AMERICAN MODEL BUILDER

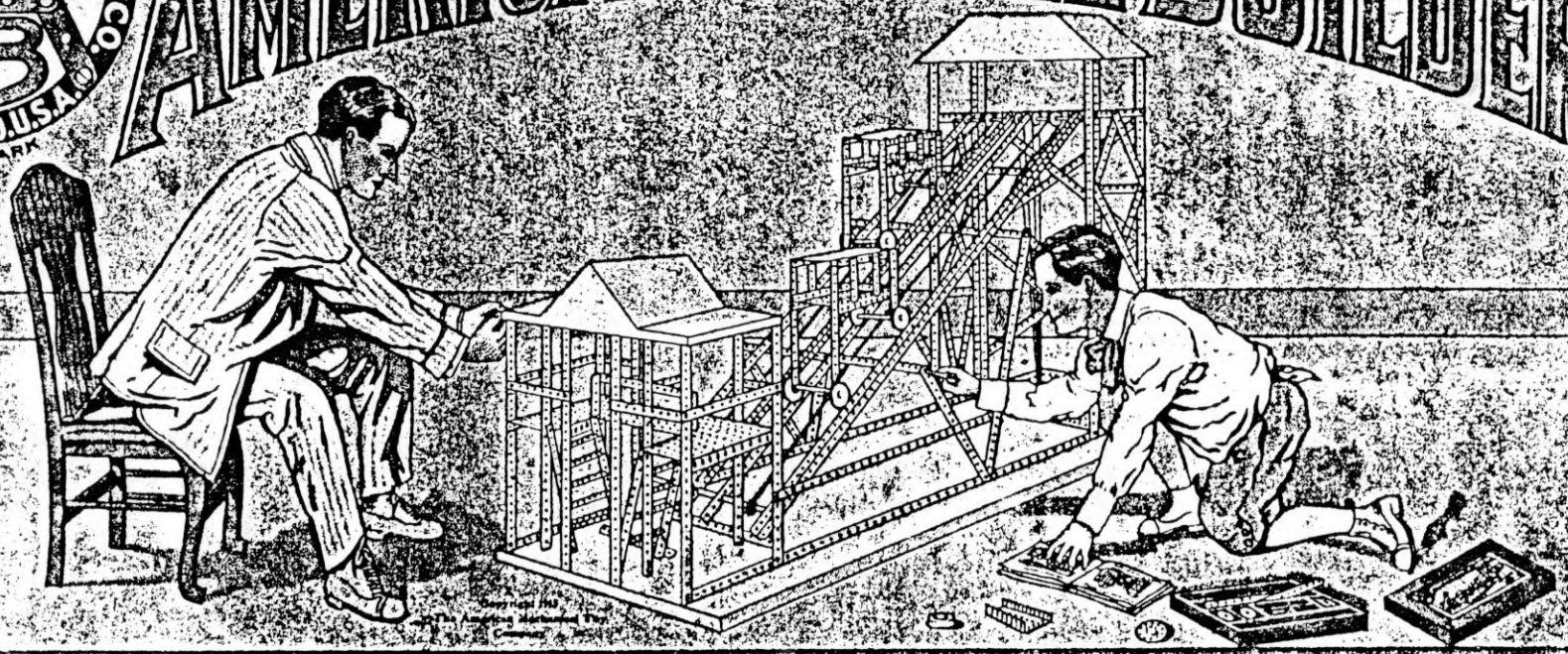
U.S.A.

TYPE	Mechanical engineering
HOLE DIAMETER	4.2mm (0.I639 ins.) HOLE SPACING I2.7 mm (0.5 ins.)
SETS IN SYSTEM	0-7 and linking sets 0½-6½. Also 11,12,13 which were sets 1,2,3 plus a No.150 motor
DIFFERENT PARTS	59 + 14 Introduced in I9I5
COLOUR	Nickel Plated
FIXING METHOD	Nuts and Bolts. 550 in Set 7
MOTORS	Nos 200 and 300 low voltage, and No.325 110V AC/DC. Later No.150 probably low voltage
PERIOD	I9I2 to I92I
MANUFACTURER	The American Mechanical toy Co., Ohio, U.S.A.
COMMENTS	Parts are exactly the same as Meccano parts of same period, some of the more interesting parts are Oscillating rack, Eccentric wheel and hanger Strip.
OTHER SYSTEMS NEWSLETTER	3/43, 6/137, 9/218, 11/278, 11/283, 11/300, 12/330, 13/340, 13/361, 14/394, 15/403, 17/491, 18/504, 22/650, 24/693

MATERIAL SUPPLIED BY: Norm La Croix

THE AMERICAN MECHANICAL TOY CO. MB DAYTON, O. U.S.A. TRADE MARK

The AMERICAN MODEL BUILDER



COMPLETE MANUAL OF INSTRUCTION

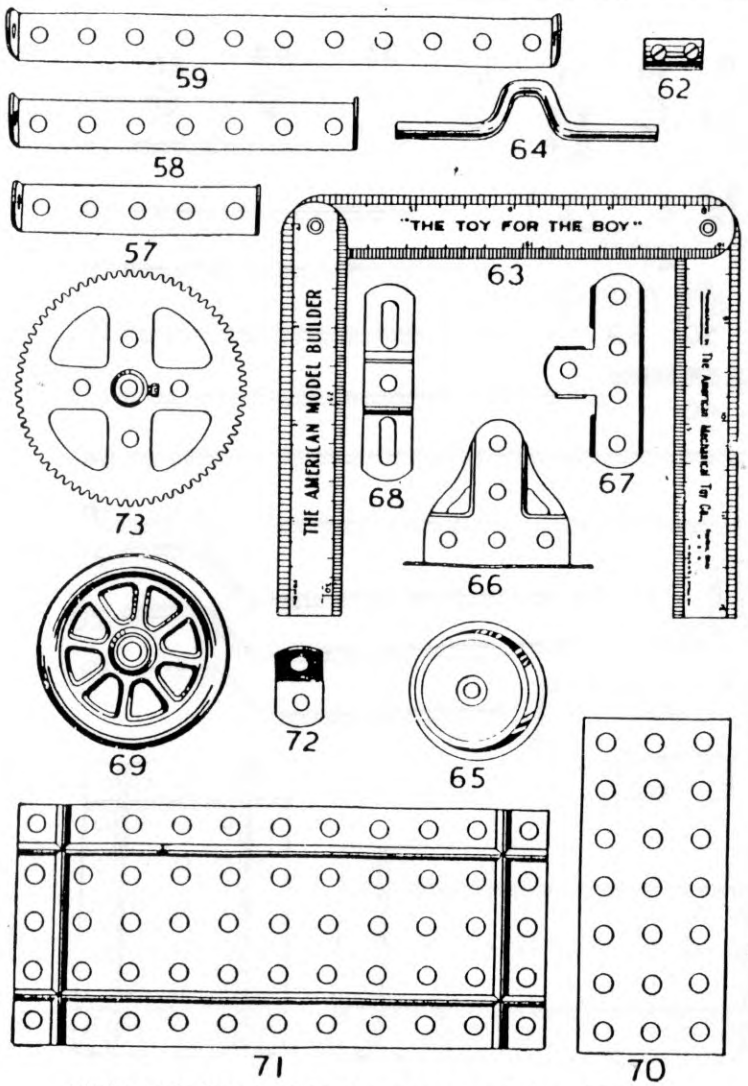
Full details of construction given for all Models that can be built with the Fifteen Progressive Outfits of The American Model Builder

PATENTED IN CANADA JULY 29, 1913

U. S. PATENT APPLIED FOR

Manufactured by The American Mechanical Toy Co., Dayton, Ohio, U. S. A.

MADE IN U. S. A.



All the parts illustrated on this page are exclusive with The American Model Builder outfits.

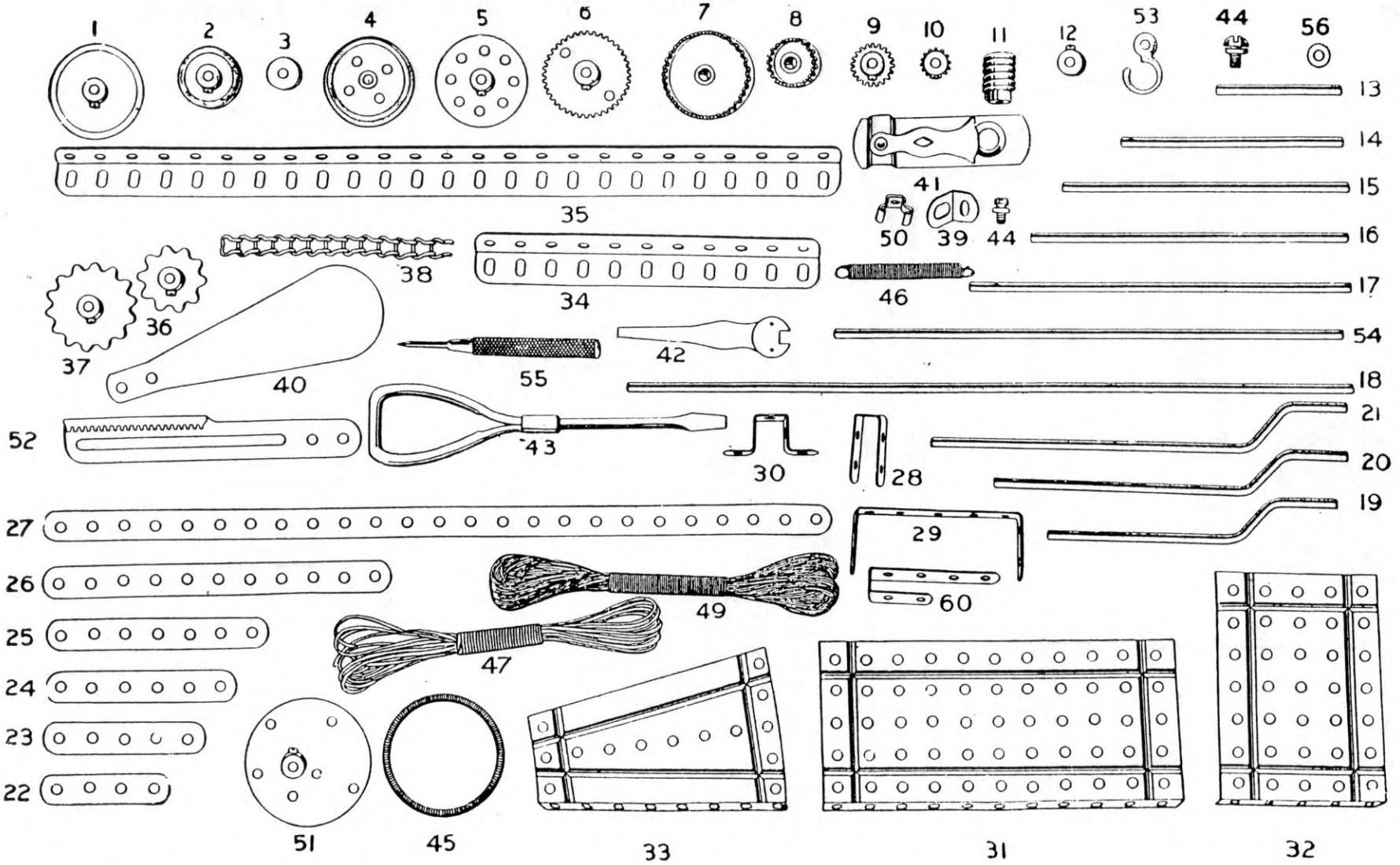
PRICE LIST OF SEPARATE PARTS

No. 1.	1½" Pulley Wheels	at	10c Each	No. 37.	1½" Sprocket	at	15c Each
No. 2.	1" " "	"	10c "	No. 38.	Chain, 4 ft. Length	"	10c "
No. 3.	½" " "	"	05c "	No. 39.	Angle Brackets	"	10c Doz.
No. 4.	1½" Flanged Wheels	"	15c "	No. 40.	Propeller Blades	"	15c Pair
No. 5.	1½" Bush Wheels	"	15c "	No. 41.	Ratchet Pawls	"	10c Each
No. 6.	1½" Gear Wheels	"	15c "	No. 42.	Spanner and Screw Driver	"	05c "
No. 7.	1½" Crown Gears	"	20c "	No. 43.	Large Screw Driver	"	10c "
No. 8.	¾" " "	"	15c "	No. 44.	Nuts and Bolts	"	10c Doz.
No. 9.	¾" Pinions	"	15c "	No. 45.	Pulley Belts	"	05c Each
No. 10.	½" "	"	10c "	No. 46.	1¾" Springs	"	05c "
No. 11.	Worm Wheels	"	15c "	No. 47.	Blue Cord, 15 ft.	"	2½c "
No. 12.	Collars and Set Screws	"	05c "	No. 49.	Green Cord, 80 ft.	"	05c "
No. 13.	2" Axles, rounded ends	"	2½c "	No. 50.	Eye Pieces	"	2½c "
No. 14.	3½" " " "	"	2½c "	No. 51.	Eccentric Wheels	"	15c "
No. 15.	4½" " " " Drilled	"	05c "	No. 52.	Oscillating Rack	"	15c "
No. 16.	5" Axles, rounded ends—Drilled	"	05c "	No. 53.	Hooks	"	2½c "
No. 17.	6" Axles, rounded ends	"	05c "	No. 54.	8" Axle Rod, rounded ends	"	05c "
No. 18.	11½" " " "	"	05c "	No. 55.	Knurled Screw Driver	"	10c "
No. 19.	4½" Cranks, rounded ends—Drilled	"	05c "	No. 56.	Washer	"	10c Doz.
No. 20.	5½" Cranks, rounded ends—Drilled	"	05c "	No. 57.	2½" Angle Strips	"	15c ½ Doz.
No. 21.	6½" Cranks, rounded ends—Drilled	"	05c "	No. 58.	3½" " "	"	15c ½ "
No. 22.	2" Perforated Strips	"	10c ½ Doz.	No. 59.	5½" " "	"	20c ½ "
No. 23.	2½" " "	"	10c ½ "	No. 60.	Hanger Strip	"	05c Each
No. 24.	3" " "	"	10c ½ "	No. 61.	½" Wood Screws	"	05c Doz.
No. 25.	3½" " "	"	10c ½ "	No. 62.	Shaft Connector	"	10c Each
No. 26.	5½" " "	"	15c ½ "	No. 63.	12" Rule	"	10c "
No. 27.	12½" " "	"	25c ½ "	No. 64.	Engine Crank	"	05c "
No. 28.	Single Bent Strips	"	05c Each	No. 65.	Car Wheel	"	05c "
No. 29.	Large Bent Strips	"	05c "	No. 66.	Truck Frames	"	2½c "
No. 30.	Double Bent Strips	"	05c "	No. 67.	"T" Strips	"	2½c "
No. 31.	Large Rectangular Plates	"	10c "	No. 68.	Bolster Plates	"	2½c "
No. 32.	Small Rectangular Plates	"	10c "	No. 69.	Auto Wheels	"	10c "
No. 33.	Sector Plates	"	10c "	No. 70.	3½" Flat Plate	"	05c "
No. 34.	5½" Angle Girders	"	20c ½ Doz.	No. 71.	5½" " "	"	05c "
No. 35.	12½" " "	"	25c ½ "	No. 72.	Obtuse Angle	"	10c Doz.
No. 36.	1" Sprocket	"	15c Each	No. 73.	2¼" Gear Wheel	"	20c Each
				No. 77.	Instruction Book No. 1	"	10c "
				No. 78.	Complete Manual of Instruction	"	25c "
				No. 79.	Set Screws	"	10c Doz.

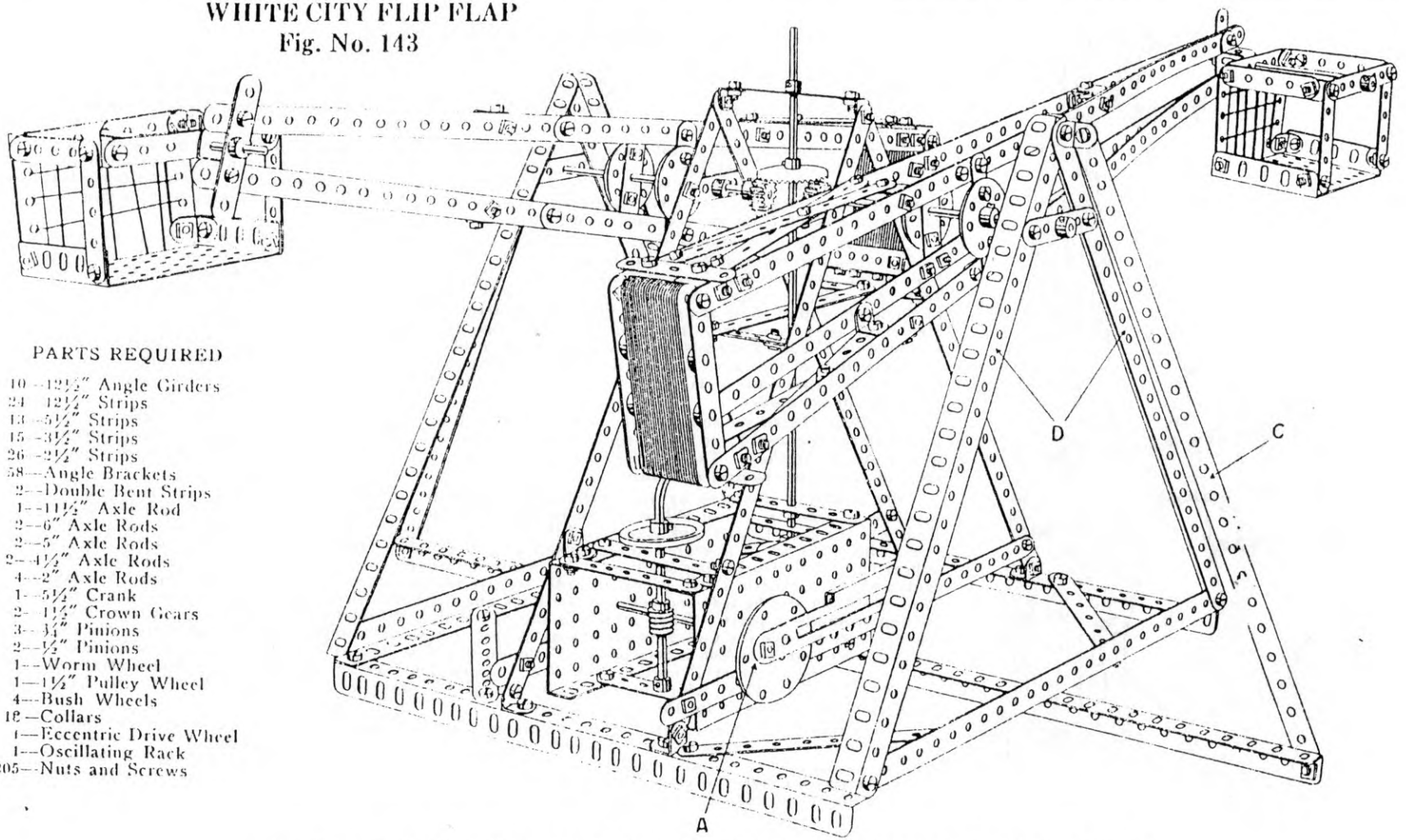
Any of these parts can be secured from dealers handling AMERICAN MODEL BUILDER Outfits at the above prices.

When separate parts are ordered DIRECT FROM THE FACTORY, 10% must be added to the above prices to cover postage.

When orders for separate parts amount to $3.00 or more, we will prepay transportation charges anywhere in the United States.


1
2
3
4
5
6
7
8
9
10
11
12
53
44
56
13
14
15
16
17
54
18
21
20
19
35
41
50
39
44
38
34
46
36
37
40
55
42
52
43
30
28
27
29
26
60
49
25
47
24
23
22
51
45
33
31
32

WHITE CITY FLIP FLAP
Fig. No. 143

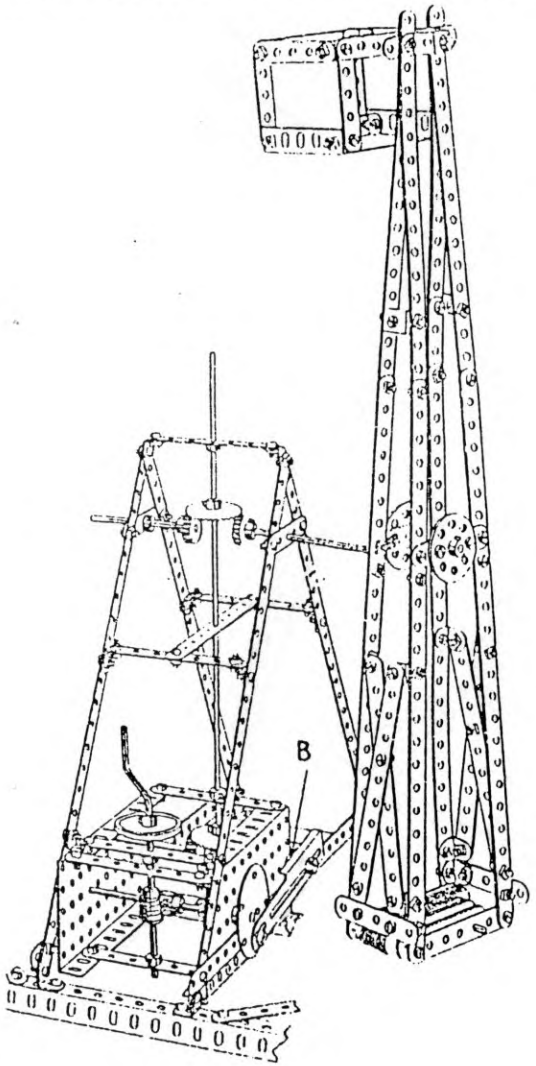


PARTS REQUIRED

10—12½" Angle Girders
24—12½" Strips
13—5½" Strips
15—3½" Strips
26—2½" Strips
58—Angle Brackets
2—Double Bent Strips
1—11½" Axle Rod
2—6" Axle Rods
2—5" Axle Rods
2—4½" Axle Rods
4—2" Axle Rods
1—5½" Crank
2—1¼" Crown Gears
3—¾" Pinions
2—½" Pinions
1—Worm Wheel
1—1½" Pulley Wheel
4—Bush Wheels
18—Collars
1—Eccentric Drive Wheel
1—Oscillating Rack
205—Nuts and Screws

The Model shown on this page can be built with The American Model Builder Outfit No. 7, or No. 6 and No. 6½.

AMERICAN MODEL BUILDER 5 b.



WHITE CITY FLIP FLAP

This is one of the most interesting Models that we show, and it is built along the lines of the Flip-Flap that was built for the Franco-British Exposition at London. It is a similar device to the Ferris Wheel that is used for raising passengers high into the air to give them a bird's eye view of the exhibition grounds.

In beginning this model, first make the base frame which is made of four 12½" Angle Girders fastened at each corner, then fasten two 12½" Angle Girders overlapped in the third hole through the center of this base. Next construct the end frames which are made of two 12½" Angle Girders (D) supported by a 12½" Strip (C) set diagonally. The center frame work is very simple, and can be easily constructed from the sectional view that is shown.

We also show a sectional view of one of the arms carrying the cage. These are made of eight 12½" Strips, and are overlapped in the ninth hole. These are fastened together at one end with two 3½" Strips, and one 2½" Strip is fastened at the top, which, with the Double Bent Strip, forms the support for the passenger cage. This frame work is stiffened by four 5½" Strips fastened diagonally at the lower end of these arms. The 2½" Strips carrying the Bush Wheels should be bolted in the eighteenth hole from the bottom, and when the cage is attached, sufficient small strips should be mounted on 2" Axle Rods and fastened at the bottom of the Arm between the two 3½" Strips to offset the weight of the cage. Ordinarily, it will require twenty-three ¾" Strips to balance the weight of the cage, and care must be taken to see that this arm is perfectly balanced so as to insure the smooth operation of the model.

The Gear Housing is shown in the sectional view, and is made of two Large Plates fastened together at the top with three 3½" Strips, and fastened to the sides of the center frame work by means of two Angle Brackets. The Gearing in this model should be carefully studied as it involves a good many practical mechanical movements.

The model is operated by the upright Crank fastened in the center of the Gear Housing, to which is attached a Worm Wheel which meshes with the ½" Pinion Wheel fastened on a 4½" Axle Rod. On the end of this Crank is attached the Eccentric Drive Wheel, and to this is fastened the Oscillating Rack which is geared to the outside of the rear Axle Rod and meshes with the ½" Pinion Wheel (B). This Oscillating Rack must be fastened through the second hole that is nearest to the center of the Eccentric Drive Wheel in order to give the proper swing to the moving arm. A small Washer should also be fastened between the Rack and the Eccentric Drive Wheel so as to relieve the friction from these parts. When attaching the ½" Pinion Wheel to the outside of the rear Axle Rod, be sure to have the Collar on the Pinion Wheel rest on the outside of the Large Plate. On the inside of this rear Axle Rod is attached a ¾" Pinion which meshes with the 1½" Crown Gear fastened to the lower end of the 11¼" upright Axle Rod. On the upper end of this 11¼" Axle Rod is attached another 1½" Crown Gear, which meshes with two ¾" Pinions attached to the ends of the 6" Axle Rods which form the axis for the moving arms.

When this model is completed, you will notice that the Crank can be turned in one continuous direction and that the arms will automatically reverse when they reach a certain position. This movement is very unique and is accomplished by means of the Eccentric Drive Wheel and the Oscillating Rack. As stated above, this is one of the most interesting models that we show, and any boy can feel proud of his accomplishment when this model is completed.

The Model shown on this page can be built with The American Model Builder Outfit No. 7, or No. 6 and No. 6½.

LIST OF CONTENTS

	0	0½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7
Flanged and Grooved Wheel						4	4		4	4	8		8		8
Pulley Wheels, 1½"								1	1	1	2	1	3	1	4
Pulley Wheels, 1"	4		4	2	6		6		6		6		6		6
Pulley Wheels, ½"		1	1		1		1	1	2	1	3	4	7	1	8
Auto Wheels								4	4		4		4		4
Car Wheels				4	4		4		4	4	8		8		8
Bush Wheel		1	1		1		1		1	1	2		2	3	5
Pinion Wheel, ¾"								2	2		2	1	3		3
Pinion Wheel, ½"						1	1	1	2		2	1	3	1	4
Worm Wheel								1	1		1		1	1	2
Eccentric Drive Wheel								1	1	1	2		2		2
Gear Wheel, 1½"								1	1		1	1	2	2	4
Gear Wheel, 2¼"												1	1	1	2
Crown Gear, 1½"								1	1	1	2		2	1	3
Crown Gear, ¾"								2	2		2		2		2
Sprocket, 1"												2	2	1	3
Sprocket, 1½"												2	2	1	3
Collar and Set Screw	2	4	6	2	8	2	10	2	12	2	12	4	16	4	20
Axle Rod, 11½"										2	2		2	2	4
Axle Rod, 8"												2	2	2	4
Axle Rod, 6"										2	2	2	4		4
Axle Rod, 5"						3	3	1	4		4		4		4
Axle Rod, 4½"	2		2	1	3		3	1	4	2	6		6	2	8
Axle Rod, 3½"				1	1	1	2		2	2	4	2	6	2	8
Axle Rod, 2"		2	2		2	1	3	1	4	2	6	2	8	2	10
Shaft Connector						2	2		2	2	4		4		4
Cranks, 6½"								1	1	1	2		2	2	4
Cranks, 5½"		1	1		1	1	2		2		2	1	3	1	4
Cranks, 4½"	1		1	1	2		2	1	3		3		3	2	5
Engine Crank								2	2		2		2		2
Perforated Strip, 12½"		4	4	4	8	6	14		14	6	20	4	24	42	66
Perforated Strip, 5½"	6		6		6	12	18	2	20	4	24	12	36	36	72
Perforated Strip, 3½"		2	2		2	1	3	3	6	2	8	12	20	20	40
Perforated Strip, 3"								2	2	2	4	4	8	16	24
Perforated Strip, 2½"	6	4	10		10	10	20		20	10	30	30	60	10	70
Perforated Strip, 2"										4	4	6	10	20	30
Angle Strip, 2½"		4	4		4		4		4	2	6	2	8		8
Angle Strip, 3½"		2	2		2		2		2	2	4	2	6		6
Angle Strip, 5½"		2	2		2		2		2	2	4	2	6		6
Single Bent Strip		1	1		1		1	1	2		2	1	3	1	4
Double Bent Strip				1	1	1	2		2		2	2	4	4	8
Large Bent Strip								1	1	1	2	2	4		4
Hanger Strips										2	2	2	4		4
Angle Girder, 12½"						4	4	4	8		8	2	10	14	24
Angle Girder, 5½"										4	4	4	8	12	20
Angle Bracket	6	6	12		12	12	24		24	24	48	12	60	120	180
Obtuse Angle				6	6		6	6	12		12	12	24		24
Truck Frames				4	4		4		4	4	8		8		8
"T" Strips				4	4		4		4		4		4		4
Bolster Plates				2	2		2		2		2		2		2
Rectangular Plate, Large	1		1		1		1	1	2		2		4	4	8
Rectangular Plate, Small		1	1	1	2		2	2	4		4	2	6	4	10
Flat Plate, 3½"				2	2		2		2	2	4	2	6	2	8
Flat Plate, 5½"				1	1		1		1	1	2	2	4	2	6
Sector Plate		1	1	1	2		2		2		2		2	2	4
Nuts	12	12	24	12	36	24	60	20	80	40	120	130	250	300	550
Machine Screws	12	12	24	12	36	24	60	20	80	40	120	130	250	300	550
Wood Screws				4	4		4	4	8		8	4	12	12	24
Screw Driver, Large				1	1		1		1		1		1	1	2
Knurled Screw Driver										1	1		1		1
Spanner and Screw Driver	1		1		1		1		1	1	2		2		2
Ratchet Pawl						1	1	1	2		2	1	3	1	4
Hook				1	1		1	1	2		2		2	1	3
Spring										1	1		1	1	2
Eye Pieces										2	2	2	4	2	6
Oscillating Rack								1	1	1	2		2		2
Chain, 4 ft. Length												2	2	2	4
Washers				4	4		4		4	4	8		8		8
Rule, 12"										1	1		1		1
Cord, Heavy Blue, Hank				1	1	1	2	1	3	1	4	2	6		6
Cord, Green, 40 ft. Lengths		1	1		1	1									
Cord, Green, 80 ft. Lengths							1		1		1	1	2	1	3
Propeller Blades										2	2	2	4	2	6
Pulley Belt										1	1	1	2	2	4
No. 100 Motor															
No. 150 Motor								1	1		1		1		1
Instruction Book	1	1	1			1		1		1		1		1	
Complete Manual of Instruct'n				1	1		1		1		1		1	1	2

The contents of the No. 11, No. 12, and No. 13 outfits are exactly the same as the No. 1, No. 2, and No. 3 respectively, except that one No. 150 A. M. B. motor is included in each outfit.

Price List Of Outfits

REGULAR OUTFITS

No. 0	American Model Builder Outfit		will build	105	Models		.50
No. 1	American Model Builder Outfit		" "	173	"		1.00
No. 2	American Model Builder Outfit		" "	231	"		2.00
No. 3	American Model Builder Outfit		" "	269	"		3.00
No. 4	American Model Builder Outfit	(No. 150 Motor included)	" "	309	"		5.00
No. 5	American Model Builder Outfit	(No. 150 Motor included)	" "	334	"		7.50
No. 6	American Model Builder Outfit	(No. 150 Motor included)	" "	349	"	(Packed in Heavy Cardboard Box)	12.50
No. 6	American Model Builder Presentation Outfit	(No. 150 Motor included)	" "	349	"	(Packed in a Quartered Oak Box, Mission Finish)	15.00
No. 7	American Model Builder Presentation Outfit	(No. 150 Motor included)	" "	365	"	(Packed in a Mahogany Box)	25.00

SPECIAL OUTFITS

No. 11	American Model Builder Outfit	(No. 150 Motor included)	" "	173	"		2.00
No. 12	American Model Builder Outfit	(No. 150 Motor included)	" "	231	"		3.00
No. 13	American Model Builder Outfit	(No. 150 Motor included)	" "	269	"		4.00

ACCESSORY OUTFITS

No. 0½	American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 0 Outfit into a No. 1 Outfit)	.50
No. 1½	American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 1 or No. 11 Outfit into a No. 2 Outfit)	1.00
No. 2½	American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 2 or No. 12 Outfit into a No. 3 Outfit)	1.00
No. 3½	American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 3 or No. 13 Outfit into a No. 4 Outfit) (No. 150 Motor included in this Outfit)	1.00
No. 4½	American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 4 Outfit into a No. 5 Outfit)	2.50
No. 5½	American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 5 Outfit into a No. 6 Outfit)	5.00
No. 6½	American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 6 Outfit into a No. 7 Outfit)	10.00

NOTE.—Any Regular Outfit can be converted into the next larger Outfit by the addition of the Accessory Outfit bearing the half size. For example, a No. 1½ Outfit added to a No. 1 will convert a No. 1 into a No. 2. No. 11 Outfit can be converted into the next larger Outfit by adding No. 1½, No. 12 into the next larger Outfit by adding No. 2½, and No. 13 into the next larger Outfit by adding No. 3½.

Any of the above Outfits can be secured from your dealer at prices shown. Where Outfits are ordered direct from the factory, the following amounts must be added to cover packing, insurance and free delivery: REGULAR OUTFITS—No. 0, 10c; No. 1, 15c; No. 2, 25c; No. 3, 35c; No. 4, 35c; No. 5, 50c; No. 6, 75c; No. 7, $1.00. SPECIAL OUTFITS—No. 11, 25c; No. 12, 25c; No. 13, 35c. ACCESSORY OUTFITS—No. 0½, 10c; No. 1½, 15c; No. 2½, 25c; No. 3½, 35c; No. 4½, 25c; No. 5½, 35c; No. 6½, 75c.

If your remittance does not include the amounts specified for free delivery, shipment will be made by Express Collect.