" ,, ,,		• • • • • • • • • • • • • • • • • • •	•		•		•		••	•	•	•		•		9
10.	Flat Brackets		1.			•					•			•	•	•	4
	Angle Brackets			•	•			e de M		•	•	•	•		•	••	8
	4½" Rods		•	•				•		•	•		•	•	•		. 2
	2" Rods	•		•		••		••		•	••					•	. 2
19.	Small Crank Handle				•	•			•	•				•	•	• 1	1
	1" Pulley Wheels (fast)		••	•				••	•			•		•	7 7	•	4
23.	½" Pulley Wheel	•						•				•	**	*/	1		1
24.	Bush Wheel			•							*	•	•				1
35.	Spring Clips		•	•													4
36.	Combined Screwdriver														•		1
	Nuts and Bolts		•			•			7		••		•				1
40.	Hank Cord									•	κ.					•	. 1
44.	Cranked Bent Strip Perforated Flanged Plate	 51/″ v	21//	•	•		*						IR. *				1
52.	Perforated Flanged Flate Perforated Sector Plate	, 572 A	. 472		•				•								. 1
54. 56.	No. 0 Manual of Instruct				•										••		. 1
57.						•						115				•	1
60.												•	••				. 2
	. 5½" Braced Girder Strip															••	2
100	. 0/2 Diaced Guider Strip																

Price List

No. 0.	Meccano	Outfit								\$1.00
No. 1.	118		• •			•			• •	2.00
No. 1X.	+ ,,	"		••						3.00
No. 2.	* 31	,,	1		4.	••				4.00
No. 2X.	,,))	••	• •	+		••		• •	5.00
No. 3.		,,,	••	••	e o		• •			6.00
No. 3X.	,,	11	••		a o	0.0	•	e 0		7.50
No. 4.	75,	,,		•••			•			10.00
No. 5.	, ,,	"	Packed i	n neat and well-r	nade cardbo	ard box			••	14.00
Do.	,, I	Presentation		t well-made wood ł	ox with lock	and key				18.00
No. 6.	2.2).)	,,	Ditto	Ditto		* **			36.00
No. 0a.	Meccano	Accessory	Outfit	(containing suff No. 0 into a N	ficient parts o. 1 Outfit)	to convert a				\$1.00
No. 1a.	-,,	,,	,,	(containing suff a No. 2 Outfit)	icient parts					2.00
No. 2a.	,,	,,	22	(containing suff a No. 3 Outfit)	icient parts		o. 2 into			2.00
No. 3a.	,,	,,	, ,	(containing suff a No. 4 Outfit)	icient parts	c convert a N	o. 3 into			4.00
No. 4a.	,,	,,,	,,	(containing suff a No. 5 Outfit)	icient parts	to convert a N	o. 4 into			4.00
NTO E.				Packed ir ne (containing suff	at and well-	made cardboar	d box			
No. 5a.	,,	,,	,,	a No. 6 Outfit)		made cardboar				13.00
Do.	,,	.,,	,,	Packed in well-	the transfer of the same				••	18.00
Meccano	Inventors	' Accessory	Outfit	••	••			• •	••	2.00