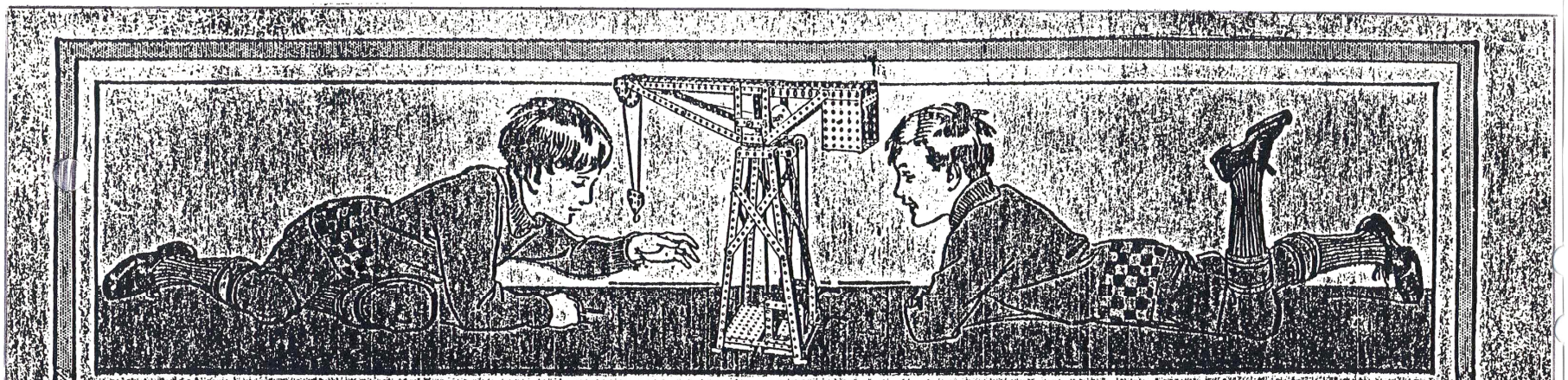
U.S.A.

NAME	MECCANO
TYPE	Mechanical Engineering
HOLE DIAMETER	4.2mm HOLE SPACING 12.7mm (½")
SETS IN SYSTEM	Total of 7 : 1, 3, 5, 110, 115, 125, 150. (See Meccano America Introduction for names of the sets) In 1932, the 110 & 115 sets were renumbered 10 & 15 respectively. Also Meccano Building Blocks/Meccano Brik and Meccano Tool Chests.
DIFFERENT PARTS	203
COLOUR	Red, green, black and tinplate with some nickel plate
FIXING METHOD	8-32 Nut and Bolt. 6-32 on bosses (Same as Erector)
MOTORS	3 Electric. E2A, E2B, E3
PERIOD	1930 to 1933
MANUFACTURER	The Meccano Company of America Inc., New Haven, Connecticut, USA.
COMMENTS	This is the MECCANO-ERECTOR system. There were a large number of ERECTOR parts re-numbered as MECCANO parts and included in the system. They were manufactured at AC Gilberts Erector factory, the Meccano Elizabeth factory was closed in 1930. The Hubs on Pulleys, Gears and such were changed to ERECTOR Hubs, with a 6/32 thread and set screw. Also included were a variety of new parts, such as the BOAT parts, also a unique 1" (25mm) pulley, which was formed from one metal disc. Sets 1, 3, 5, 110, 115, 125, 150 sets were similar to the 1929 0,10, 20,40, 50, 60, 70 sets respectively. The 125 and 150 sets were discontinued in 1932. The four larger sets were packed in green wood boxes.
OTHER SYSTEMS	12/316, 13/361, 14/386, 19/546, 20/586, 21/619, 22/642, 22/652, 23/683, 24/685, 24/706, 27/788, 30/876A,
NEWSLETTER	30/890, 49/1487

MATERIAL SUPPLIED BY Clyde T. Suttle and updated by articles in OSN



MECCANO

(TRADE MARK REG. U.S. PAT. OFF.)

MANUAL OF INSTRUCTIONS

This outfit will build scores of other fine models in addition to those illustrated. There is no limit!

M 1363
Printed in U.S.A.

The MECCANO COMPANY of America, Inc.
NEW HAVEN, CONN., U. S. A.

AMERICAN MECCANO SEPARATE PARTS (circa I930)

No.	Description
I	I2½" Beam
IA	9½" "
IB	7½" "
2	5½" "
2A	4½" "
3	3½" "
4	3" "
5	2½" "
6	2" "
6A	I½" "
7	24½" Angle girders
7A	I8½" " "
8	I2½" " "
8A	9½" " "
8B	7½" " "
9	5½" " "
9A	4½" " "
9B	3½" " "
9C	3" " "
9D	2½" " "
9E	2" " "
9F	I½" " "
IO	Flat bracket
II	Double bracket
I2	½"x ½" Angle bracket
I2A	I"x I" " "
I2B	I"x I½" " "
I2	I2" Axle rod
I3A	8" " "
I3B	I9 3/4" Axle rod
I3C	IO" Axle rod
I4	7" " "
I4A	6" " "
I5	5" " "
I6	4" " "
I6A	3" " "
I7	2" " "
I8B	I" " "
I9S	Crank
I9A	3" wheel with set screw
20	I I/8" Flanged wheel
20B	3/4" " "
I9B	3" Pulley wheel with set screw
I9C	6" " " " " "
2I	I I/4" " " " " "
22	I" " " " " "
22A	I" " without set screw
23	½" " " " "
24	Bush wheel
24A	" " for I/4" axle
25C	I8 tooth gear
26C	I2 " "
27	72 " "
27C	36 " "
28C	Crown gear
30	Bevel gear 7/8" dia. 36 teeth
30A	" " I/2" " I6 "
30C	" " I½" " 48 "
	Can only be used together
30D	Mitre gear
32C	Worm gear
34	Wrench
36	Screwdriver - wire handle
36A	" - wooden handle
37A	Nuts
37B	I/4" screws
38	Washers
38A	Gasket washer
40	Hank of string
4I	Propeller blade
43	Spring
44	Cranked bent strip
45	Double " "
46	2½ x ½" Double angle strip
47	2½"x I½" " " "
47A	3" x I½" " " "
48	I½"x ½" " " "
48C	4½"x ½" " " "
50A	Eye piece with hub
52	5½" 2½" perforated flanged plate
52A	5½" 3½" " " "
52B	I6½" x 5½" Per. flanged plate
53	3½" x 2½" " " "
53A	4½" x 2½" " " "
54	Perforated flanged sector plate
55	5½" slotted strip
55A	2½" " "
57	Small hook
57C	Large hook
59	Collars with set screw
59A	Collars formed
59B	Twin collar
62	Eccentric crank
63	Coupling
63B	Slotted coupling
68	5/8" R.H. wood screws
70	5½" x 2½" Flat plate
76	2½" Triangular plate
77	I" " "
89	5½" Curved beam IO" radius
89A	3" " " I 3/4" radius
90	2½" " " 2 3/8" radius
90A	2½" " " I 3/8" radius

Total of I02 parts.

The similarity between the numbering and that of the Meccano system should be noted. Apart from a few differences it is almost the same.

See reference to several unusal parts on opposite page.

The curved beams were the lattice type as in the Erector system.

MECCANO (AMERICA) GILBERT ERA (a) 3b

AMERICAN MECCANO SEPARATE PARTS (circa I930) - continued from overleaf.

No.	Description
94	Sprocket chain 22" length
94A	" " I0 feet length
98	2½" braced girder
99	I2½" " "
I00	5½" " "
I00B	6" curved beam girder
I02	U bent strip
I03	5½" Flat girder
I03A	9½" " "
I03B	I2½" " "
I03C	4½" " "
I03D	3½" " "
I03E	3" " "
I03F	2½" " "
I03G	2" " "
I03H	I½" " "
I03K	7½" " "
I08	Corner brace
I09	2½" Face plate
II0	Rack
III	7/8" screw
IIIA	I/2" "
IIIC	I 3/8" screw
IIID	I 3/4" "
II3	Girder frames
II4	Hinge loop
II6	Fork piece large
II6A	" " small
II8	5½" dia, Hub disc
II9	Channel segment 8 to circle II½"
I23	Cone pulley
I24	I" reversed angle bracket
I25	½" " " "
I26	Trunnion
I26A	Flat trunnion
I27	Simple bell crank
I28	Bell crank with hub
I29	Quarter gear
I30	Triple throw eccentric
I3I	Chain bucket
I33	Corner bracket
I35	I80 degree dial
I35	I80 degree dial
I35A	360 " "
I36	Handrail support
I37	Wheel flange
I38A	Ship funnel
I39	Flanged bracket, right
I39A	" " , left
I42B	3" rubber tire
I43	5½" dia. circular girder
I45	7" " " beam
I46	6" " " plate
I47A	Pawl
I48	Ratchet wheel
I50	Crane grab
I5I	Pulley block
I54A	Corner angle bracket ½" right
I54B	" " " ½" left
I56	Pointer
I58A	Signal arm
I60	I½" x I" x ½" Channel bearing
I62	Boiler complete with ends
I62B	Radiator
I63	Chimney
I64	" adaptor
I65	Swivel bearing
I67	Geared roller bearing complete
I67A	" " race I92 teeth
I67B	Ring frame for rollers
I67C	Pinion for roller bearing I6 teeth
I68	Ball bearing 4" dia.
I68A	" races, flanged disc
I68B	" " , toothed disc
I68C	" casings with balls
I69	Digger bucket
I69A	Tip bucket

NOTES ON ABOVE

Parts 94 and 94A are differing lengths of chain as Liverpool pattern.

No sprocket wheels however, are incl ed as in similar UK manuals of I920.

Parts 98 and I00 are braced girders in a different pattern to Meccano. Both continued their existance later as Erector parts BI and BJ.

Parts I02 and I03 and I03K disappeared the latter being replaced by Erector girders.

Part I08 also disappeared as new and unusual angle pieces were introduced into the Erector system.

Part I09 Liverpool pattern was replaced by Erector part PI8 called round plate

Bolts were called screws.

Parts II3 and II9 dsiappeared in the Erector range. But Part I23 Cone pulley was redesignated FM as Erector.

Parts I24 and I26A all disappeared in the Erector range, although they were functionally replaced by Erector parts P59 Car truck piece and Part BS Flat Ar truck.

Parts I27,I28 and I30 disappeared in the Erector range, but Part I29 continued as Part FX- Quarter gear to replace the rack segment.

An analysis of these parts is shown later in simple reference form.

AMERICAN MECCANO SEPARATE PARTS (circa I930) This is a continuation of the previous lists commencing at No.I.

No.	Description
I72	Hull
I72A	Bow deck
I72B	Mid deck
I72C	Stern deck
I72D	Cabin top
I72E	Rudder
I72F	Keel
I72G	Ballast keel
I72H	Rudder and propeller quill
I72I	Quill Nut
I72J	Propeller
I72K	Forward deck
I72L	Pilot house top
I74	Loop rod

Parts above from I72 to I74 are ship building parts all included in outfit No.II5 Ship Building Outfit.

None of the above were Liverpool Meccano parts or patterns.

20 Ship models could be built, the hulls were watertight and the models would float and travel under their own power, driven by the E-2-B Electric motor.

The SHIP BUILDING OUTFIT No.II5 was supplied in a stout box 25½" x IO 3/4" x 5½" deep (65 x 27 x I4 cm).

Motors and hoisting units.

No.	Description
I73R	Gear box side plate, right
I73L	" " " " , left
I75	5 foot elastic band
I76	Foot block
I77	Reverse switch attachment
E2B	Motor with gear box side plates
E2A	" separate
E3	IIOv Motor
P66	Disc Clutch power hoist
P60D	Transformer
P57M	Motor

The above is the total of hoisting and Motor units from the American Meccano Company manual of I930.

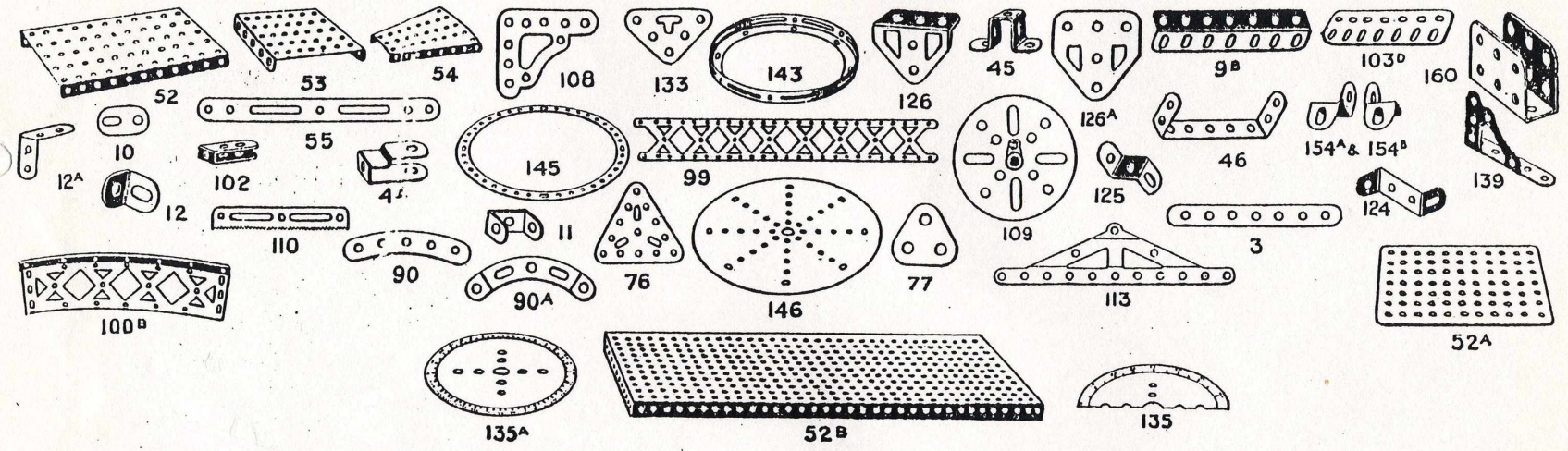
Comparision lists and other extra information by F.A.Beadle.

MECCANO (AMERICA) GILBERT ERA (a) 3d

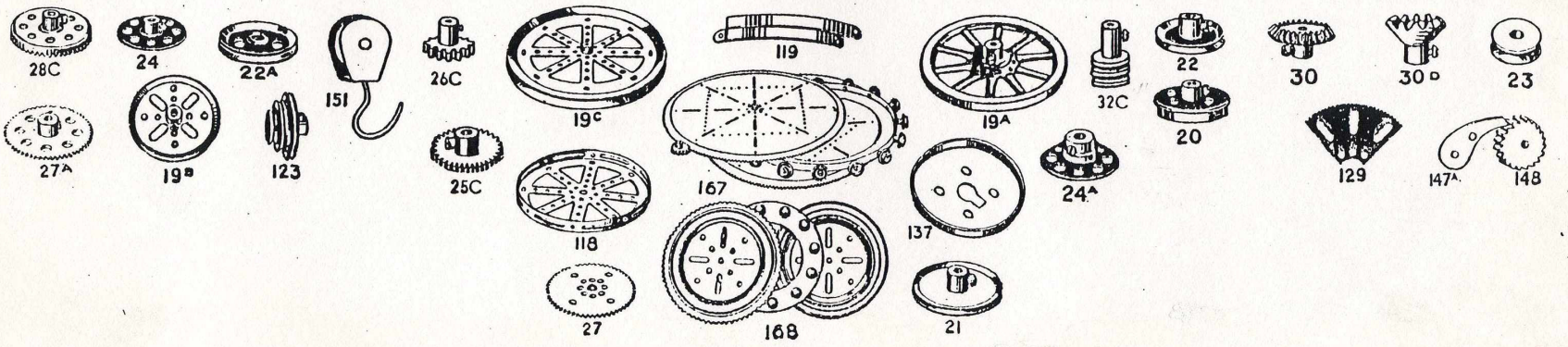
MECCANO SEPARATE PARTS PRICES

Number	Name of Part	Price
1	12-½ inch Beams	.30 - ½ doz.
1A	9-½ " "	.25 - ½ doz.
1B	7-½ " "	.20 - ½ doz.
2	6-½ " "	.15 - ½ doz.
2A	4-½ " "	.10 - ½ doz.
3	3-½ " "	.10 - ½ doz.
4	3 " "	.06 - ½ doz.
5	2-½ " "	.06 - ½ doz.
6	2 " "	.06 - ½ doz.
6A	1-½ " "	.06 - ½ doz.
7	24-½ " Angle Girders	.25 each
7A	18-½ " " "	.20 each
8	12-½ " " "	.50 - ½ doz.
8A	9-½ " " "	.45 - ½ doz.
8B	7-½ " " "	.40 - ½ doz.
9	5-½ " " "	.35 - ½ doz.
9A	4-½ " " "	.30 - ½ doz.
9B	3-½ " " "	.30 - ½ doz.
9C	3 " " "	.30 - ½ doz.
9D	2-½ " " "	.25 - ½ doz.
9E	2 " " "	.25 - ½ doz.
9F	1-½ " " "	.25 - ½ doz.
10	Flat Bracket	.05 - ½ doz.
11	Double Bracket	.03 each
12	½"x½" Angle Bracket	.10 doz.
12A	1"x1" Angle Bracket	.15 - ½ doz.
12B	1"x1-½" Angle Bracket	.10 - ½ doz.
13	12 inch Axle Rod	.12 each
13A	8 inch Axle Rod	.08 each
13B	10-¾ inch Axle Rod	.20 each
13C	10 inch Axle Rod	.10 each
14	7 " " "	.07 each
14A	6 " " "	.00 each
15	5 " " "	.05 each
16	4 " " "	.04 each
16A	3 " " "	.03 each
17	2 " " "	.02 each
18B	1 " " "	.01 each
19S	Crank	.10 each
19A	3 inch Wheel with set screw	.45 each
20	1-⅛" Flanged Wheel	.20 each
20B	¾ inch Flanged Wheel	.15 each
19B	3 inch Pulley Wheel with set screw	.25 each
19C	6 inch Pulley Wheel with set screw	1.00 each
21	1-¼ inch Pulley Wheel with set screw	.10 each
22	1 inch Pulley Wheel with set screw	.10 each
22A	1 inch Pulley Wheel without set screw	.05 each
23	½ inch Pulley Wheel without set screw	.05 each
24	Bush Wheel	.15 each
24A	Bush Wheel for ¼ inch axle	.25 each
25C	18 tooth Gear	.15 each
26C	12 tooth Gear	.10 each
27	72 tooth Gear	.30 each
27C	36 tooth Gear	.20 each
28C	Crown Gear	.30 each
30	Bevel gear ⅞" dia. 20 teeth.	.30 each
30A	Bevel gear ½" dia. 16 teeth*	.25 each
30C	Bevel gear 1¼"dia. 48 teeth*	.05 each
	*Can only be used together	
30D	Mitre Gear	.20 each
32C	Worm Gear	.20 each
34	Wrench	.05 each
36	Screw Driver—wire handle	.10 each
36A	Screw Driver—wooden handle	.25 each
37A	Nuts	.05 per doz.
37B	¼ inch screws	.10 per doz.
38	Washers	.05 per doz.
38A	Gasket Washer	.05 for 2
40	Hank of String	.05 each
41	Propeller Blade	.05 each
43	Spring	.05 each
44	Cranked Bent Strips	.03 each
45	Double Bent Strip	.03 each
46	2-½"x1" Double Angle Strip	.20 - ½ doz.
47	2-½"x1-½"DoubleAngle Strip	.30 - ½ doz.
47A	3"x1-½" Double Angle Strip	.35 - ½ doz.
48	1½"x½" Double Angle Strip	.15 - ½ doz.
48C	4-½"x½" Double Angle Strip	.30 - ½ doz.
50A	Eye Piece with hub	.15 each
52	5½"x2½" Per. Flanged Plate	.20 each
52A	5-½"x3½" Flat Plate	.20 each
52B	16-½"x5-½" Per. Flngd Plate	1.00 each
53	3-½"x2-½" Per. Flngd Plate	.15 each
53A	4-½"x2-½" Flate Plate	.12 each
54	Perf. Flanged Sector Plate	.15 each
55	5-½" Slotted Strip	.05 each
55A	2-½" Slotted Strip	.03 each
57	Small Hook	.15 doz.
57C	Large Hook	.25 doz.
59	Collars with set screw	.05 each
59A	Collars, formed	.25 doz.
59B	Twin Collar	.35 doz.
62	Eccentric Crank	.10 each
63	Coupling	.15 each
63B	Slotted Coupling	.15 each
68	⅝" R. H. Wood Screws	.10 doz.
70	5-½"x2-½" Flat Plate	.15 each
76	2-½" Triangular Plate	.05 each
77	1" Triangular Plate	.04 each
89	5-½"Curved Beam 10"Radius	.05 each
89A	3" Crvd Beams 1-¾" Radius	.05 each
90	2¼" Curved Beams 2-¾" Radius	.25 - ½ doz.
90A	2-½" Curved Beams 1-⅜" Radius	.25 - ½ doz.
94	Sprocket Chain, 22" length.	.15 ft.
94A	Sprocket Chain, 10' length.	.15 ft.
98	2-½" Braced Girder	.15 - ½ doz.
99	12-½"BracedGirder,Straight	.75 - ½ doz.
100	5-½" Braced Girder	.50 - ½ doz.
100B	6" Curved Beam Girder	.75 - ½ doz.
102	U Bent Strip	.05 each
103	5-½" Flat Girder	.25 - ½ doz.
103A	9-½" " "	.35 - ½ doz.
103B	12-½" " "	.40 - ½ doz.
103C	4-½" " "	.25 - ½ doz.
103D	3-½" " "	.25 - ½ doz.
103E	3" " "	.20 - ½ doz.
103F	2-½" " "	.20 - ½ doz.
103G	2" " "	.15 - ½ doz.
103H	1-½" " "	.15 - ½ doz.
103K	7-½" " "	.30 - ½ doz.
108	Corner Brace	.07 each
109	2-½" Face Plate	.15 each
110	Rack	.25 each
111	⅞ inch screw	.02 each
111A	½ inch screw	.03 for 2
111C	1-⅜ inch screw	.20 doz.
111D	1-¾ inch screw	.25 doz.
113	Girder Frames	.10 each
114	Hinge Loop	.05 for 2
116	Fork Piece, Large	.10 each
116A	Fork Piece, Small	.10 each
118	5-½" dia. Hub disc	.50 each
119	Channel Segment 8 to a circle 11-½" dia.	.15 each
123	Cone Pulley	.50 each
124	1 inch Rev. Angle Bracket.	.15 - ½ doz.
125	½ inch Rev. Angle Bracket	.10 - ½ doz.
126	Trunnion	.08 each
126A	Flat Trunnion	.05 each
127	Simple Bell Crank	.05 each
128	Bell Crank with Hub	.10 each
129	Quarter Gear	.15 each
130	Triple Throw Eccentric	.40 each
131	Chain Bucket	.15 each
133	Corner Bracket	.05 each
135	180 degree dial	.15 each
135A	360 degree dial	.25 each
136	Handrail support	.15 each
137	Wheel Flange	.15 each
138A	Ship Funnel	.25 each
139	Flanged Bracket, right	.10 each
139A	Flanged Bracket, left	.10 each
142B	3 in. Rubber Tire	.75 for 4
143	5-½ inch dia. Cir. Girder	.55 each
145	7 inch dia. circular beam	.50 each
146	6" dia. Circular Plate	.60 each
147A	Pawl	.06 each
148	Ratchet Wheel	.30 each
150	Crane Grab	.25 each
151	Pulley Block	.15 each
154A	Cor. Angle Bracket—½" R.	.25 - ½ doz.
154B	Cor. Angle Bracket—½" L.	.25 - ½ doz.
156	Pointer	.10 each
158A	Signal Arm	.10 each
160	1-½"x1"x½" Channel Brng.	.15 each
162	Boiler, com. with ends	.50 each
162A	Boiler Ends	.15 each
162B	Radiator	.30 each
163	Chimney	.12 each
164	Chimney Adaptor	.12 each
165	Swivel Bearing	.25 each
167	Geared Roller Bearing, com.	12.50 each
167A	Grd Roller Races, 102 teeth	3.00 each
167B	Ring Frame for Rollers	2.00 each
167C	Pinon for Rollr Brng,16 teeth	.75 each
168	Ball Bearing 4 in. dia.	3.00 each
168A	Ball Races, Flanged disc.	.50 each
168B	Ball Races, Toothed disc.	.75 each
168C	Ball Casings with Balls	1.75 each
169	Digger Bucket	.75 each
169A	Tip Bucket	2.50 each
172	Hull	1.75 each
172A	Bow Deck	.15 each
172B	Mid Deck	.30 each
172C	Stern Deck	.15 each
172D	Cabin Top	.20 each
172E	Rudder	.20 each
172F	Keel	.15 each
172G	Ballast Keel	.10 each
172H	Rudder & Prop. Quill	.10 each
172I	Quill Nut	.05 each
172J	Propeller	.20 each
172K	Forward Deck	.15 each
172L	Pilot House Top	.05 each
173R	Gear Box Side Plate, R.	.15 each
173L	Gear Box Side Plate L.	.15 each
174	Loop Rod	.05 each
175	5 ft. Elastic Band	.30 each
176	Foot Block	.15 each
177	Reverse Switch Attachment	.50 each
E2B	Motor with GrBx Side Plates	2.00 each
E2A	Motor separate	1.25 each
E3	110 volt motor	5.00 each
P66	Disc Clutch Power Hoist	12.50 each
P60D	Transformer	3.50 each

PLATES, STRIPS, GIRDERS AND BRACKETS

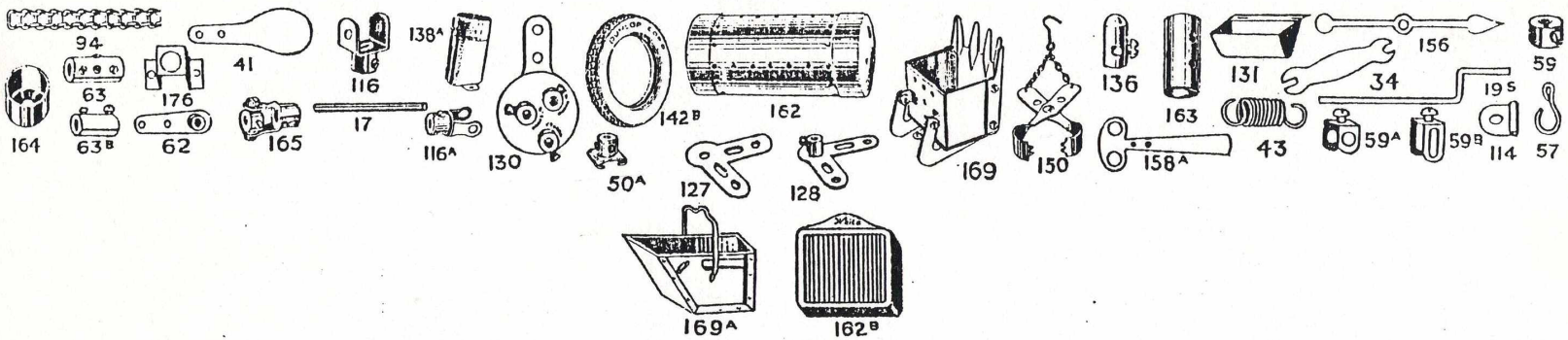


WHEELS, PULLEYS, GEARS, ETC.

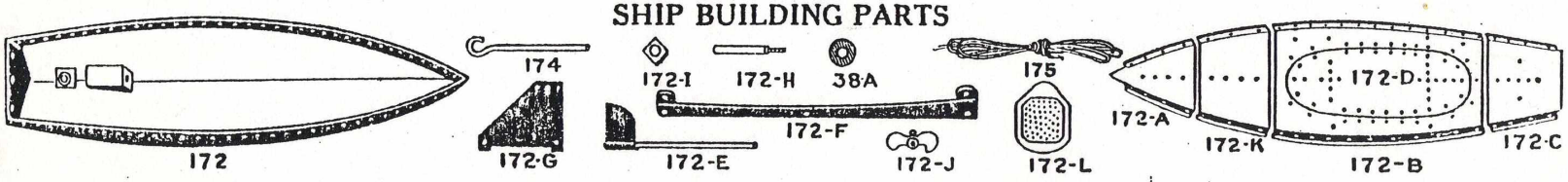


MECCANO (AMERICA) GILBERT ERA (a) 4b

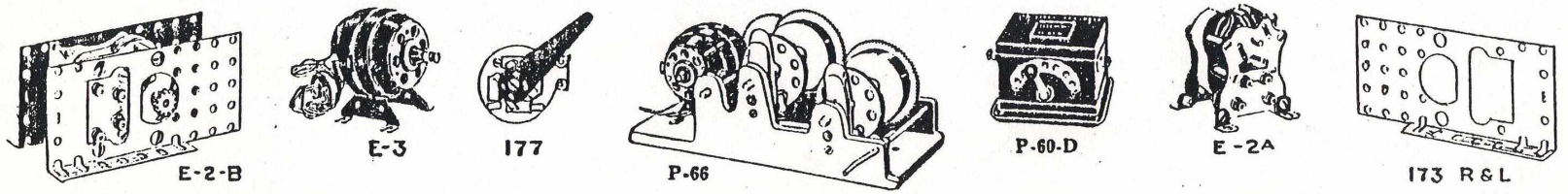
RODS, CRANKS, COUPLINGS, AND MISCELLANEOUS



SHIP BUILDING PARTS

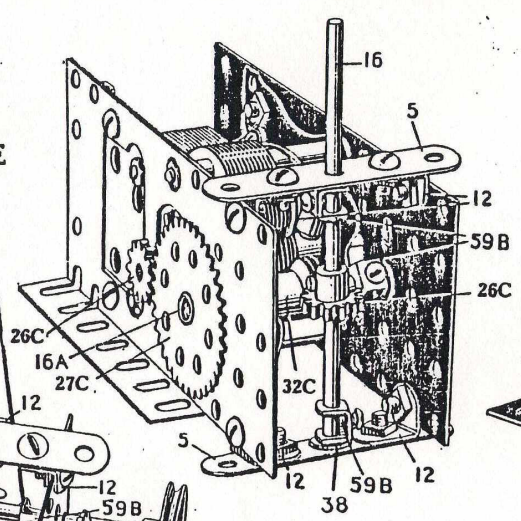


MOTORS AND HOISTING UNITS

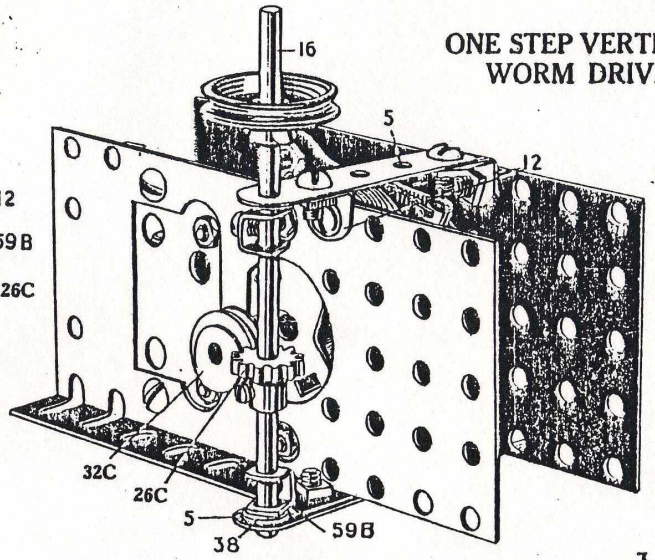


GEAR COMBINATIONS

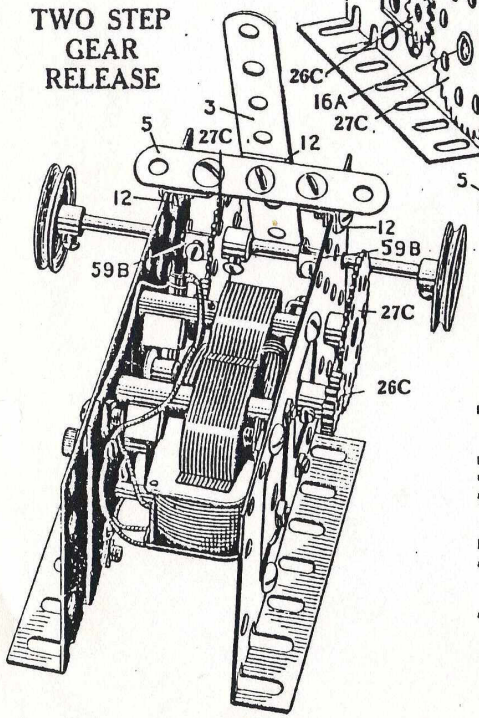
TWO STEP VERTICAL WORM DRIVE



ONE STEP VERTICAL WORM DRIVE



TWO STEP GEAR RELEASE



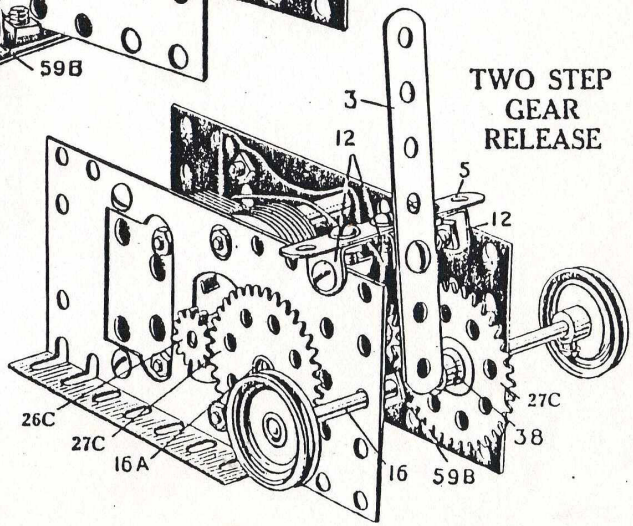
The top left gear combination is a two step vertical worm drive delivering great power at a slow speed.

The top right gear combination is a one step vertical drive delivering a little less power at a trifle faster speed. These arrangements of drives allow a rotating body to revolve in a horizontal plane which is necessary in building of turn tables, draw bridges merry-go-rounds, etc

The builder often desires to shift or release gears by operating a lever, the lower left and right hand views of a two step gear release illustrates this accomplishment in a practicable way

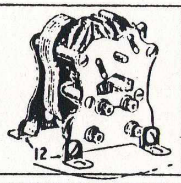
When building shift gears or releases, be sure to adjust collars on axle rods leaving sufficient end play permitting the sliding in or out of mesh.

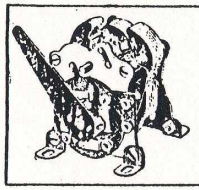
TWO STEP GEAR RELEASE



POWER FACTORS AND FEATURES

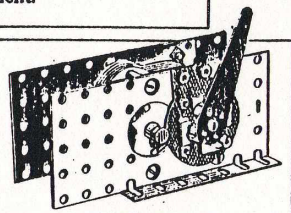
Leaving off gear box side plates and putting on four angle brackets No. 12 for leg supports makes it possible to use this motor as an independent motor for driving models and mechanisms by string or sprocket chain.

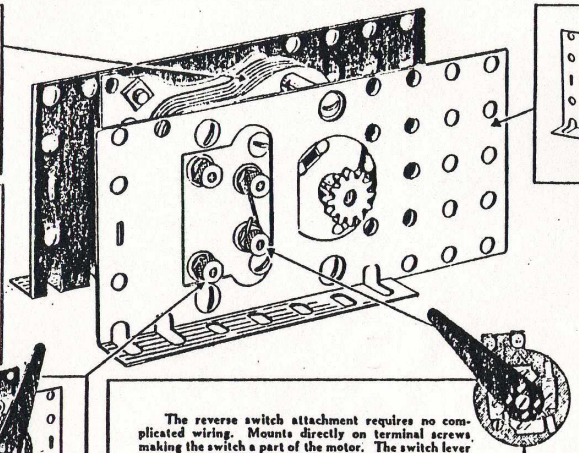




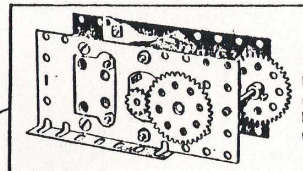
Independent motor with reverse switch attachment. Easily mounted without wiring. Start, stop and reverse your models with this clever attachment.

Gear box combinations are more interesting and useful with the reverse switch attachment. Marvelous feature for models requiring hauling, hoisting or lowering movements. Easily mounted without wiring or electrical knowledge.



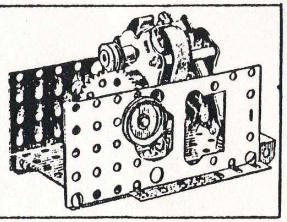


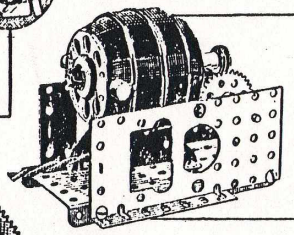
The reverse switch attachment requires no complicated wiring. Mounts directly on terminal screws, making the switch a part of the motor. The switch lever can be operated in four positions. A slight movement of lever starts, stops or reverses. This attachment not furnished with any set but can be purchased separately complete with instructions for mounting.



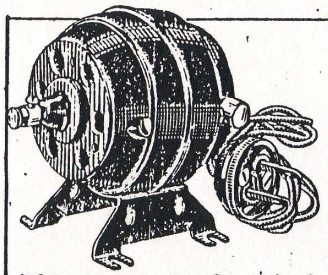
Motor comes to you mounted between gear box side plates by which you are able to obtain numerous gearing combinations of either high or low speeds. Plates and gears can easily be changed to meet your requirements.

Mounting motor on perforated flanged plates No. 52 and fastening gear box side plates on as illustrated, effords a means of obtaining a powerful unit of various speeds.



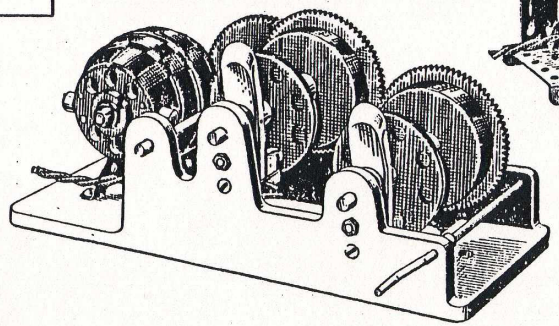


The powerful 110 volt motor mounted on perforated flanged plate No. 52 with gear box side plates fastened on as shown permits various worm drive combinations. A heavy duty feature.

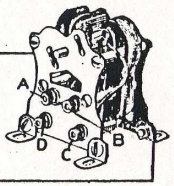


This motor is furnished with sets No. 125 and No. 150 only but can be purchased separately.

The powerful 110 volt motor can be used independently or with gear box combination. Has proper leg spacing to conform with spacings of holes in all beams, girders and plates. This motor is run directly from 110 volt AC or DC house current without the use of transformers or current reducers.

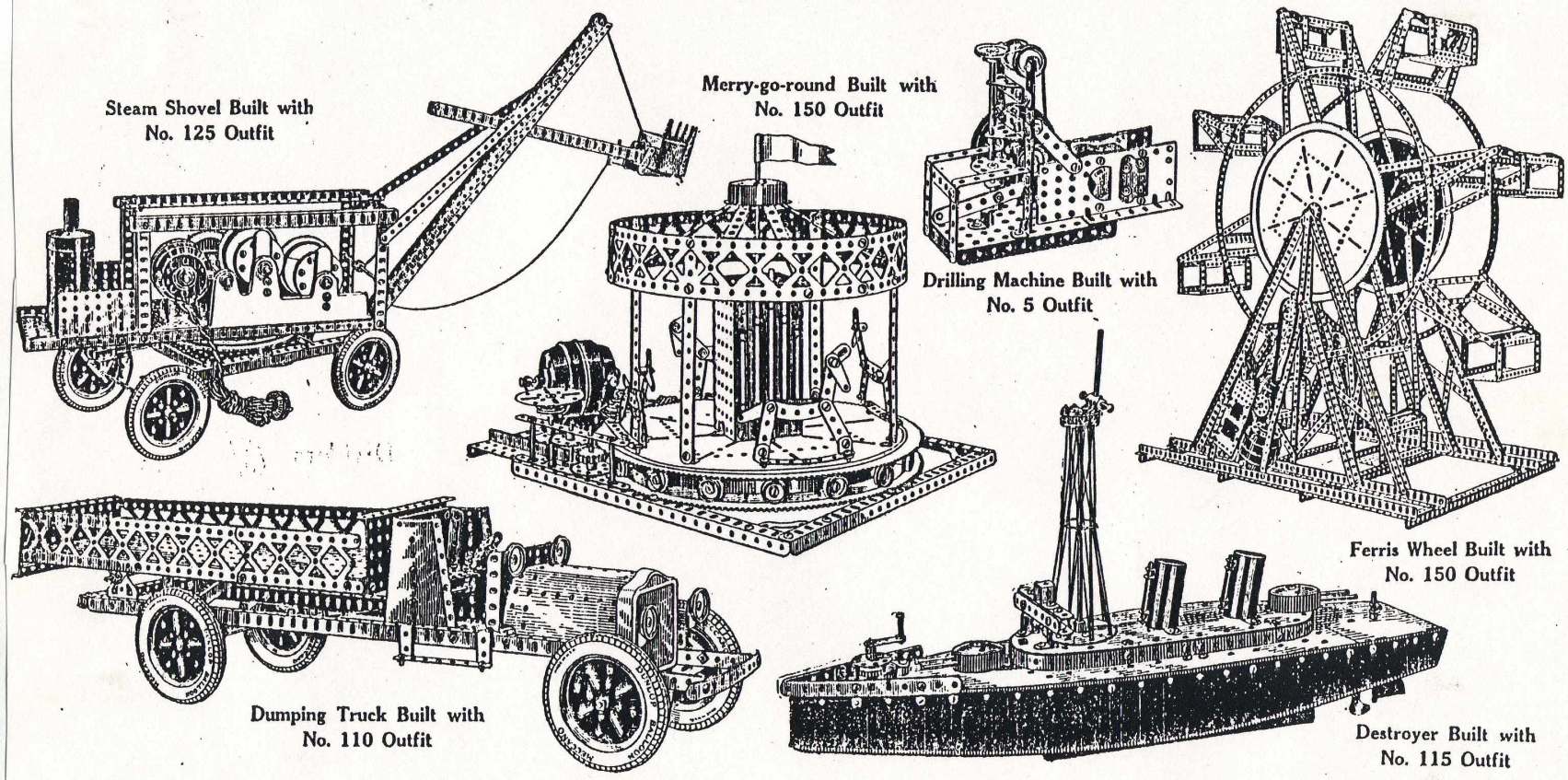


Motors are assembled with jumper wire across A and B, leaving C and D for feed wires. Should you want to reverse the direction of your motor, change jumper wire to B and C, leaving A and D to which connect feed wires.



The disc clutch power hoist. A very strong and well constructed hoisting unit complete in itself. Attractively finished in red, black and nickel trim. This unit is an indispensable accessory by itself or on models where hoisting or hauling units are required, such as steam shovels, derricks, elevators and many others. The two drums make this machine capable of operating a clam shell bucket with perfection. There is no end of the many uses to which the disc clutch power hoist can be put. The disc clutch power hoist is furnished in sets No. 125 and No. 150 only but can be purchased separately.

Meccano Builds these Wonderful Models



This page is intentionally left blank